

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

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

**JOINT COMMENTS OF ARBROS COMMUNICATIONS, INC.,  
ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES,  
COMPETITIVE TELECOMMUNICATIONS ASSOCIATION,  
E.SPIRE COMMUNICATIONS, INC., FAIRPOINT COMMUNICATIONS SOLUTIONS,  
INTERMEDIA COMMUNICATIONS INC., JATO COMMUNICATIONS CORP., KMC  
TELECOM, INC., METROMEDIA FIBER NETWORK,  
NEWSOUTH COMMUNICATIONS, INC., AND PATHNET COMMUNICATIONS  
REGARDING 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**

Brad E. Mutschelknaus  
Jonathan E. Canis  
Edward A. Yorkgitis Jr.  
Joan Griffin  
Ross A. Buntrock  
David Kirschner  
David Konuch  
KELLEY DRYE & WARREN LLP  
1200 19<sup>th</sup> Street, N.W.  
Washington, D.C. 20036  
(202) 955-9600  
(202) 955-9782 (fax)

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Attorneys for the Joint Commenters

## SUMMARY

At the heart of the market-opening provisions of the Telecommunications Act of 1996 (“1996 Act”) of the Communications Act of 1934, as amended (the “Act”) is Section 251(c). Section 251(c) imposes duties on incumbent local exchange carriers (“ILECs”) that enable competitors to provide both facilities-based and resale competition. Two critical obligations in section 251(c) are the ILECs’ duties to provide (1) interconnection (Section 251(c)(2)), and (2) access to unbundled network elements (“UNEs”). Without both, competition is simply not feasible.

Two of the methods by which competitors may obtain interconnection with ILECs and access to UNEs – and, therefore, two major components of achieving the statutory objectives of Sections 251(c)(2) and 251(c)(3) – are physical and virtual collocation. In the mid-1990’s, the United States Court of Appeals for the District of Columbia Circuit (“D.C. Circuit”) found that the Act, as it then existed, did not give the Commission the requisite authority to order physical collocation of competitor’s equipment in ILEC premises. In the 1996 Act, Congress included Section 251(c)(6) to provide the Commission with the statutory authority it needed to require collocation so that Sections 251(c)(2) and 251(c)(3) could be fully implemented.

The Commission interpretation of Section 251(c)(6), to require the collocation of equipment that is “used or useful” for interconnection or access to UNEs, has been remanded to the Commission by the DC Circuit for further consideration and a better explanation. Four years of experience with physical collocation by CLECs underscore that it is a vital means of interconnection and access to UNEs if competition is to take hold. The rules of statutory construction require that the Commission give meaning to this provision of the statute consistent with the context and overall purpose of the Act. Because the strict application of the term

“necessary” to refer to only that equipment indispensable for interconnection or access to UNEs renders section 251(c)(6) all but meaningless and will not further these statutory purposes, it would be unreasonable to interpret the term narrowly in the circumstances. Instead, Section 251(c)(6) should be read to authorize physical collocation that the Commission deems required to fulfill the goals of section 251(c), including the collocation of any equipment without which the Commission concludes that the ILECs cannot satisfy their obligations under sections 251(c)(2) and (c)(3) and the pro-competitive objectives of the Act cannot be achieved.

In considering rules governing space selection, again the Commission should reaffirm its previous decisions. The requirements of Sections 251(c)(2), (c)(3), and (c)(6) combined with the opinion of the D.C. Circuit upholding the propriety of cageless collocation, require that competitors play the principal role in choosing collocation space from unused space in ILEC premises. Likewise, permitting ILECs to require separate or isolated facilities and separate entrances for collocation would not conform with the requirements and purposes of Sections 251(c)(2), (c)(3), and (c)(6) because they would discriminate against CLECs, would be unjust and unreasonable, and would thwart competition.

Cross-connections between collocators are also necessary to ensure ILECs meet their interconnection and unbundling obligations. When one collocated carrier connects to a second collocated carrier that is interconnected with the ILEC or buying UNEs, a cross-connect between the two is integrally related to such interconnection or access. When a carrier providing competitive interoffice transport collocates and connects to a second carrier that is purchasing UNEs from the ILEC, for example, the transport carrier facilitates and supports the second carrier obtaining access to interconnection and UNEs. But for the collocation of the transport carrier, the second carrier often would not find it justifiable to collocate its own equipment to

interconnect or access the ILEC's UNEs, frustrating Sections 251(c)(2) and 251(c)(3) of the Act. The Commission should also declare cross-connects to be a UNE, and require ILECs to permit the "stable manhole zero" collocation option discussed in the *Second Further Notice*.

Denial of collocation and cross-connects for competitive transport providers would have a chilling effect on carriers' abilities to provide advanced services and would conflict with the pro-competitive goals of Section 251(c)(2) and (c)(3) in another way. Providers of interoffice transport and dark fiber not only need collocation in order to connect their networks directly to the ILEC where they themselves are purchasing UNEs from the ILEC, but to connect indirectly to the ILEC when they are providing services as carriers' carriers to other CLECs. The Act's purpose is to promote competition, including advanced services competition, not to place limits on such competition. Competition for interoffice transport simply cannot adequately develop without a Commission mandate that ILECs must permit collocation by interoffice transport providers.

The Joint Commentors also urge the Commission to adopt national standards for the provisioning of collocation arrangements other than caged collocation. Specifically, the Commission should specify 60 days as the maximum provisioning interval for cageless, virtual, and collocation within remote structures. Modifications to existing collocation arrangements, such as expansion of cages, additions to cageless arrangements, and additional power outlets, should be provisioned within 30 days. Rules establishing such intervals are necessary because the ILECs have the incentive and ability to delay all forms of collocation for CLECs. In some markets, ILECs have delayed cageless collocation. The adoption of provisioning intervals for non-caged collocation arrangements will promote the ability of CLECs to compete effectively in

advanced services and other telecommunications services markets furthering the objectives of Sections 251(c)(2), (c)(3), and (c)(6).

The Joint Commentors also recommend national standards for space reservation to eliminate ILEC ability to reserve space in central offices for their own use or that of their affiliates without regard for the needs of competing carriers, and thereby create artificial space exhaustion. In establishing national standards, the Joint Commentors recommend that the Commission follow the lead of those states such as Florida, California, Texas, and Washington that have already established space reservation standards and permit properly supported reservations of space for transmission equipment only for up to 12 months and for other equipment only for up to 18 months.

In the *Fifth Further Notice of Proposed Rulemaking* (“*Fifth FNPRM*”), the Commission seeks comment on a number of issues concerning the deployment of new network architectures. As the Commission recognized in the *UNE Remand Order*, access to the unbundled subloops is one of the lynchpins of facilities-based competition. In order to promote competitive alternatives, particularly to advanced services, the Joint Commenters submit that the Commission must amend its collocation and unbundling rules, particularly in light of the recent technological developments and product innovations since the release of the *UNE Remand Order*. Specifically, in response to the *Fifth FNPRM*, the Joint Commenters urge the Commission to amend its rules as follows:

Unbundling Obligations

The Commission should amend its rules to require unbundled access to the loops consisting of optical wavelengths generated by DWDM equipment, in addition to DS1, DS3, fiber, other high capacity loops. Further, the Commission should clarify that as part of their unbundling obligations, the ILEC must provide access to all technically feasible

transmission speeds and quality of service classes, including Constant Bit Rate and Variable Bit Rate, even if the ILEC does not currently utilize these themselves.

The Commission should amend its rules governing unbundled access to loops and subloops to require ILECs to notify CLECs of any planned deployment of fiber facilities at least 12 months prior to such a rollout, and further, should require ILECs to maintain existing copper infrastructure for a 10-year transition period.

The Commission should establish a new Broadband UNE, essentially an “intraloop enhanced extended loop,” consisting of the copper subloop and the fiber feeder subloop, with multiplexing, in light of space constraints associated with remote premises collocation.

### Collocation Obligations

The Commission should amend its collocation rules to eliminate any distinction between obligations governing central office collocation and remote premises collocation by clarifying that physical collocation is available at *all* remote locations, pursuant to the same cost allocation and space allocation rules as are applicable to physical collocation in the central office.

The Commission should require that ILECs reserve, at a minimum, 50% of all available collocation space in remote premises for use by CLECs.

The Commission should clarify that virtual collocation is available at the option of CLECs, including the virtual collocation of line cards in remote terminals, and should further clarify that title of any virtually collocated equipment need not be transferred to the ILEC. In addition, rates for ILEC-provided installation, maintenance and repair must be cost-based.

The Commission should clarify that competitors have the right to cross-connect to ILEC equipment at all remote premises, including within the remote terminal, under the same terms and conditions (including cross-connections at cost-based rates) as at the central office. To the extent that cross-connections cannot be made internally, CLECs must be allowed to cross-connect from adjacent collocation arrangements.

