

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matters of)	
)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability)	CC Docket No. 98-147
)	
and)	
)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996)	CC Docket No. 96-98
)	

**REPLY COMMENTS OF
ALLEGIANCE TELECOM, INC.**

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SUMMARY

Allegiance Telecom, Inc. (“Allegiance”) presents the following summary of these reply comments:

The ILECs’ own comments demonstrate the many uncertainties regarding the availability of next generation architecture to support CLECs’ voice and data services. ILEC positions in their comments would frustrate the provision of advanced services. In particular, the ILECs object to line card collocation and the unbundled provision of network elements needed to provide all voice and data services over their end-to-end fiber loops, and express doubts that collocation of CLEC DSLAMs at the remote terminals will be feasible in many cases. Furthermore, CLECs today cannot always obtain unbundled access to fiber loops served by Digital Loop Carriers for the provision of voice service, and therefore require access to copper loops to carry voice traffic between the customer premises and the central office. These issues must be resolved in a manner that assures meaningful CLEC access to customers in next generation architectures. In the meantime, the Commission must ensure that copper loops remain available so that consumers in affected markets will not be left with only the monopoly ILEC provider.

The ILEC comments fail in their attempt to justify their constricted interpretation of the collocation requirements of Section 251(c)(6). These comments attempt to parlay the Court of Appeals’ decision in *GTE v. FCC* as a mandate for the elimination of numerous essential collocation rules. On the contrary, the standards proposed by Allegiance in its initial comments satisfy the directives of *GTE v. FCC*. Collocation of equipment that is necessary for interconnection and access

to UNEs is not disqualified because of multifunction capability, and multifunction equipment is itself necessary.

Competitor access to next generation network architecture is essential to the preservation of competition. These “new” ILEC networks rely upon legacy infrastructure and rights-of-way. CLECs cannot fairly compete with ILECs if they are required to construct new competing parallel networks. The provision of advanced services over the next generation fiber loops requires access to a full range of line cards, access to the Optical Concentration Device (“OCD”), and transmission between the remote terminal and OCD over all feasible ATM bitstream options. Line cards and OCDs are attached electronics that are part of the full features, functions and capabilities of the fiber loop. CLECs wishing to provide voice and/or data services would be impaired without access to these electronics.

The Commission should also establish a generally available packet-switching UNE whenever ILECs deploy next generation architecture. The ILECs’ own comments demonstrate that the four conditions set forth in the *UNE Remand Order* for the provision of unbundled packet switching will in most cases be met, but the ILECs own actions have likewise demonstrated that they will not readily agree to such provisioning.

New UNEs should also be established for specific transmission options between the line card at the remote terminal and the OCD. In particular, DWDM technology and all feasible ATM bitstream options, such as Constant Bit Rate service, is necessary for CLECs wishing to provide a

wide variety of services. CLECs should not be limited to the provision of the ILEC and its affiliates' contemplated services.

National collocation standards for provisioning and space reservation are essential to the promotion of competition. State standards vary widely and are often inadequate; at least one Commission has even refused to set any standards. If new national standards are to have any effect, the Commission must apply them as new minimum standards that will apply in all states, regardless of previous state determinations, unless a state prospectively approves a variance from the new standards. The *Collocation Waiver Order*, by exempting all previously "approved" state standards, struck a devastating blow against national standards because nearly all states have arguably approved (often insufficient) standards. Except for Qwest, the ILECs appear poised to entirely escape the reach of the national standards through these exemptions. The Commission should revise its implementation strategy for the 90 day provisioning standard and for all other provisioning and space reservation standards adopted in this proceeding. In particular, the Commission should establish national maximum provisioning intervals of 45 days for cageless collocation and 15 days for augments. Space reservation should be limited to one year. While Allegiance believes that these standards can reasonably be set as absolute minimum standards, if the Commission opts to allow states to approve variances, all such variances should be required to be entered after the new national standards are established.

Finally, the ILECs have not presented any compelling argument to limit remote terminal collocation. The Commission should clearly reaffirm the obligation to provide such collocation, and any necessary limitations should be addressed at the state level.

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**COMMENTS OF
ALLEGIANCE TELECOM, INC.**

Allegiance Telecom, Inc. (“Allegiance”) submits these reply comments in the above-captioned proceedings¹ to address issues raised on remand² of the *Collocation Order*³ and the need for revision

¹ *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147, 96-98, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 (August 10, 2000)(“*Collocation Reconsideration Order and NPRM*”).

² *GTE Service Corp v. FCC*, 205 F.3d 416 (D.C. Cir. 2000)(“*GTE v. FCC*”).

³ *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147, 14 FCC Rcd. 4761 (1999)(“*Collocation Order*”), *aff’d in part and remanded in part sub. nom. GTE v. FCC, supra*.

of the Commission's local competition rules in light of deployment of next generation network architecture by incumbent local exchange carriers ("ILECs").

I. ILECs SHOULD BE REQUIRED TO OFFER AND MAINTAIN COPPER LOOPS

Initial comments of ILECs in this proceeding confirm the importance of a requirement upon ILECs to maintain and offer copper loops as UNEs. Preservation of copper is essential, particularly until it is clear that CLECs will have meaningful access to fiber loops that can support their voice and data services. The ILEC comments demonstrate that it is far from clear that meaningful access for all types of voice and data service is assured. For example, ILECs contend that there is no collocation space at most remote terminals, and that even if there were, it may not be technically feasible for ILECs to collocate at these facilities.⁴ The proposed next-generation architecture favored by ILECs would not support several xDSL flavors, including the symmetric services demanded by higher-volume customers. Furthermore, the ILECs question the extent to which they should be required generally to provide access to CLECs for provision of advanced services over next generation networks. Prices for access to ILEC next generation networks are largely unknown. Finally, even voice-only carriers face difficulty and uncertainty in obtaining unbundled loops to provide voice services to customers served over Digital Loop Carriers. SBC's proposed voluntary broadband offering would not provide voice-only loops, and voice CLECs could be left without access to new customers in these markets, with devastating consequences to competition. With so

⁴ *Verizon Comments* at p. 26; *BellSouth Comments* at p. 13.

many uncertainties regarding fiber loop access, the record at this point strongly shows the need for the continued availability of copper loops.

Some ILECs and their vendors support to some extent the continued availability of copper facilities.⁵ In particular, Alcatel posits copper facilities as an alternative for those CLECs seeking to provide SDSL service.⁶ However, ILECs couple their assurances that they will not retire copper on a massive scale with statements that they have an unfettered right to manage their own networks.⁷

SBC, in particular, has an expansive notion of its right to decommission facilities, arguing that the Commission approved the decommission policy it outlines in its Comments.⁸ On the contrary, the Commission's *Project Pronto Order* did not sanction SBC's decommissioning policy. Instead, it required SBC to adhere to certain commitments in regard to maintaining copper facilities. These commitments were designed to "ensure that competitors have access to the essential inputs needed to provide advanced services."⁹ Far from giving sanction to any purported unfettered right to retire facilities, the Commission mandated that SBC adhere to terms that would ensure these facilities are preserved.

⁵ CC Docket 98-141, Reply Comments of SBC Communications, Inc. In Support of a Determination that SBC Incumbent LECs May Own Combination Plug/Cards and Optical Concentration Devices at p. 15 (March 10, 2000)(*"SBC Reply Comments"*).

⁶ CC Docket Nos. 98-147 and 96-98, Comments of Alcatel USA at p. 20.

⁷ *SBC Comments* at 74.

⁸ *SBC Comments* at 73.

⁹ *Project Pronto Order* at ¶ 40.

SBC also argues that requiring it to maintain copper facilities would be akin to requiring access “to a yet unbuilt superior [network].”¹⁰ The argument is flawed, however. CLECs are seeking to preserve their access to the existing network and are seeking to ensure that their access to customers is not imperiled. Just as ILECs are not allowed to uncombine already combined network elements, ILECs should not be permitted to retire copper loop facilities as long as they have any utility for provision of service to customers. Strong, enforceable national rules are necessary to ensure that CLECs have the ability to provide voice and data services over copper notwithstanding ongoing ILEC efforts to squeeze CLECs out of the market by restricting meaningful access to fiber loops.

Consumers in markets where copper is retired face the return of monopoly control if copper competitive options are eliminated prior to the establishment of certainty that competitors will have meaningful access to next generation networks for all voice and data services. The mandate of the Federal Act and the objectives of this docket compel interim restrictions on the retirement of useful copper facilities so that competition will not be extinguished and consumers left without choice of telecommunications service providers.

II. THE COMMISSION SHOULD ESTABLISH STRENGTHENED COLLOCATION RULES ON REMAND

A. ILECs Misread *GTE v. FCC*

¹⁰ *SBC Comments* at 74.

Contrary to ILEC contentions, the court in *GTE v. FCC* did not determine the meaning of “necessary” or foreclose collocation by CLECs of a wide range of telecommunications equipment. USTA argues that the Commission’s call for comment on the meaning of the term “necessary” was misguided because the D.C. Circuit provided sufficient instruction to the Commission. However, the D.C. Circuit remanded the case to the Commission specifically for further reconsideration of the meaning of the term “necessary” by the Commission. In fact, the only sensible reading of the Court’s opinion is that while the Court believed that the Commission’s interpretation of the term “necessary” as discussed in the *Collocation Order* was overly broad, it expected the Commission to reconsider its rules to give additional meaning to the term “necessary” in light of the Court order. The Court held that

the FCC’s interpretations of “necessary” and “physical collocation” *appear to be impermissibly broad. We therefore vacate the challenged Collocation Order insofar as it embraces unduly broad definitions of “necessary” and “physical collocation” and remand for further consideration by the FCC.*¹¹ (emphasis added)

While the Court clearly gave the Commission guidance as to what might be an acceptable reading of the term “necessary,” it did not mandate the cramped meaning or anticompetitive implementation that some ILECs seek. Accordingly, while ILECs would like the Commission to conclude that their views are the equivalent of the law on what equipment may be collocated, this is not the case. Instead, the Commission need only provide a reasoned explanation of its interpretation of “necessary.” For all the reasons provided in Allegiance’s initial comments, this term encompasses a wide range of telecommunications equipment.