The Commission should clarify that ILECs must provide nondiscriminatory access to OSS interfaces necessary to allow CLECs to order subloops and associated features and functions. Further, the rules should provide CLECs with nondiscriminatory access to remote loop testing ability.

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**I. INTRODUCTION**

By their attorneys and pursuant to the *Second Further Notice of Proposed Rulemaking* in CC Docket No. 98-147, and the *Fifth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98<sup>1</sup> Arbros Communications, Inc., the Association for Local Telecommunications Services (“ALTS”), the Competitive Telecommunications Association (“CompTel”), e.spire Communications, Inc., FairPoint Communications Solutions, Inc., Intermedia Communications Inc., Jato Communications Corp., Metromedia Fiber Network, Inc., KMC Telecom, Inc., NewSouth Communications, Inc., and Pathnet Communications (hereinafter the “Joint Commenters”) hereby respectfully submit these comments. The Joint Commenters represent the interests of a wide range of CLEC deployment strategies, and include “fiber based” CLECs, data CLECs, wholesale CLECs, a competitive provider of interoffice

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<sup>1</sup> *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket 98-147, Order on Reconsideration (“*Order*”) and Second Further Notice of Proposed Rulemaking (“*Second Further Notice*”), *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Fifth Further Notice of Proposed Rulemaking (“*Fifth FNPRM*”) (rel. Aug. 10, 2000).

transport, as well as the two leading trade associations representing the CLEC industry. ALTS is a leading national trade association representing over 200 facilities-based competitive local exchange carriers (“CLECs”). CompTel is a leading industry association over 350 competitive telecommunications companies and their suppliers providing local, long distance, international, and enhanced services nationwide.

The ground-breaking rules adopted by the Commission in its *Advanced Services First Report and Order*<sup>2</sup> have, since their adoption in March 1999, spurred the development of competition in the advanced services market. Indeed, the Commission’s most recent report regarding the deployment of advanced services indicated that at the end of 1999 the deployment of advanced services to residential end-users had increased by three-fold over the year before.<sup>3</sup> There than be little doubt that the massive rollout of advanced services to American consumers cited by the Commission in the *Advanced Telecommunications Capability Second Report* is due in large part to the rules promulgated by the Commission in the *Advanced Services First Report and Order*. There, the Commission took dramatic and essential steps to address anti-competitive incumbent local exchange carrier (“ILEC”) behavior, which included delaying collocation, larding the collocation process with unnecessary costs, and imposing unreasonable space

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<sup>2</sup> *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 4761 (1999) (“*Advanced Services First Report and Order*”), *aff’d in part and remanded in part sub nom. GTE Service Corp. v. FCC*, 205 F. 3d 416 (D.C. Cir. 2000) (*GTE v. FCC*).

<sup>3</sup> *See In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket 98-146, Second Report, ¶ 8 (rel. Aug. 21, 2000) (“*Advanced Telecommunications Capability Second Report*”).



restrictions upon competitors.<sup>4</sup> The rules promulgated by the Commission in the *Advanced Services First Report and Order*, consistent with Section 251(c)(6)<sup>5</sup> of the Communications Act of 1934, as amended (the “Act”) by the Telecommunications Act of 1996 (the “1996 Act”),<sup>6</sup> imposed, among other things, a statutory duty on ILECs to allow the physical collocation of multifunctional equipment, and allowed CLECs to interconnect their equipment with other collocated carriers through cross-connections. These rules were necessary to achieve the pro-competitive goals of the Act, in fact, were cited by the Commission in the *Advanced Telecommunications Capability Second Report* as one of the “significant actions” taken by the Commission to open “bottlenecks in the market” and “encourage the deployment of [advanced] service[s] to underserved areas.”<sup>7</sup>

The significance, indeed, the fundamental necessity, of the collocation rules promulgated by the Commission in the *Advanced Services First Report and Order* cannot be overstated. Accordingly, for consumers to continue to realize the maximum potential benefit associated with advanced services deployment, the Commission should revisit and modify the collocation rules established in the *Advanced Services First Report and Order* as proposed herein. The Commission should also adopt new collocation and unbundling rules or clarify existing rules in order to remove as-yet-unaddressed barriers to entry and further level the competitive playing field. Modification of the rules, as detailed in these Comments, would serve to reduce drastically the type of unnecessary litigation that has hampered the development of local competition over

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<sup>4</sup> *Second Further Notice*, ¶ 2.

<sup>5</sup> 47 U.S.C. § 251(c)(6).

<sup>6</sup> Telecommunications Act of 1996, Pub.L. No. 104-104, 110 Stat. 56, *codified at* 47 U.S.C. §§ 151 *et seq.* (“1996 Act”).

<sup>7</sup> *Advanced Telecommunications Capability Second Report*, ¶ 251 (emphasis added).

the last four years and allow the deployment of advanced services to continue unimpeded. At bottom, the Commission should approach this remand proceeding as a means of building upon the solid foundation it already has established.

## II. BACKGROUND

### A. THE COMMISSION'S COLLOCATION RULES

In 1993 the Commission first required certain LECs to provide physical collocation in its *Expanded Interconnection* proceeding.<sup>8</sup> On review, the D.C. Circuit in 1994 found that the Commission lacked the necessary statutory authority under Section 201(a)<sup>9</sup> of the Act to order physical collocation.<sup>10</sup> As the court in *GTE v. FCC* summarized, “absent a more definite congressional authorization, the court was unwilling to defer to the Commission’s unduly broad reading of § 201(a).”<sup>11</sup> The court remanded the Commission’s *Expanded Interconnection* decision to the Commission.<sup>12</sup>

On remand, the Commission adopted rules designed “to ensure local telephone companies offer expanded interconnection for both special access and switched transport

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<sup>8</sup> *Expanded Interconnection with Local Telephone Company Facilities, First Report and Order*, 7 FCC Rcd 7369 (1992)(*Special Access Order*), vacated in part and remanded, *Bell Atlantic*, 24 F. 3d 1441 (1994); *First Reconsideration*, 8 FCC Rcd 127 (1993); vacated in part and remanded, *Bell Atlantic*, 24 F. 3d 1441; *Second Reconsideration*, 8 FCC Rcd 7341 (1993); *Second Report and Order*, 8 FCC Rcd 7374 (1993) (*Switched Transport Order*), vacated in part and remanded, *Bell Atlantic Telephone Cos., v. FCC*, 24 F. 3d 1441; *Remand Order*, 9 FCC Rcd 5154 (1994) (*Virtual Collocation Order*), remanded for consideration of 1996 Act, *Pacific Bell, et al. v. FCC*, 81 F. 3d 1147 (1996) (collectively referred to as *Expanded Interconnection*).

<sup>9</sup> See 47 U.S.C. § 201(a).

<sup>10</sup> *Bell Atlantic Telephone Companies v. F.C.C.*, 24 F. 3d 1441, 1445-46 (D.C. Cir. 1994) (*BA v. FCC*).

<sup>11</sup> *GTE Service Corp. v. FCC*, 205 F. 3d 416, 419 (D.C. Cir. 2000)(*GTE v. FCC*).

<sup>12</sup> *BA v. FCC*, 24 F. 3d at 1445-46.

through . . . virtual collocation.”<sup>13</sup> The *Remand Order* also was challenged. But, while the challenge was pending, the 1996 Act was enacted. The 1996 Act included a provision, Section 251(c)(6), that in combination with the Commission’s general rulemaking authority, provided the Commission with the specific statutory authority to require physical collocation that was lacking in Section 201(a). Rather than rule on the Commission’s old rules, the D.C. Circuit sent the *Remand Order* to the Commission so it could consider the impact of the recently-enacted 1996 Act.<sup>14</sup>

As part of its watershed *Local Competition First Report and Order*, the Commission established the groundwork for competition by establishing rules for obtaining interconnection to ILEC networks and access to UNEs, thereby promoting the objectives of the ILEC obligations under Sections 251(c)(2) (interconnection) and 251(c)(3) (access to unbundled network elements).<sup>15</sup> In the *Local Competition First Report and Order*, the Commission recognized that the 1996 Act allowed several forms of interconnection and access, of which physical collocation was only one.<sup>16</sup> The Commission found that in order for the procompetitive purposes of the Act to be fulfilled, carriers must be able to, at their option, take advantage of *each* of them:

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<sup>13</sup> *Remand Order*, 9 FCC Rcd at 5156, ¶ 3.

<sup>14</sup> *Pacific Bell v. FCC*, 81 F. 3d 1147; *Implementation of the Local Telecommunications Provisions in the 1996 Act*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15784 ¶ 1359 (1996) (“*Local Competition First Report and Order*”).

<sup>15</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15776-811, ¶¶ 542-617.

<sup>16</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15779-81, ¶ 549-53. The Commission rejected the ILEC suggested notion that section 251(c)(6) should limit interconnection to points where only collocation is possible. *Id.* at 15779, ¶ 550.

under Sections 251(c)(2) and 251(c)(3), any requesting carrier may choose *any* method of technically feasible interconnection or access to unbundled elements at a particular point.<sup>17</sup>

The Commission also found that the new legislation shored up the deficiencies that the D.C. Circuit previously had found existed in the Act with respect to its authority to order collocation: “Section 251(c)(6) provides the Commission with explicit authority to mandate physical collocation as a method of providing interconnection or access to unbundled elements.”<sup>18</sup> The Commission concluded that “in enacting Section 251(c)(6), Congress intended to expand the interconnection choices available to requesting carriers, not to restrict them.”<sup>19</sup> Moreover, the Commission found that the 1996 Act “specifically directed incumbent LECs to provide physical collocation for interconnection and access to unbundled network elements, absent technical or space constraints pursuant to Section 251(c)(6) of the Communications Act.”<sup>20</sup>

In the *Local Competition First Report and Order* the Commission addressed for the first time the issue of what equipment competitors must be allowed to collocate in an ILEC office pursuant to the 1996 Act. The Commission concluded that Section 251(c)(6) obligated ILECs to allow physical collocation of:

equipment used for the purpose of interconnection or access to unbundled network elements. . . . A strict reading of the term “necessary” in these circumstances could allow LECs to avoid

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<sup>17</sup> *Id.* at 15779, ¶ 549.

<sup>18</sup> *Id.* at 15779, ¶ 551. The D.C. Circuit affirmed this conclusion by finding that “[t]he 1996 Act completely revamped the statutory landscape by providing explicit congressional authorization for physical collocation.” *GTE v. FCC* 205 F. 3d at 419.

<sup>19</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15779, ¶¶ 550-51.

<sup>20</sup> *Id.*, at 15785-86, ¶ 561 (citing 47 U.S.C. 251(c)(6)).

collocating the equipment of the interconnectors' choosing, thus undermining the pro-competitive purposes of the 1996 Act.<sup>21</sup>

It is interesting to note that none of the ILECs challenged the Commission's decisions regarding collocation when they appealed the *Local Competition First Report and Order*.

Unfortunately, the ILECs continued to forestall the development of meaningful competition by making it difficult for competitors to obtain physical collocation. Nevertheless, through dogged effort and the realization of end users that competitors could provide valuable services, competition has made initial inroads in a number of markets. As a result, competitors have begun to offer new and innovative services previously not offered by the ILECs. To counter this development, the ILECs instituted additional roadblocks to prevent the proliferation of new, innovative telecommunications including those known as advanced services.

In its March 31, 1999, *Advanced Services First Report and Order* the Commission realized that it was "critical that the marketplace for [advanced] services be conducive to investment, innovation, and meeting the needs of consumers."<sup>22</sup> The Commission committed itself to "removing barriers to competition" so that competitors could effectively compete with the ILECs.<sup>23</sup> To that end, the Commission adopted several measures designed to enforce its earlier rules and promote competition in the advanced services market.<sup>24</sup> The goal was to "create incentives for providers of advanced services to innovate and to develop and

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<sup>21</sup> *Local Competition First Report and Order*, at 15794 ¶ 579 (citing *National Railroad Passenger Corporation v. Boston and Maine Corp.*, 503 U.S. 407, 417 (1992)).

<sup>22</sup> *Advanced Services First Report and Order*, ¶ 2.

<sup>23</sup> *Id.* at 4763, ¶ 3.

<sup>24</sup> *Id.* at 4763, ¶ 4. It is important to note that the Commission concluded "that the pro-competitive provisions of the 1996 Act are technology-neutral and thus apply equally to advanced services and to circuit-switched voice services." *Id.* at 4769 ¶ 15. Therefore although the *Advanced Services First Report and Order* might appear to only deal with  
(continued...)

deploy new technologies and services on a more expeditious basis,”<sup>25</sup> by reducing the costs and delays associated with collocating in an ILEC’s central office thereby promoting lower prices and increased choices for consumers of advanced services.<sup>26</sup>

In order to accomplish these goals, the Commission took several steps. The Commission removed the ability of ILECs to create artificial space limitations by expanding the types of physical collocation competitors could obtain from ILECs, requiring ILECs to offer shared caged and cageless collocation.<sup>27</sup> The Commission expanded the space for collocation by requiring ILECs to offer collocation in any unused space as well as in adjacent controlled environmental vaults or similar structures.<sup>28</sup> The Commission closed some of the loopholes ILECs were using to thwart collocation, *e.g.*, security issues, safety requirements.<sup>29</sup> The Commission also clarified that its rules require ILECs “to permit collocation of all equipment that is necessary for interconnection or access to unbundled network elements, regardless of whether such equipment includes a switching functionality, provides enhanced services capabilities, or offers other functionalities.”<sup>30</sup>

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(...continued)

advanced services, the requirements of the Commission’s order apply to the facilities used and not the services being offered.

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*Id.*

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*Id.* at 4764, ¶ 6, 4770 ¶ 18. The Commission steps, among other things, included requiring ILECs to: make shared and cageless collocation available; permit collocation in CEVs or similar structures when collocation is exhausted at a particular LEC location; adopt reasonable security measures; apply nondiscriminatory safety requirements on CLEC equipment; allow collocation of CLEC necessary for interconnection and access to UNEs; permit CLEC tours of the entire ILEC office when the CLEC has been denied collocation space; and, remove old, obsolete equipment from their offices.

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*Id.* at 4784, ¶ 41 (shared collocation cages), 4784-4785 ¶ 42 (cageless collocation).

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*Id.* at 4788-4789, ¶ 49.

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*Id.* at 4786-4789, ¶ 45-49 (security), 4780-4782 ¶ 34-36 (safety requirements).

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*Id.* at 4776-4777 ¶ 28.

In strengthening the collocation requirements first established in the *Local Competition First Report and Order*, the Commission furthered the statutory objectives of Sections 251(c)(2) and 251(c)(3) of the Act. The Commission recognized that:

At the core of the Act's market-opening provisions is Section 251. In Section 251, Congress sought to open local telecommunications markets to competition by, among other things, reducing economic and operational advantages possessed by incumbents.<sup>31</sup>

Section 251 sets out the three methods Congress envisioned to initiate and promote competition: interconnection, access to UNEs, and resale. Not failing to take an opportunity to delay competition, several ILECs challenged aspects of the Commission's decision strengthening the collocation rules.

#### 1. THE D.C. CIRCUIT'S DECISION

The D.C. Circuit issued its opinion reversing the *Advanced Services First Report and Order* in *GTE v. FCC* on March 19, 2000.<sup>32</sup> The court affirmed the Commission's decisions requiring ILECs to provide shared and cageless collocation, and make available adjacent property for collocation.<sup>33</sup> The court found that cageless collocation was "reasonable and consistent with the statutory purpose of promoting competition, without raising the threat of unnecessary takings of LEC property."<sup>34</sup> The Court concluded that it was "hardly surprising that the Commission opted to prohibit LECs from forcing competitors to build cages, particularly

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<sup>31</sup> *Id.* at 4768 ¶ 13 (citing Joint State of Managers, S. Conf. Rep. No. 104-230, 104<sup>th</sup> Cong. 2d (1996)).

<sup>32</sup> *GTE v. FCC*, 205 F. 3d 416.

<sup>33</sup> *Id.* at 424-25.

<sup>34</sup> *Id.* (emphasis added). Specifically, the court found the Commission's decision to require cageless collocation reasonably interpreted section 251(c)(6) because it saved space, reduced costs, recognized that security concerns could be resolved without the necessity of cages, and, in general, promoted competition. *Id.*

given the alternative means available to LECs to ensure the security of their premises.”<sup>35</sup> The court also affirmed the Commission’s general conclusions regarding the allocation of security costs.<sup>36</sup>

The court, however, vacated and remanded several of the Commission’s decisions. The court vacated the Commission’s requirement that ILECs allow collocation of equipment “used or useful” for interconnection or access to UNEs, and remanded this determination back to the Commission for further consideration and a better explanation of the Commission’s interpretation.<sup>37</sup>

The court also found that the Commission “went too far in giving competitors rights beyond what is reasonably required by § 251(c)(6)” when it decided “that LECs ‘*must* give competitors the option of collocating equipment *in any unused space* within the incumbent’s premises, to the extent technically feasible, and *may not* require competitors to collocate in a room or isolated space separate from the incumbent’s own equipment.”<sup>38</sup> The court found that the Commission failed to give good reasons: (1) why a competitor and not the LEC should choose where to establish physical collocation; (2) why LECs are forbidden from requiring competitors to use separate entrances to access their facilities; and (3) why LECs are forbidden from requiring competitors to use separated or isolated rooms or floors.<sup>39</sup> The court said that

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<sup>35</sup>

*Id.*

<sup>36</sup>

*Id.* at 427.