¹¹ 205 F.3d at 425 (emphasis added).

Perhaps the most glaring ILEC overstatement about the Court's ruling is the argument that the Court has forbidden the collocation of "multifunctional" equipment.¹² In fact, the Court did not hold that only single function equipment could be collocated. Had the Court intended to rule that only single function equipment may be collocated, it easily could have done so. The term "single function equipment" or any equivalent is not used in the Court's opinion. And, of course, the Court's primary holding was that to the extent that the Commission's collocation rules require collocation of equipment that is not "directly related to and thus necessary, required or indispensable to interconnection or access to UNEs the Commission's rules 'demand' a better explanation." Therefore, the Commission need only provide a better explanation as to why collocation of multifunction equipment is "necessary." All of the reasons provided by Allegiance in its initial comments provide such an explanation.

B. ILECs Have the Burden of Justifying Denial of Collocation

¹² Verizon argues that "collocated equipment may contain only those features and functions that meet the 'necessary' test, and not features and functions that are unnecessary for that narrow purpose." *Verizon Comments* at 12.

The ILECs also impermissibly read the *GTE v. FCC* decision as putting the burden on competitors to demonstrate that the equipment they seek to place in the ILEC's central office is equipment that is necessary for interconnection or access to unbundled network elements. For example, Verizon states that "if the competitor can show that the cost of alternative interconnection arrangements is so significant that the competitor would be unable to offer a commercially viable service, or if it can prove that the alternative is technologically inferior and makes the service non-competitive, then the alternative is effectively unavailable."¹³ But nowhere in either the statute or the Court's order is there any indication that the burden should be on the competitors to demonstrate that the equipment that they seek to place in the incumbent's central office satisfies any requirements of the statute. In fact, Section 51.323(a) of the Commission's rules, adopted in the *Local Competition Order* in 1996, requires that "[w]henver an incumbent LEC objects to collocation of equipment by a requesting . . . carrier for purposes within the scope of section 251(c)(6) of the Act, the incumbent LEC must prove to the state commission that the equipment will not be actually used by the telecommunications carrier for the purpose of obtaining interconnection or access to unbundled network elements." This rule is in effect. The Commission should reject the ILECs' attempt to use this proceeding to undermine their clear, existing obligation to fully justify denial of collocation of any equipment on the grounds that it is not necessary for interconnection or access to UNEs.

C. Collocation of Multifunction Equipment Should Be Required

¹³ *Verizon Comments* at 4.

As discussed, contrary to ILEC statements, the Court in *GTE v. FCC* did not determine that CLECs may not collocate multifunction equipment. Moreover, in its initial comments, Allegiance outlined the extensive authority the Commission has to adopt rules that prohibit ILECs from providing interconnection or access to UNEs to CLECs in a manner less efficient than the ILECs provide themselves.¹⁴ Because of the strong anti-discrimination provisions in the 1996 Act the Commission has the authority to adopt rules that put competitive carriers at parity with the incumbents with respect to the collocation of equipment necessary for interconnection or access to UNEs. Further, Section 251(c)(6) authorizes the Commission to establish reasonable terms and conditions for the provision of collocation. Pursuant to that section, the Commission should require ILECs to permit collocation of multifunction equipment.

¹⁴ *Allegiance Comments* at 28-32.

For the most part, the ILECs appear determined to ignore their obligation to offer physical collocation on reasonable and nondiscriminatory terms and conditions. Qwest is the exception¹⁵, and Allegiance applauds Qwest's courage in speaking out. Indeed, other than generalized, incorrect assumptions about what the *GTE v. FCC* decision envisions, the ILECs offer precious little in support of their highly restricted views of their obligations under section 251(c)(6) of the Act. Accordingly, the Commission should determine that CLECs may collocate multifunction equipment.

D. The Commission Should Adopt Rules that Specify that Any Type of Equipment that ILECs Use Themselves to Provide Interconnection or Access to UNEs May Be Collocated in ILEC Central Offices

While the ILECs would have the Commission read section 251(c)(6) very narrowly, it is absolutely clear that the Commission must read the section in context and with reference to other sections of the Act and the purposes of the Act. Allegiance will not reiterate all of its initial arguments here, but points out that Section 251(c)(6) requires the incumbents to "provide, on rates, terms and conditions that are just reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements." In interpreting that section, the Commission must, at the very least, consider the remaining provisions of Section 251 that address the incumbents' obligations to offer interconnection and access to unbundled network elements. Section 251(c)(2) provides in part that interconnection must be "at least equal in quality to that provided to the local exchange carrier itself or to any subsidiary, affiliate, or any other party

¹⁵ *Qwest Comments* at 4.

to which the carrier provides interconnection” and Section(c)(3) requires incumbents to provide “nondiscriminatory access to network elements . . . on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.” Those sections provide the context in which “necessary” must be interpreted. The Commission should determine that the collocation obligation of Section 251(c)(6) is coincident with the interconnection and unbundling obligations of Sections 251(c)(2) and 251(c)(3). In short, the Commission must interpret the collocation obligation in a way that will assure that CLECs can exercise all of their interconnection and unbundling rights established elsewhere in the statute.