<sup>37</sup>

*Id.* at 422-24.

<sup>38</sup>

*Id.* at 425-26 (quoting the *Advanced Services First Report and Order*, ¶ 42 (emphasis added by court)).

<sup>39</sup>

*GTE v. FCC*, 205 F. 3d at 426.



“[o]n remand, the Commission will have an opportunity to refine its regulatory requirements to tie the rules to the statutory standard.”<sup>40</sup>

As explained below, the statute combined with the court’s decision almost requires the Commission to reach the same conclusions it reached in the *Local Competition First Report and Order* and *Advanced Services First Report and Order*, albeit with better reasoning to satisfy the deference requirement of a *Chevron* step-two analysis.

**III. THE MEANING OF “NECESSARY”: THE COMMUNICATIONS ACT OBLIGATES ILECS TO PROVIDE COLLOCATION AS “NECESSARY” TO ACHIEVE THE PURPOSES OF SECTION 251(C)(2) AND ACCESS TO UNES UNDER SECTION 251(C)(3)**

**A. THE D.C. CIRCUIT DECISION ALLOWS FOR A BROADER INTERPRETATION OF “NECESSARY” IF ADEQUATELY EXPLAINED AND PROPERLY RELATED TO THE STATUTORY PURPOSES**

Perhaps the most important issue facing the Commission on remand in this proceeding is the proper interpretation of the term “necessary” found in Section 251(c)(6) of the Act. Equally important is the Commission’s explanation justifying that interpretation. The D.C. Circuit concluded that “in some significant respects,” the Commission’s earlier interpretation of the term “necessary” found no support in the Act, but the Court declined to substitute its own interpretation in deference to the Commission’s role as principal interpreter of the Act.<sup>41</sup> Significantly, while the D.C. Circuit upheld the Commission’s *Advanced Services First Report and Order* only to the extent that it “merely requires LECs to provide collocation of competitors equipment that is directly related to and thus necessary, required, or indispensable to ‘interconnection or access to unbundled network elements,’” the Court also indicated that, with

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

<sup>41</sup> *Id.* at 424.

proper explanation in light of the statute's purposes, a rule that mandated physical collocation more broadly could be justified.<sup>42</sup>

It is crucial to recognize at the outset that terms such as “necessary” and “required” are not limited to a single interpretation as the ILECs are sure to argue. Indeed, in reversing another decision of the D.C. Circuit, the U.S. Supreme Court has observed that the triad of narrow interpretation offered by the D.C. Circuit – “necessary,” “required,” and “indispensable” – must yield to an agency's alternative definition of “useful or appropriate.”<sup>43</sup> In fact, the Supreme Court in *National R.R. Passenger Corp.* interpreted a provision of the Rail Passenger Service Act of 1970 remarkably similar to Section 251(c)(6) in that it provided for the Interstate Commerce Commission to order conveyance of privately owned railroad property to Amtrak in the event negotiations between Amtrak and the owner for the sale of such property failed. The statute in question permitted the conveyance in these circumstances provided that the property was “required for intercity rail passenger service.”<sup>44</sup> A strict interpretation of “required,” the Supreme Court concluded, would “leave[] little substance to the statutory presumption in favor of Amtrak's need [for property to provide modern, efficient, and economical rail passenger service] and so is in clear tension with that part of the statute.”<sup>45</sup>

The Court's directions to the Commission upon remand tacitly acknowledge the difficulty surrounding the interpretation of the ambiguous term “necessary.” Although the Court reminded the Commission that on remand it must “operate within the limits of ‘the ordinary and

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<sup>42</sup> *Id.*

<sup>43</sup> *National R.R. Passenger Corp. v. Boston & Maine Corp.*, 112 S.Ct. 1394, 1402 (1992). See also *McCulloch v. Maryland*, 4 L.Ed. 579 (1819) (C.J. Marshall) (“necessary” means “convenient and useful” not merely “most direct and simple”).

<sup>44</sup> *National R.R. Passenger Corp.*, 112 S. Ct. at 1398; 45 U.S.C. § 562(d).

fair meaning of [the statute's] terms,"<sup>46</sup> it also recognized that "the disputed terms in § 251(c)(6) are ambiguous in their meanings."<sup>47</sup> Importantly, the Court did not condemn the Commission's interpretation of the term "necessary" outright, but stated that "the FCC *appears* to ignore the statutory reference to 'necessary'"<sup>48</sup> and that "the Collocation Order as presently written *seems* overly broad and disconnected from the statutory purpose enunciated in § 251(c)(6)."<sup>49</sup> On remand, the Court instructed the Commission that the statutory reference to "necessary" must be construed in a fashion that is consistent with the ordinary and fair meaning of the word, *i.e.*, so as to limit "necessary" to that which is required to achieve a desired goal. The [Supreme] Court's admonition seems particularly relevant here where a broader construction of "necessary" under § 251(c)(6) might result in an *unnecessary* taking of private property.<sup>50</sup>

Accordingly, rather than narrowly focus on the semantics of the term "necessary" – which to some extent the D.C. Circuit did - the Commission should first direct its attention to the context of Section 251(c)(6) and the statutory purposes that provision is designed to serve so as to ensure that its interpretation of Section 251(c)(6) is consistent with a reasonable reading of the words of the statute and furthers those purposes.<sup>51</sup>

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(...continued)

<sup>45</sup> *National R.R. Passenger Corp.*, 112 S. Ct. at 1402.

<sup>46</sup> *GTE v. FCC*, 205 F. 3d at 424 (citing *Iowa Utilities Bd.*, 525 U.S. 366, 390 (1999) (remanding the FCC's rule establishing a minimum list of UNEs for failure to give any effort to the "necessary" and "impair" provision of Section 251(d)(2)).

<sup>47</sup> *Id.* at 421.

<sup>48</sup> *Id.* (emphasis added)

<sup>49</sup> *Id.* (emphasis added)

<sup>50</sup> *Id.* at 423 (emphasis in original).

<sup>51</sup> See *King v. St. Vincent's Hosp.*, 502 U.S. 215, 221 (1991) (the "meaning of statutory language, plain or not, depends on context"); *Addison v. Holly Hill Fruit Products*, 322 U.S. 607, 610 (1944) (although a literal reading of a statute can produce a result, it would be arbitrary to examine a phrase ignoring the purpose of the statute).

**B. THE PROPER INTERPRETATION OF SECTION 251(C)(6) IS THAT ILECS MUST PROVIDE PHYSICAL COLLOCATION OF EQUIPMENT AS NEEDED TO FURTHER THE PRO-COMPETITIVE PURPOSES OF THE ACT**

**1. SECTION 251(C)(6) MUST BE INTERPRETED IN LIGHT OF THE STATUTORY PURPOSES OF SECTIONS 251(C)(2) AND 251(C)(3)**

The Joint Commenters submit that, interpretation of Section 251(c)(6) in light of the structure of the 1996 Act as a whole, and the context and purposes of Section 251(c) in particular, makes clear that the Commission may and should interpret the ILECs' obligation to provide for collocation under Section 251(c)(6) more broadly than the strict sense of "required or indispensable" would permit. As the D.C. Circuit recognized in *GTE v. FCC*, a central purpose of the 1996 Act is the promotion of competition.<sup>52</sup> If the ILECs under Section 251(c)(6) are obligated only to permit collocation of equipment of a type that meets a minimum physical threshold of interconnection or access to UNEs, that purpose will be frustrated.

More specifically, a strict interpretation of Section 251(c)(6) would create a strong tension with the particular statutory objectives of Sections 251(c)(2)<sup>53</sup> and 251(c)(3).<sup>54</sup> As detailed below, when adopting rules to implement Section 251(c)(6), the Commission is

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<sup>52</sup> 205 F. 3d at 425.

<sup>53</sup> Section 251(c)(2) promotes facilities-based competition by requiring ILECs to provide interconnection with their by other carriers networks for purposes of transmitting or routing telephone exchange service or exchange access. Section 251(c)(2) requires ILECs to provide interconnection "at any technically feasible point within the carrier's network" (251(c)(2)) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory. 47 U.S.C. § 251(c)(2)(D). The statute specifically provides that such interconnection must be at least equal in quality to that provided by the LEC *to itself* or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection, *i.e.*, the ILEC must provide nondiscriminatory access to interconnection. 47 U.C.C. § 251(c)(2)(C) (emphasis added).

<sup>54</sup> Section 251(c)(3) obligates ILECs to provide requesting carriers access to unbundled network elements in the ILECs network in order to allow requesting carriers to provide telecommunications services of their own choosing. Specifically, Section 251(c)(3) requires such access to be nondiscriminatory, available at any technically feasible point, (continued...)

empowered to require – and ILECs must be obligated to allow – collocation to the extent needed to advance the objectives of these two sections. In this sense, the use of the term “necessary” in Section 251(c)(6) to relate to the stated objectives of Sections 251(c)(2) and 251(c)(3), albeit limited to the context of collocation, is more akin to the use of the term “necessary” in Section 4(i) and 201(b) of the Act, whereby the Commission may take whatever actions are necessary to fulfill the purposes, objectives, and goals of the Act.<sup>55</sup> In the following sense, then, the D.C. Circuit erred in its focus: the inquiry is not whether collocation of a particular type of equipment is necessary to interconnect or access a UNE in some minimalist engineering sense. Rather the challenge is to ascertain what equipment in what types of arrangements must requesting carriers, taken as a whole, have the ability to collocate if the statutory purposes of Sections 251(c)(2) and 251(c)(3) are to be fulfilled.

The close link between Section 251(c)(6) and Sections 251(c)(2) and 251(c)(3) the Joint Commenters urge herein is not novel. Indeed, when the Commission first examined Section 251(c)(6) in its *Local Competition First Report and Order*, it recognized that collocation was merely one of several means by which interconnection and access to UNEs could be achieved.<sup>56</sup> As the Commission recognized in its *Local Competition First Report and Order*, there are several ways to interconnect two networks, such as meet points or interconnection

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(...continued)

and provided on rates, terms, and conditions that are just, reasonable, and nondiscriminatory. 47 U.S.C. § 251(c)(3).

<sup>55</sup> See 47 U.S.C. §§ 154(i), 201(b).

<sup>56</sup> 11 FCC Rcd at 15779 ¶ 550 (“We are not persuaded that Congress intended to limit interconnection points to location only where collocation is possible.”)

trunks, that do not involve collocation.<sup>57</sup> These same methods could also permit a carrier to access the unbundled network element of an ILEC, in essence using the trunks as some sort of super cross-connect.<sup>58</sup> Thus, if, indeed, the inquiry was simply whether collocation is “required” or “indispensable” to interconnect or to access a UNE from the standpoint of network architecture, the answer in many cases arguably might be “no.”<sup>59</sup> But the inquiry is not so limited because the statutory purposes of the 1996 Act are not so narrow. The structure of the Act makes clear – and four years of experience has shown – that collocation under 251(c)(6) is a means of implementing interconnection under 251(c)(2) and access to UNEs under 251(c)(3). Any interpretation of the Act must proceed accordingly or there would be little substance to Section 251(c)(6) and the pro-competitive provisions of Section 251 would be undermined.

The purpose of Section 251(c)(6), to further the statutory objectives of Sections 251(c)(2) and 251(c)(3), has previously been recognized by the Commission. As the Commission stated in the *Local Competition First Report and Order*: “both the interconnection and unbundling sections of the Act, *in combination with the collocation obligations imposed by Section 251(c)(6)*, allow competing carriers to choose technically feasible methods of achieving interconnection or access to unbundled network elements.”<sup>60</sup> More pointedly, the Commission “conclude[d] that, under Sections 251(c)(2) and 251(c)(3), any requesting carrier may choose *any* method of technically feasible interconnection or access to unbundled elements at a

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<sup>57</sup> *Id.* at 15779-82; *see also Bell-Atlantic New York Application for Section 271 Authority*, 15 FCC Rcd 3979, ¶ 66 (1999) (technically feasible networks of interconnection include interconnection trunking, meet point arrangements, and collocation).

<sup>58</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15719-15720, ¶ 444.

<sup>59</sup> *See infra* note 73 and accompanying text.

<sup>60</sup> 11 FCC Rcd at 15588, ¶ 172 (emphasis added).

particular point.”<sup>61</sup> In other words, if the objectives of these two sections are to be met, Section 251(c)(6) cannot be interpreted in the strictest sense within the vacuum of only its own terms. Rather, Section 251(c)(6) must be read in the context of Section 251(c) as a whole and to support its pro-competitive goals.

The subservience of Section 251(c)(6) to the objectives of Sections 251(c)(2) and 251(c)(3) is further illustrated by the competitive checklist in Section 271 of the Act of items that Bell operating companies must meet before they are permitted to provide in-region interLATA service. Under the checklist, Bell operating companies are required to provide interconnection and access in accordance with Sections 251(c)(2) and 251(c)(3) of the Act, but the checklist is silent as to any requirement to provide physical collocation.<sup>62</sup> The reason for this is that the Section 251(c)(6) obligation to provide physical and virtual collocation supports and furthers the objectives of Sections 251(c)(2) and 251(c)(3).<sup>63</sup>

**2. SECTION 251(C)(6) WAS REQUIRED IN ADDITION TO SECTIONS 251(C)(2) AND 251(C)(3) TO ENSURE THE COMMISSION HAD THE REQUISITE AUTHORITY TO ORDER COLLOCATION**

If physical and virtual collocation are only two types out of a greater number of methods of interconnection and access to UNEs of those contemplated by Sections 251(c)(2) and 251(c)(3), a strict interpretation of “necessary” would raise the issue of why Section 251(c)(6)

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<sup>61</sup> 11 FCC Rcd at 15779, ¶ 549.

<sup>62</sup> See 47 U.S.C. § 271(c)(2)(B).

<sup>63</sup> For example, the Commission when approving the Bell Atlantic New York request for Section 271 Authority stated that “[t]he provision of collocation is an essential prerequisite to demonstrating compliance with item 1 [interconnection under Section 2451(c)(2)] of the competitive checklist.” *Bell Atlantic New York Application for Section 271 Authority* 15 FCC Rcd 3979, ¶ 66, (1999). See also *BellSouth (Louisiana) Application for Section 271 Authority*, 15 FCC Rcd 4035, ¶163 (1998)(absence of definite terms and conditions for collocation caused BellSouth to fail item 2 [access to UNEs under Section 251(c)(3)] of the checklist).

was required at all? The answer is straightforward and further illustrates why a narrow reading would be inappropriate. As the Commission recognized in its *Local Competition First Report and Order*, before the 1996 Act, its attempts to require ILECs to offer physical collocation foundered because the Act did not give the Commission specific statutory authority necessary to order what the D.C. Circuit thought would likely be a taking of ILEC property.<sup>64</sup> The Commission found in that *Order* that the question of such authority “largely evaporates” in the context of the 1996 Act, and Section 251(c)(6) in particular.<sup>65</sup> The D.C. Circuit in *GTE v. FCC* agreed.<sup>66</sup> The objective of Section 251(c)(6) is not simply to provide for physical or virtual collocation *per se* when no other method of collocation is available, however, but to promote competition by allowing for collocation that furthers the larger statutory purpose that requesting carriers be able to choose from among the various technically feasible methods of interconnection and access to UNEs.<sup>67</sup>

Stated otherwise, the structure of Section 251 taken as whole inevitably leads to the following conclusions: one, Congress intended that the ILECs permit interconnection and provide access to unbundled network elements; two, Congress, preserving the rulemaking authority of the Commission under Section 201(b), intended the Commission as an expert agency adopt rules and regulation consistent with the Act “as may be necessary in the public interest to

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<sup>64</sup> *Local Competition First Report and Order* 11 FCC at 15809 ¶ 613, 15810-11 ¶ 615 (citing *Bell Atlantic v. FCC*, 24 F. 3d 1441 (D.C. Cir. 1994)).

<sup>65</sup> *Id.* at 15811, ¶ 616.

<sup>66</sup> 205 F. 3d at 419-20.

<sup>67</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15779, ¶ 550 (CLECs must be able to choose *any* method of interconnection or access to UNE).



carry out the provisions of [the] Act,” including Section 251(c);<sup>68</sup> three, Section 251(c)(6) is intended to further Sections 251(c)(2) interconnection and Section 251(c)(3) unbundling;<sup>69</sup> and four, that absent the need for express statutory authority for physical collocation identified in *Bell Atlantic v. FCC*, Section 251(c)(6) would be mere surplusage relative to Sections 251(c)(2) and 251(c)(3).