III. THE COMMISSION SHOULD DEFINE LOOP AND TRANSPORT UNES TO INCLUDE ADVANCED SERVICES ELECTRONICS

SBC argues that before the Commission adds any electronics to the definition of the loop it must make a finding that each such item of electronics satisfies the necessary/impair tests of section 251(d)(2) of the Act.¹⁶ However, the Commission has recognized that electronics are not necessarily in and of themselves network elements, but rather part of other network elements. Thus, the Commission has included the attached electronics in the definition of the loop network element.¹⁷

The one piece of attached electronics the Commission excluded from the definition of the loop, the DSLAM, was excluded because the Commission found it to be the component of another network element, the packet switching network element.¹⁸ Thus, the key question is whether or not the new

¹⁶ *SBC Comments* at 58.

¹⁷ *UNE Remand Order* at ¶ 167.

¹⁸ *UNE Remand Order* at ¶ 175.

electronics, *i.e.*, line cards and Optical Concentration Devices (OCDs), are properly considered to be component parts of the loop or other network elements.

The loop was initially defined by the Commission as “a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises.”¹⁹ In the *UNE Remand Order*, the Commission modified its definition of the loop network element to include “all features, functions and capabilities of the transmission facilities, including dark fiber and attached electronics (except those used for the provision of advanced services, such as DSLAMs) owned by the incumbent LEC, between an incumbent LEC’s central office and the loop demarcation at the customer premises.”²⁰ The Commission has sought to ensure that its definition of the loop will apply to “new as well as current technologies.”²¹ Thus, the question is whether line cards and OCDs are properly considered to be features, functions and capabilities of the loop transmission facility. The unequivocal answer for all the attached electronics continues to be in the affirmative.

A. Line Cards

¹⁹ *In the Matter of the Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 96-325, First Report and Order, 11 FCC Rcd. at 15499 at ¶ 380 (1996)(“*Local Competition Order*”).

²⁰ *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 99-238, ¶ 167 (1999)(“*UNE Remand Order*”).

²¹ *Id.*

Perhaps the strongest support for including line cards within the definition of the loop comes from Verizon, which stated:

Verizon could use several kinds electronics in the loop that are unrelated to any particular service but which cannot technically be unbundled from the transport facilities. These include Digital Loop Carrier, Next Generation Digital Loop Carrier, High Bit-Rate Subscriber Line, Digital Single Subscriber Line, Optical Network Units, and Fiber-to-the-Home electronics. Each of these technologies provides no service itself. Instead, each technology simply provides a transmission channel to facilitate delivery of specific services to the end user.²²

Thus, the NGDLC is a component part of the loop transmission facility in that it provides a particular transmission channel. Under Verizon's description, the NGDLC has no independent function, but rather is used to facilitate the transmission functionality of the loop. Verizon goes on to add that the same holds true for electronic devices which are not used to provide any particular service, but are used "along with the associated network facilities to provide transmission capacity."²³

This formulation is also consistent with the characterizations of the line cards provided by SBC and Alcatel. SBC argued that line cards have no stand-alone function and are merely a "sub-component" of the NGDLC, and Alcatel has also described the line cards as integral components of the NGDLC.²⁴

²² *Verizon Comments* at 35.

²³ *Id.*

²⁴ *SBC Comments* at 16; *Alcatel Comments* at 18.

This characterization of line cards supports the inclusion of the line cards within the loop network element. The situation is analogous to the circumstances that led the Texas Public Utility Commission to include splitter functionality in the definition of a loop.²⁵ The arbitrators noted:

²⁵ *Petition of Southwestern Bell Telephone Company for Arbitration with AT&T Communications of Texas, L.P., TCG Dallas, Teleport Communications, Inc. Pursuant to Section 252(b)(1) of the Federal Communications Act of 1996*, Public Utility Commission of Texas Docket No. 22315, Arbitration Award at p. 17 (September 13, 2000)(“*Texas Line Sharing Arbitration*”).

The Arbitrators recognize that the FCC specifically rejected DSLAMs as part of the “attached electronics” of the loop because of its determination that DSLAMs are used solely to provide advanced services. Accordingly, the Arbitrators believe it would be inaccurate from a technical standpoint to analogize splitters to DSLAMs. As noted above, a splitter is a passive device necessary to access both the voice and data portions of the loop in order to provide an end user with both voice and xDSL service. By contrast a DSLAM is used primarily for the routing and packetizing of data. The Arbitrators note that adding a splitter to the UNE-loop is no different than adding a circuit-enhancing device to the loop at the central office.²⁶

²⁶

Id.