In this context, Section 251(c)(6) therefore authorizes the Commission to order physical collocation that the Commission deems necessary to fulfill the requirements of Sections 251(c)(2), interconnection, and 251(c)(3), access to network elements. The inescapable implication of the Commission’s reading of the *Bell Atlantic v. FCC* decision is that, without Section 251(c)(6) or similar express statutory authority, it would not be possible for the Commission to impose physical collocation rules and regulations as necessary to ensure that ILECs meet their interconnection and unbundling obligations under Sections 251(c)(2) and (c)(3) of the Act and the pro-competitive purposes of these section.<sup>70</sup> Properly seen, therefore, because collocation is a method both of interconnection and of access to UNEs, Section 251(c)(6) is necessary to ensure that the goals and objectives of Sections 251(c)(2) and 251(c)(3) could be achieved. Concomitantly, Section 251(c)(6), in general, and the term “necessary,” in particular,

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<sup>68</sup> 47 U.S.C. § 201(b). *See also* 47 U.S.C. § 251(i)(Commission’s authority under Section 201 preserved). In *AT&T Corp. v. Iowa Utilities Board*, the U.S. Supreme Court recognized that Section 201(b) gave the Commission the authority to adopt rules and regulations to implement the provisions of Sections 251 and 252 of the Act. 525 U.S. at 377-85. That authority extends to the authority to adopt regulations implementing Section 251(c)(6), as well as Sections 251(c)(2) and 251(c)(3) and the pricing provisions of the Act.

<sup>69</sup> As the Commission recognized in the *Local Competition First Report and Order* and *Advanced Services First Report and Order*, collocation is a primary method by which CLECs achieve interconnection and access to unbundled network elements. *See also* 47 C.F.R. §51.321(b).

should be interpreted, in conjunction with the Commission's general rulemaking authority in Section 201(b), as empowering the Commission to require ILECs to permit physical collocation as the Commission deems necessary to achieve the goals of the Act. Accordingly, the Commission should define the provision "physical collocation of equipment necessary for interconnection or access to unbundled network elements" to mean collocation of equipment needed to fulfill the requirements of the sections that define interconnection and access to network elements, Sections 251(c)(2) and (c)(3), respectively.<sup>71</sup> In short, in addition to the more general provisions of Sections (c)(2) and (c)(3) which are sufficient for the Commission to order that non-collocation methods be made available, Section 251(c)(6) is required if collocation is to be among the choices that a CLEC has to interconnect or obtain access to UNEs.

**3. THE INTERPRETATION URGED BY THE JOINT COMMENTERS IS  
CONSISTENT WITH THE D.C. CIRCUIT'S INSTRUCTIONS THAT SOME  
LIMITING STANDARDS BE APPLIED**

Significantly, the interpretation the Joint Commenters urge here takes heed of the D.C. Circuit's admonition that the obligation to allow physical collocation not be unlimited, but related to the statute's purposes.<sup>72</sup> Numerous limitations are inherent in both the interconnection and unbundling provisions of the Act, as well as Section 251(c)(6) itself. First, physical collocation is not an obligation where it is impractical because of space limitations. 47 U.S.C. §251(c)(6). Second, physical collocation is not required where it would be technically infeasible.

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<sup>70</sup> See *Local Competition First Report and Order* 11 FCC Rcd at 15809, ¶ 613. See also *BA v. FCC*, 24 F. 3d at 1446-47.

<sup>71</sup> The centrality of these objectives to Congressional interest is that the FCC may not forbear from enforcing Sections 251(c)(6) – as well as 251(c) in general – until its "requirements have been fully implemented." 47 U.S.C §10(d).

<sup>72</sup> *GTE v. FCC*, 205 F. 3d at 424.

47 U.S.C. §§251(c)(2)(6), 251(c)(3) and 251(c)(6). Third, only telecommunications carriers are entitled to collocation. 47 U.S.C. §§251(c)(2), 251(c)(3), and 251(c)(6). Fourth, where the collocation is to be used for interconnection purposes, such interconnection must be for the transmission and routing of local exchange service or exchange access. 47 U.S.C. §251(c)(2)(A). Fifth, where the collocation is being used to access UNEs, such UNEs must be used for the provision of a telecommunications service. 47 U.S.C. §251(c)(3).

The foregoing standards ensure that physical collocation rules, as advocated herein, will be closely related to the statutory purposes of Sections 251(c)(2) and (3), thereby setting limiting parameters on the definition of “necessary” in particular, and the ILEC obligation in Section 251(c)(6) in general, to satisfy the admonitions of the Supreme Court and D.C. Circuit. Any further restrictions would be impermissible under the plain language of the Act and in insoluble tension with the pro-competitive objectives of the Act and Sections 251(c)(2) and 251(c)(3). The Commission should resist any temptation to add further limitations or restrictions on its interpretation of these key market-opening provisions as they are not warranted under the statute.<sup>73</sup>

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<sup>73</sup> If “necessary” is interpreted in some narrow fashion such as “required or indispensable,” such that Section 251(c)(6) applies solely to the equipment types that represent the physical minimum that permit interconnection or access to UNEs, section 251(c)(6) would be rendered meaningless. As the FCC found in the *Local Competition First Report and Order*, collocation *per se* is not absolutely required if the reference to “necessary for interconnection or access to unbundled network elements” in Section 251(c)(6) is limited to some bare bones method of interconnection or access; there are alternative methods for providing interconnection and access, *i.e.*, “meet point” interconnection. Thus, if “necessary” modifies the equipment without which a CLEC could not obtain interconnection or access, as opposed to physical collocation required to meet ILEC obligations imposed by sections 251(c)(2) and (c)(3), than arguably in my circumstances *no* equipment would meet the requirements of section 251(c)(6). As a result, one would be led to the absurd conclusion that collocation for interconnection and access to UNEs is not permitted pursuant to section 251(c)(6) because collocation is not, strictly speaking, indispensable for interconnection or access. If “necessary” were read in this strictest sense, then the obligations of an ILEC to provide for collocation might be (continued...)

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Four years of CLEC experience with trying to obtain physical collocation underscore that collocation is a vital means of interconnection and access to UNEs if competition is to take hold. The rules of statutory construction require that the Commission give meaning to this provision of the statute consistent with the context and overall purpose of the Act. Because the strict application of the term “necessary” to refer to only that equipment indispensable for interconnection or access to UNEs renders Section 251(c)(6) all but meaningless and will not further these statutory purposes, it would be unreasonable to interpret the term narrowly in the circumstances. Instead, Section 251(c)(6) should be read to authorize physical collocation that the Commission deems required to fulfill the goals of Section 251(c), including the collocation of any equipment without which the Commission concludes that the ILECs cannot satisfy their obligations under Sections 251(c)(2) and (c)(3) and the pro-competitive objectives of the Act cannot be achieved. What that means is discussed more fully below.

**C. REQUESTING CARRIERS MUST BE PERMITTED TO COLLOCATE ANY EQUIPMENT THAT THEY INTEND TO USE FOR INTERCONNECTION OR ACCESS TO UNEs AND TO UTILIZE ALL FUNCTIONS RELATED TO THESE OPERATIONS**

As explained above, ILECs must provide physical collocation to the extent the Commission deems required to further the goals and objectives of Sections 251(c)(2) and 251(c)(3). Previously, in the *Local Competition First Report and Order* and the *Advanced Services First Report and Order*, the Commission required ILECs under Section 251(c)(6) to permit physical collocation of the following types of equipment:

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little more than those applying to all carriers under Section 251(a) – *i.e.*, collocation would be strictly voluntary -- and Section 251(c)(6) would impermissibly be rendered (continued...)

- Transmission equipment, including optical terminating equipment, concentration equipment, and multiplexers.<sup>74</sup>
- DSLAMs, routers, ATM multiplexers, remote switching modules and other equipment used to interconnect with an ILEC or to access unbundled network elements for the provision of telecommunication services.<sup>75</sup>

Provided that such collocated equipment is used for such interconnection or access, the *Advanced Services First Report and Order* permitted the collocating carriers to use other functions integrated into such equipment, including switching and enhanced services functionality.<sup>76</sup>

There has been no debate from the ILECs that they must accommodate physical collocation of basic transmission equipment of the sort described in the first bullet above. Indeed, collocation of this type of equipment was expressly required in the *Local Competition First Report and Order*, and the ILECs did not appeal that finding.<sup>77</sup>

The debate revolves around integrated and multifunction equipment that not only provides for direct access to UNEs and/or interconnection, but has other related functionality as well. The regulatory treatment of such equipment is particularly important for the development of competition because modern technology is eradicating the need for separate transmission, multiplexing, switching, and information services equipment, to name a few examples. The Commission has already recognized that equipment integrating multiple functions is more

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meaningless. *See Moskal v. US*, 498 U.S. 103, 109-110 (1990) (there is an interpretive obligation to try to give meaning to all the statutory language).

<sup>74</sup> *Local Competition First Report and Order* 11 FCC Rcd at 15794, ¶580.

<sup>75</sup> *Advanced Service First Report and Order* 14 FCC Rcd at 4776-4777 ¶28.

<sup>76</sup> *Id.* at 4777-4778 ¶29.

<sup>77</sup> *See Local Competition First Report and Order*, 11 FCC Rcd at 15799, ¶ 580.

efficient and cost effective. Such equipment also facilitates the provision of a broader range of services.<sup>78</sup>

The Joint Commenters submit that provided the equipment a CLEC seeks to collocate is deployed for purposes of access to UNEs and/or interconnection and meets minimum threshold requirements, such as NEBS Level 1 safety standards,<sup>79</sup> the burden should be on the ILEC to demonstrate that collocation of such equipment should not be allowed. To succeed, ILECs must show that the requested collocation is not technically feasible, is impractical because of space limitations, or violates other bases expressly in the Commission's rules, namely that the collocation of such equipment is not required to "fully implement" the provisions and objectives of Sections 251(c)(2) and 251(c)(3).

Unless such equipment as described above, and equipment that provides similar functionality, is permitted under the rules the Commission adopts in this proceeding, the goals and objectives of Sections 251(c)(2) and 251(c)(3) will be frustrated for several reasons:

*First*, CLECs will not be able to compete effectively with ILECs because they will either be unable to provide the same services as the ILEC in all cases or the cost of providing services will increase unreasonably, giving ILECs an insurmountable and discriminatory competitive edge. For example, as the Commission recognizes, in order to provide xDSL services, a carrier's DSLAM cannot be located beyond a certain distance from the end user and the equipment must have direct access to the copper loop.<sup>80</sup> In most instances, this

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<sup>78</sup> See *Advanced Services First Report and Order*, 14 FCC Rcd at 4775, 4777-4778, ¶¶ 26, 29.

<sup>79</sup> *Id.* at 4780-81, ¶¶ 34-35.

<sup>80</sup> See *UNE Remand Order*, at 15 FCC Rcd at 3838-3839, ¶313 ("xDSL services generally may not be provisioned over fiber facilities. . . . We agree that if a requesting carrier is unable to install its DSLAM at the remote terminal or obtain spare copper loops

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will require collocation or the CLEC will have to construct its own loop facilities, a requirement Section 251(c)(3) was meant to obviate (subject to the necessary and impair standards of Section 251(d)). Thus, in order to use interconnection or access to UNEs, to compete with ILECs, collocation of certain equipment must be permitted in the ILEC premises.<sup>81</sup>

Notably, the “additional” functionalities being described herein are those the CLEC would have no reason to utilize if the equipment were not also being used for interconnection with the ILEC network or access to UNEs. Thus, for example, integrated switching functionality will act on traffic that is exchanged with the ILEC network (interconnection) or over unbundled loops and/or transport (access to UNEs). Accordingly, such functions in addition to basic transmission functions are, in any reasonable sense of the words, used for interconnection or access to UNEs and their deployment is inextricably related to the purposes of Sections 251(c)(2) and 251(c)(3).<sup>82</sup>

If collocation of modern integrated or multifunction equipment is denied, competitors’ costs will increase unnecessarily, denying CLECs a meaningful opportunity to compete. Denying CLECs the ability to collocate such equipment will force CLECs to buy multiple pieces of less efficient, single function equipment, only some of which may be

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necessary to offer the same level of quality for advanced services, the incumbent LEC can effectively deny competitors entry into the packet switching market.”). Notably, the decision by the FCC in some circumstances to not make certain advanced service UNEs available, such as packet switching and permanent virtual circuits, was predicated on the ability of CLECs *to collocate* DSLAMs and related multifunction equipment in ILEC premises. *Id.* at 3838-3839, ¶ 313.

<sup>81</sup> The need for collocation in the remote terminals of ILECs to provide certain advanced services is discussed more fully below in Section VIII.

<sup>82</sup> The D.C. Circuit, in *GTE v. FCC*, referred to “straw man” integrated functionalities such as payroll or data collection unrelated to interconnection or access to UNEs. 205 F. 3d at (continued...)

collocated (under such a narrow interpretation), despite the fact that the functions of the integrated equipment all intricately relate to interconnection or access to UNEs. In addition to the expenditures for additional pieces of equipment, a CLEC's associated land and building costs to achieve the same functionality will increase if it cannot collocate integrated or multi-function equipment but must find space both in and outside of ILEC premises for multiple pieces of equipment. The CLEC will also incur the additional costs of unnecessary transport and cross connections between these multiple pieces of equipment. Further, because of these connections, additional points of failure will be needlessly introduced into CLEC network architectures. As the Commission stated when it rejected efforts by the ILECs to require intermediate single point of termination ("SPOT") frames and other arrangements between unbundled elements and collocated equipment, additional points of failure are unnecessary and introduce inefficiencies into the networks of competitors.<sup>83</sup> Moreover, as the D.C. Circuit recognized in *GTE v. FCC*, economic and operational factors such as these are properly considered when ascertaining whether the Commission's rules further the statutory purposes of the Act.<sup>84</sup>

*Second*, if ILECs are not required to permit collocation of such multifunction equipment, ILECs will be given an enhanced, if not inherent, ability to discriminate against CLECs in violation of Sections 251(c)(2), 251(c)(3), and 251(c)(6) of the Act. Specifically, ILECs will be capable of discriminating because, unlike CLECs, they will be able to install and use the most efficient technology and equipment to access network elements directly. Section

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424. The Joint Commenters are unaware of any desire of CLECs to have such functionalities integrated into collocated equipment.

<sup>83</sup> See *Advanced Service Order* 14 FCC Rcd at 4784-4785 ¶ 42.

<sup>84</sup> 205 F. 3d at 425.



251(c)(3) prohibits ILECs from providing access to UNEs discriminatorily. The Commission recognizes that the nondiscrimination requirement is met only if the elements *and the access to those elements* that CLECs receive are of the same quality as the elements and access thereto that *the ILEC itself enjoys*.<sup>85</sup>

[T]he phrase “nondiscriminatory access” in Section 251(c)(3) means at least two things: first the quality of an unbundled network element that an incumbent LEC provides, *as well as the access provided to that element*, must be equal between all carriers requesting access to that element; second, where technically feasible, the access and unbundled network element provided by an incumbent LEC must be at least equal in quality to that *which the incumbent LEC provides to itself*.<sup>86</sup>

Moreover, as the Commission noted in the *Local Competition First Report and Order*, “because Section 251(c)(3) includes the terms ‘just’ and ‘reasonable,’ this duty encompasses more than the obligation to treat carriers equally.”<sup>87</sup> Specifically, Section 251(c)(3) requires that the means of access to unbundled elements, as well as the elements provided, must give carriers a “meaningful opportunity to compete” with the ILEC.<sup>88</sup> As noted above, if CLECs, unlike ILECs, are required to incur the additional and unnecessary equipment, space, and transport costs described above – as well as introduce additional points of failure into their networks — in order to interconnect with ILEC, and access UNEs to provide telecommunication services, they will be denied such a meaningful opportunity to compete.

Similarly, the Commission concluded that the term “discriminatory” as used in Section 251(c)(2) “applies to the terms and conditions [of interconnection] that an incumbent

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<sup>85</sup> *Local Competition First Report and Order* 11 FCC Rcd at 15657, ¶ 312.

<sup>86</sup> *Id.* (emphases added).

<sup>87</sup> *Id.* at 15660, ¶ 315.

<sup>88</sup> *Id.*

LEC imposes on third parties *as well as on itself*.”<sup>89</sup> The Commission also explained that where the interconnection the ILEC provides is “less efficient than an incumbent LEC provides itself, the incumbent LEC violates the duty to be just and reasonable under Section 251(c)(2)(D).”<sup>90</sup> Where a CLEC is limited to collocating equipment on an ILECs premises that is more costly and less efficient than an ILEC itself can place in those premises, then the collocation provided is discriminatory, unjust, and unreasonable and in violation of Section 251(c)(2).

Significantly, Section 251(c)(6), in a manner fully complementary to Sections 251(c)(2) and (c)(3), also includes the obligations that terms and conditions be just, reasonable, and nondiscriminatory. ILECs have no restrictions on the placement of integrated or multi-function equipment on their premises used to access elements in their network or otherwise interconnect such equipment with existing network configurations. Denying CLECs the same flexibility would be unjust, unreasonable, and discriminatory in violation of Section 251(c)(6).

*Third*, if the types of equipment that can be collocated are defined to exclude those which integrate functions that are not in the strictest “stand alone” sense absolutely required for the physical activities of interconnection and access to UNEs, albeit they are used in conjunction with such activities, ILECs will be able to delay a CLEC’s efforts at collocation and its delivery of services to consumers.<sup>91</sup> Specifically, ILECs will have the incentive to challenge, on a regular basis, whether the functionality of the equipment that the CLEC intends to collocate to access UNEs or interconnect with the ILEC network complies with the Commission’s rules and regulations. Regardless of where the Commission draws the line between equipment types

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<sup>89</sup> *Id.* at 15612, ¶ 218 (emphasis supplied).