Line cards are clearly devices that support and enhance the functionality of the loop network element. Line cards provide splitter functionality, DSLAM functionality and support both voice and DSL service. Catena observes that the most cost-effective remote terminal deployment is the use of integrated POTS/DSL line cards.²⁷ SBC argues against providing unbundled access to the line cards by attempting to downplay the line cards importance in providing voice service.²⁸ However, when SBC in connection with Project Pronto was seeking to exclude line cards from the definition of advanced services equipment so it could maintain ownership of the line cards, it emphasized the voice functionality provided by line cards.²⁹ By SBC's own definition, the combination unit equipment is "an integrated piece of technology having both POTS and DSLAM capabilities as well as the 'splitter' functionality."³⁰ Line cards, unlike DSLAMs, are not used solely for the provision of advanced services, but are "deployed where there are multiple service requirements (*i.e.*, voice and data)."³¹ Clearly, SBC's original pronouncements on line cards demonstrates how CLECs would be "impaired" in the provision of voice service without access to this equipment on an unbundled basis.

B. Optical Concentration Devices (OCDs)

Allegiance noted in initial comments that Optical Concentration Devices (OCDs), which are essentially ATM switches, separate each CLEC's ATM packetized bitstream from the common ATM

²⁷ CC Docket Nos. 98-147 and 96-98, Comments of Catena Networks, Inc. at p. 8 (October 12, 2000)(*"Catena Comments"*).

²⁸ *SBC Comments* at 50.

²⁹ CC Docket No. 98-141, Letter from Paul K. Mancini, SBC Vice President and Assistant General Counsel to Lawrence Strickling, Common Carrier Bureau at p. 4 (February 15, 2000)(*"SBC Letter"*).

³⁰ *Id.*

³¹ *See also* CC Docket 98-141, Comments of Alcatel USA at 2 (March 2, 2000) (*Alcatel Comments*). SBC argues that the cards are not advanced services equipment, and notes the majority of the cards will be used to provide

packetized bitstream coming from the remote terminals, and hand off the appropriate packetized bitstream to each CLEC and the ILEC advanced services affiliate.³² Under SBC's proposed network configuration in Project Pronto, the ATM switches are "the only means by which the ADSL-based traffic of multiple CLECs can be aggregated and disaggregated." Despite the obvious importance of the OCDs for exchange of traffic from the ILEC to the CLEC, SBC argues that the OCDs are "not strictly necessary for interconnection or access to unbundled network elements."³³ SBC's argument is, of course, not true, if the Commission either designates the OCD to be part of the loop or if finds the elements of the broadband fiber loop to be UNEs. Either way, the Commission must assure access to OCDs, which provide the only way for CLECs to access their traffic in the NGDLC architecture.

SBC's position underscores the need to ensure that CLECs have access to the OCDs on an unbundled basis. If CLECs are not able to collocate OCDs, which may be a cost-prohibitive proposition based on the way ILECs configure their network, then CLECs need to have unbundled access to this vital equipment. The Commission should either define the OCD to be part of the loop

POTS service, at least initially. *SBC Letter* at 4; *see also*, *SBC Reply Comments* at 7.

³² *Allegiance Comments* at 10, *citing* CC Docket 98-141, *Ex Parte Letter* from DSL Access Telecommunications Alliance to Carol Matthey at p. 4 (April 11, 2000) ("*DATA Letter*").

³³ *SBC Comments* at 15.

network element, as requested by Allegiance in its initial comments, or treat the OCD as a component of the packet switching network element and unbundle the packet switching network element.

The Commission noted in its *UNE Remand Order* that:

When an incumbent has deployed DLC systems, requesting carriers must install DSLAMs at the remote terminal instead of at the central office in order to provide advanced services. We agree that, if a requesting carrier is unable to install its DSLAM at the remote terminal or obtain spare copper loops necessary to offer the same level of quality for advanced services, the incumbent LEC can effectively deny competitors entry into the packet switching market. We find that in this limited situation, requesting carriers are impaired without access to unbundled packet switching. Accordingly, incumbent LECs must provide requesting carriers with access to unbundled packet switching in situations in which the incumbent has placed its DSLAM in a remote terminal.³⁴

Given the realities of remote terminal collocation as described by the ILECs themselves, the Commission should establish a new general presumption that ILECs must unbundle packet switching whenever they have deployed any packet switching functionality in their remote terminals for their own use or for use by their advanced services affiliate. The ILECs have asserted that there is no space at most remote terminals for CLECs to collocate their DSLAMs, and that even if there is space at the remote terminal such collocation is not technically feasible. The ILECs have further argued that CLECs may not collocate their own line cards with DSLAM functionality, although Allegiance believes that the Commission should require such collocation pursuant to Section 251(c)(6) of the Act. Thus, the Commission should require that packet switching be offered on an unbundled basis where NGDLC facilities are deployed. The OCD could be considered to be part of this network

³⁴ *UNE Remand Order* at ¶ 313.

element since it is essentially an ATM switch. Without unbundled access to the OCDs, CLECs would be unable to access data traffic of customers served by such loops, and would be effectively precluded from offering xDSL service to such customers if spare copper facilities are not available.

IV. THE COMMISSION SHOULD DESIGNATE NEW UNES

A. DWDM

Despite ILEC requests for delay, now is the time for the Commission to establish UNEs based on capacity in fiber that can be provided by DWDM technology. Moreover, ILEC comments undercut their own requests to defer this important issue. SBC notes that it will be commencing a trial of DWDM for interoffice transport next year.³⁵ Verizon also has plans to deploy DWDM for inter-office fiber links.³⁶ ILECs, of course, argue that it is premature for the Commission to consider this technology.³⁷ Thus, ILECs expect this Commission and CLECs to sit idly by while they deploy what is likely to be a key technology. Then, later, ILECs will raise various objections as to why DWDM should not be offered as a UNE and will seek to restrict the availability of DWDM as it is deployed. If there is a lesson to be learned from the line sharing experience, it is that the Commission should not wait to establish this new technology as a UNE. With line sharing, the ILECs leveraged their control over the loop facility to get a head start in providing voice and xDSL service over a single loop. CLECs to this day are still litigating in states throughout the U.S. such issues as line splitting, line sharing over fiber loops, and OSS upgrades to support line sharing. Meanwhile,

³⁵ *SBC Comments* at 58.

³⁶ *Verizon Comments* at 35.

³⁷ *SBC Comments* at 58.

Verizon has been provisioning Infospeed, its retail line sharing service, for more than a year and has provisioned many thousands of shared lines.³⁸ DWDM is clearly a technology that has tremendous potential for ILECs and CLECs alike. The technology can increase the capacity of fiber and since deployment of fiber is a more capital-intensive undertaking than deployment of copper facilities, DWDM can promote the more efficient use of existing network facilities. Clearly, the ILECs would not have plans to deploy this expensive technology if they did not see tremendous potential in its use. As noted in Allegiance's initial comments, DWDM gives a carrier growth capacity and intelligent provisioning of bandwidth, and is perhaps the best long-term strategy for promoting network capacity.³⁹ Intelligent provisioning of bandwidth will be crucial to the deployment of new services, and will hopefully eliminate some of the impediments to providing new services caused by bandwidth concerns.

B. ATM Classes of Service

³⁸ *Investigation as to Propriety of the Rates and Charges set Forth in M.D.T.E. No. 17, etc.*, D.T.E. 98-57-Phase III, at 46 (Mass. D.T.E. Sept. 29, 2000) ("*Massachusetts Line Sharing Order*").

³⁹ *Allegiance Comments at 23.*

Despite making a commitment to provide Constant Bit Rate (CBR) Quality of Service that will enable CLECs to offer carrier-grade voice over DSL and other bandwidth-intensive applications,⁴⁰ SBC argues extensively why the Commission should not allow CLECs to have unrestricted access to all transmission speeds and QoS classes, particularly CBR and VBR (variable bit rate).⁴¹ SBC argues that if the Commission does require CLEC access to CBR and VBR, SBC should be allowed to price the offering according to the service level guaranteed and not the actual traffic level generated.⁴²

However, the comments of manufacturers in this proceeding make clear that new technological developments are eliminating the service degradation issues in regard to CBR QoS.

For instance, Cisco notes that its new DSLAMs include:

“smart” technology that enables the equipment to ensure performance quality of service (“QoS”) for new and emerging broadband applications that necessitate very low delay, very low delay variance, and/or very low loss of data. For example such QoS functionalities can allocate bandwidth and thereby prioritize real-time

⁴⁰ *Project Pronto Order* at ¶ 45.

⁴¹ *SBC Comments* at 65-70. It is interesting how SBC seems to be diluting its “commitments” in regard to its Project Pronto deployment with each passing day.

⁴² *Id.* at 70.

applications (such as voice services) and enable carriers to offer customers service level agreements that guarantee specific bandwidth levels.⁴³

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Cisco Comments at 9.

Cisco notes the importance of the ability of carriers to differentiate their service offerings and notes the strong and growing demand for bandwidth-intensive, real-time applications such as videoconferencing or voice over IP. QoS guarantees a certain level of performance commensurate with these services for those needing certainty and reliability in regard to the particular services.⁴⁴ For instance, customers are looking for voice service over DSL or IP without gaps and videoconferencing services without delays in transmission.

Cisco provides a very illustrative comparison of a CLEC using a “smart” DSLAM to manage bandwidth allowing for oversubscription of bandwidth as opposed to a CLEC that must rely on a DSLAM that provides no QoS functionality and, thus, requires the CLEC to buy sufficient bandwidth to meet the maximum bandwidth demand at all times.⁴⁵ The latter scenario would require the purchase of additional DSLAM ports, additional installation, a second uplink, additional power, and additional DS-3 transport. Cisco determined that lack of access to QoS functionality would raise the CLEC’s costs by 31% in the example given. The latter scenario also places a greater burden on the ILEC, and its facilities, since it has to provide additional facilities including more power, more DS-3 lines, and more space to house extra DSLAM ports.⁴⁶

⁴⁴ *Id.*

⁴⁵ If bandwidth can be effectively managed, a carrier can “oversubscribe” the bandwidth, *i.e.*, sell bandwidth in quantities larger than the maximum demand at any given moment. DSLAMs with QoS functionality do this by prioritizing certain services that are more bandwidth sensitive.

⁴⁶ *Cisco Comments* at 11.

The Commission should require the availability of all feasible ATM qualities of service, including CBR and VBR (real time and non-real time). The availability of these options would afford customers access to a wider variety of services, reduce CLEC costs, and optimize the use of ILEC facilities.

V. THE COMMISSION SHOULD ESTABLISH NATIONAL COLLOCATION STANDARDS

A. The Commission Must Reconsider its Collocation Waiver Order if National Standards Are to Have Any Effect

ILEC interpretations of the *Collocation Waiver Order*⁴⁷ issued by the Commission on November 7, 2000 will completely undermine the impact of national collocation provisioning standards. If the objective of national collocation standards is ever to be realized, the Commission must in this proceeding revise the approach of that decision and/or at least effect implementation requirements for new collocation standards that will actually require the ILECs to improve their provisioning intervals. In the *Collocation Waiver Order*, the Commission held that ILEC are not required to propose new compliant intervals in states that have “affirmatively” established collocation provisioning intervals.⁴⁸ Whatever the Commission’s intention for this language, most ILECs will take the position that intervals have been “affirmatively” established in every state where intervals are included in an “approved” tariff, SGAT, or interconnection agreement. Verizon has already explained

47 Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket 98-147, Memorandum Opinion and Order, DA 00-2528 (rel. November 7, 2000) (“*Collocation Waiver Order*” or “*Waiver Order*”).

48 *Id.* at ¶ 1.

this intent in its Petition for Reconsideration.⁴⁹ Under this interpretation, the national standard will not be implemented in any Allegiance market in the nation, or perhaps anywhere, because *virtually all* tariffs, SGATs and interconnection agreements already prescribe intervals for collocation. These are the very same unreasonable intervals that were in place when the Commission found that ILEC provisioning practices were “delay[ing] unreasonably competitive LECs’ build-out of their facilities.”⁵⁰

Existing collocation intervals should not be exempted from review. Many longer intervals were “established” on an incomplete or now-outdated record, or in interconnection agreements with CLECs that did not elect to arbitrate the issue. Meanwhile, collocation standards evolve as ILECs, CLECs and vendors become more experienced with collocation. Collocation has become cheaper, faster, more standardized, and more efficient. As a result, many existing “approved” intervals exceed the national standard and all notions of reasonableness. The requirements of the Federal Act and the evidence in the record of untenably slow provisioning should compel the Commission to address these unreasonable intervals.

By suggesting that all such intervals are deemed approved for all time, the *Waiver Order* renders all implementation of a national standard a nullity and undermines the FCC’s objectives in this docket. Now, not only has the *Waiver Order* exempted every one of these longer intervals from the national standards, but it has provided a basis for ILECs to argue to state commissions that their longer intervals have been endorsed by the FCC and should not be further scrutinized. By providing

⁴⁹ Verizon Petition for Reconsideration at 14-15.

⁵⁰ *Collocation Reconsideration Order* at ¶ 22.

regulatory cover for outdated intervals, the *Waiver Order* could make it even more difficult for CLECs to obtain procompetitive intervals from state commissions than if the FCC had never issued the *Collocation Reconsideration Order*. Such a result surely could not have been the intent of the Commission.

Therefore, in its consideration of the ongoing proceeding, the Commission should gather and consider evidence that a 90 day interval should be established as a national *maximum* interval, and not just a default interval. At a minimum, the Commission should at least require ILECs to obtain waivers from state commissions in order to maintain intervals in excess of 90 days.

Furthermore, any new national standard intervals for cageless collocation, augments, or other collocation arrangements should likewise be implemented nationwide, and not only where states have not approved intervals for such arrangements. In some states, the intervals for cageless collocation and augments are the same as for caged collocation, but they should not be deemed “approved” intervals for this purpose. Other states have approved somewhat shorter intervals for these collocation arrangements, but typically such proceedings have considered quickly only “at least” how much shorter these intervals could be. After a careful consideration of these issues by the FCC, all cageless and augment intervals exceeding new standards will be ripe for review. The Commission should then require ILECs in any state where any of its collocation intervals exceed the new standards either to amend their existing tariffs, SGATs, and interconnection agreements or to make filings with a state commission seeking exemption from the new national standards. So that the ILECs will not shield all existing collocation terms from further review, any exception to national standards must be

required to be entered on a prospective basis.

Finally, Allegiance notes that the *Waiver Order* may have been intended to exempt only state intervals that had been established in a careful, deliberative process, as opposed to intervals established with little or no review. While Allegiance would welcome any tightening of this now-gaping loophole, it cautions that any attempt to draw a line between intervals adopted “passively” versus “affirmatively” by a state commission is vulnerable to manipulation by the ILECs. Every circumstance in which provisioning intervals have been enacted may offer unique facts and circumstances. Is the Commission to take evidence on each of these cases to determine whether the resulting intervals are worthy of exemption from the national standards? In the absence of a clear mandate, ILECs will no doubt exploit any ambiguities to declare, one by one, that all of their existing intervals have been approved and are therefore exempt from the national standards. While a rigorous definition of what constitutes an “affirmative” state approval would be better than nothing, it is for this reason among others that national standards should be implemented in all states, except where a state established a longer interval *after* the adoption of the national standard.

B. Shorter Collocation Intervals are Feasible and Should be Reasonably Expected

In its initial comments, Allegiance urged the Commission to adopt collocation intervals shorter than 90 days for some types of collocation.⁵¹ The ILECs initial comments provide no concrete information showing that they could not adopt considerably shorter intervals for cageless collocation. In fact, other commenters point out that some ILECs are meeting shorter intervals for

⁵¹ *Allegiance Comments* at 75.

cageless collocation.⁵² Accordingly, the Commission should establish a national standard 45-day provisioning interval for cageless collocation. For the reasons set forth in Allegiance's initial comments, the Commission should also establish shorter intervals for other forms of collocation, such as 15 days for augments of existing space.

C. ILECs Use Space Reservation Policies to Thwart Collocation

In initial comments, the ILECs argue that the FCC should not establish national space reservation policies because states are in the best position to address this issue and that "a national space reservation policy could not take into account the differences in underlying incumbent networks and systems."⁵³ However, the ILECs have not established any state or regional differences that would put states in a better position to set space reservation policies or that would preclude a national standard. Most telecommunications equipment, switches and distribution frames are marketed nationally and do not vary significantly between ILECs or region. Nor are there any significant state or regional differences in office construction that would preclude a national standard. The only material difference between the ILECs on this issue is the extent to which they have held off state commissions from establishing reasonable space reservation rules.

⁵² *ALTS Comments* at 58.

⁵³ *SBC Comments* at 49.

Moreover, it is obvious that ILECs are using space reservation policies to thwart CLEC collocation, rather than address any genuine ILEC needs to reserve space. Pacific Bell, prior to the implementation of a space reservation policy by the California Public Utilities Commission, had an “unlimited” reservation policy for dissimilar equipment, *i.e.*, switching equipment, Main Distribution Frames, and power.⁵⁴ In this proceeding, some ILECs advocate the reserving of space for some equipment for twenty years or more.⁵⁵ These outlandish claims could not possibly be based on any legitimate space reservation needs.

As noted in the initial comments filed by several carriers, not all state commissions can be relied upon to establish reasonable space reservation rules. For example, the Arkansas Public Service Commission believes that it lacks authority to require SWBT to do anything not explicitly required by federal law or regulation.⁵⁶ Therefore, reasonable space reservation periods will only be established in Arkansas if this Commission orders specific guidelines or if SWBT voluntarily adopts them. A reasonable federal rule would guarantee a consistent national standard that would protect CLECs from unreasonable and unlawful exclusion from central offices. A national standard would eliminate a patchwork of different state requirements that could otherwise unduly complicate network planning by CLECs, and would help assure that ILEC practices of restricting the availability of collocation space will not lead to “inconsistent deployment of advanced services” throughout the

⁵⁴ *Rulemaking on the Commission’s Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Networks*, Decision 98-12-069, 1998 WL 995609, 69 (Ca. PUC 1998). Dissimilar equipment is equipment that will be deployed by the ILEC in the ILEC premises that will not be deployed by the CLEC. Similar equipment is equipment that both the ILEC and CLEC will likely deploy in an ILEC premises, *e.g.*, multiplexers.

⁵⁵ *SBC Comments* at 52.

country.⁵⁷

Accordingly, the Commission should establish a maximum national space reservation period of one year, allowing states to adopt supplemental requirements that do not undercut the federal rule.

VI. COLLOCATION AT REMOTE TERMINALS SHOULD BE REQUIRED

⁵⁶ @Link Comments at 35-36.

⁵⁷ CC Docket No. 98-147, Reply to Oppositions to Sprint's Petition for Partial Reconsideration and/or Clarification at p. 9 (July 27, 1999)(*"Sprint Reply"*).

The ILECs' initial comments do not provide any basis for restricting CLECs' ability to collocate at remote terminals. Verizon's request that it be permitted to require escorts as a precondition to collocation at remote terminals,⁵⁸ and BellSouth's vague references to practical issues concerning collocation⁵⁹ are insufficient to provide a basis for imposing any serious limits on CLECs' ability to collocate at remote terminals. Significantly, even Qwest supports the right of CLECs to collocate at remote terminals.⁶⁰ Accordingly, the Commission should require the ILECs to afford CLECs collocation space at remote terminals. Allegiance recommends in the strongest possible terms that the Commission adopt rules as specific as possible in order to ensure that CLECs are able to obtain this collocation on reasonable terms and conditions.

VII. CONCLUSION

For these reasons and those set forth in its initial comments, the Commission should adopt Allegiance's recommendations and proposals.

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⁵⁸ *Verizon Comments* at 28
⁵⁹ *BellSouth Comments* at 17.
⁶⁰ *Qwest Comments* at 25-27.