<sup>90</sup> *Id.*

that CLECs must be allowed to collocate and equipment that CLECs are not entitled to collocate absent ILEC consent, ILECs must not be allowed to be the arbiters of what equipment they are obligated to permit requesting carriers to collocate on their premises. That authority must always reside in a *bona fide* regulatory body which makes such determination *de novo*, guided, of course, by appropriate Commission rules.

In short, to ensure that CLECs are given a meaningful opportunity to compete, the market and efficient network and equipment design – not regulation – should determine where and what types of equipment CLECs may collocate in order to access unbundled network elements and interconnect with ILECs. Only by permitting collocation of the different types of equipment described above will the Commission foster the achievement of the goals and objectives of Sections 251(c)(2) and 251(c)(3), as well as the broader purposes of the 1996 Act. Accordingly, the physical collocation of such equipment is “necessary for interconnection or access to unbundled network elements” under Section 251(c)(6), read in conjunction with Sections 251(c)(2) and 251(c)(3).

**IV. THE REQUIREMENTS OF SECTIONS 251(C)(2), (C)(3) AND (C)(6), ALONG WITH THE DECISION OF THE D.C. CIRCUIT, PROVIDE THE COMMISSION WITH SUFFICIENT GUIDANCE TO DETERMINE THE MEANING OF “PHYSICAL COLLOCATION” UNDER SECTION 251(C)(6)**

As detailed in Section II, in the *Advanced Services First Report and Order*, the Commission adopted several pro-competitive decisions that facilitated physical collocation in ILEC offices, but were vacated by the D.C. Circuit. First, the Commission required ILECs to allow collocation in any unused space, as long as there were no technical reasons for not

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(...continued)

<sup>91</sup> For a fuller discussion of the impact on CLECs and their customers resulting from delays in collocation, see Section VI, A., *infra*.

allowing collocation in the unused space.<sup>92</sup> Second, the Commission determined that ILECs could not require competitors to collocate in separate or isolated areas.<sup>93</sup> Finally, the Commission determined that the ILECs could not require competitors to use separate entrances to obtain access to their equipment.<sup>94</sup> As the Commission noted in the *Second Further Notice*, the court found that the Commission had not adequately justified its decisions and remanded these decisions to the Commission so that it could refine, reconsider, and further explain its requirements.<sup>95</sup>

**A. THE D.C. CIRCUIT'S DECISION TO UPHOLD THE COMMISSION'S RULES REQUIRING ILECs TO PROVIDE CAGELESS PHYSICAL COLLOCATION PROVIDES THE FRAMEWORK FOR REAFFIRMING THE COMMISSION'S DECISIONS REGARDING SPACE ASSIGNMENT, ISOLATED AND SEPARATED COLLOCATION AREAS, AND SEPARATE ENTRANCES**

As discussed above, the D.C. Circuit affirmed the Commission's decision to require ILECs to provide cageless collocation.<sup>96</sup> The D.C. Circuit's decision provides the framework for deciding how to resolve the remaining issues regarding physical collocation: space assignment, isolated and separated collocated areas, and separate entrances. As discussed above, nothing in the Act expressly requires (or prohibits) cageless collocation.<sup>97</sup> However, as the Commission reasoned and the court approved, caged collocation alone does not fulfill the goals of the Act because it is more expensive and it wastes a precious commodity, space in the

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<sup>92</sup> *Advanced Services First report and Order*, 14 FCC Rcd at 4784-85, ¶ 42.

<sup>93</sup> *Id.*

<sup>94</sup> *Id.*

<sup>95</sup> *Second Further Notice* 2000 Lexis at 109-110 ¶ 94.

<sup>96</sup> *GTE v. FCC*, 205 F. 3d at 424-425.

<sup>97</sup> *Id.* at 425.

ILECs' office.<sup>98</sup> The court rejected the ILECs' argument regarding security concerns with cageless collocation arrangements – which is not mentioned in Section 251(c)(6) and is not one of the two limitations on ILEC provision of physical collocation<sup>99</sup> – finding that there were “alternative means available to LECs to ensure the security of their premises.”<sup>100</sup> These findings combined with the other requirements of Section 251(c)(6), and ultimately the requirements of Section 251(c)(2) and (c)(3), as discussed below, dictate that the Commission reaffirm its previous decisions regarding physical collocation and better explain those decisions so that the D.C. Circuit understands why the Commission's initial decisions were correct and required by the Act.

**B. THE STATUTORY REQUIREMENTS OF SECTIONS 251(C)(2), (C)(3), AND (C)(6) PROVIDE THE COMMISSION WITH THE AUTHORITY TO ALLOW COMPETITORS TO CHOOSE COLLOCATION SPACE, FORBID SEGREGATED SPACE ABSENT A SHOWING THAT IT IS TECHNICALLY REQUIRED UNDER SECTION 251(C)(6), AND PROHIBIT THE ILECs FROM REQUIRING SEPARATE ENTRANCES**

**1. THE PLAIN MEANING OF SECTION 251(C)(6) REQUIRES ILECs TO ALLOW PHYSICAL COLLOCATION IN UNUSED SPACE WHERE THERE ARE NO TECHNICAL CONCERNS**

ILECs have a “*duty to provide, . . . for physical collocation* of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, *except . . . if* the local exchange carrier demonstrates to the State commission that *physical collocation is not practical for technical reasons or because of space*

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<sup>98</sup> *Id.*

<sup>99</sup> Section 251(c)(6) requires an ILEC to provide for physical collocation unless it can demonstrate to a State commission “that physical collocation is not practical for technical reasons or because of space limitations.” 47 U.S.C. § 251(c)(6). Security, convenience to the ILEC, whether the ILEC is happy, and so forth, are not valid concerns for determining whether an ILEC must provide physical collocation on its premises.

<sup>100</sup> *GTE v. FCC*, 205 F. 3d at 425.

limitations.”<sup>101</sup> Therefore, if the equipment is necessary to fulfill the goals of Section 251(c)(2) or (c)(3), as described above, the ILEC must allow physical collocation unless it is not practical for technical reasons or because of space limitations. If there is unused space and there are no technical reasons for not using the space, then the ILEC must allow physical collocation in that space. Simply stated, until such space is exhausted in an ILEC office, the ILEC must continue to provide physical collocation in that office.

The issue then, is not when must an ILEC provide physical collocation – if there is unused space and there are no technical concerns about the space it must provide physical collocation – but rather, as recognized by the Commission in *Second Further Notice*,<sup>102</sup> who is to choose what space to use in the ILEC office, and subject to what constraints.<sup>103</sup> In the *Advanced Services First Report and Order*, it appears that the Commission combined the “when” and “who” questions in such a way that the D.C. Circuit did not understand why the Commission reached the conclusions it did. The Commission, however, was within its statutory authority when it implemented a space assignment policy for physical collocation. It just needs to better articulate that policy and explain why it took the actions it did.

**2. SECTIONS 251(c)(2), (c)(3), AND (c)(6) REQUIRE THAT A CLEC BE ABLE TO CHOOSE IT OWN COLLOCATION SPACE**

Section 251(c)(6) imposes on ILECs the duty to provide for physical collocation “on rates, terms, and conditions that are just reasonable, and nondiscriminatory.”<sup>104</sup> Similarly, Section 251(c)(2)(C) requires nondiscriminatory interconnection “that is at least equal in quality

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<sup>101</sup> 47 U.S.C. § 251(c)(6) (emphases added).

<sup>102</sup> *Second Further Notice* 2000 Lexis at 110-112 ¶¶ 95-96.

<sup>103</sup> *GTE v. FCC*, 205 F. 3d at 426; *Reconsideration Notice* 2000 Lexis 110-111 at ¶ 95.

<sup>104</sup> 47 U.S.C. § 251(c)(6).

to that provided by the local exchange carrier to itself, or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection.”<sup>105</sup> Further, Section 251(c)(3) requires “nondiscriminatory access to network elements on an unbundled basis.”<sup>106</sup> In considering whether provision of interconnection or access to UNEs is discriminatory in the collocation context, the Commission must consider where the ILEC locates its own equipment, as well as where it has permitted its subsidiaries, its affiliates, and other competitors to collocate equipment. Not only is this consistent with previous Commission considerations of the nondiscrimination standard,<sup>107</sup> it fulfills the requirements of Sections 251(c)(2), (c)(3), and (c)(6).

**a. Ensuring collocation that is just, reasonable and nondiscriminatory**

The best way to ensure that collocation space is offered to competitors in a just reasonable and nondiscriminatory manner is to have competitors choose their own space, just as ILECs do. Any challenge an ILEC might raise in response to a competitor’s selection must be subject to clear criteria designed to ensure competitors are not denied space unjustly, unnecessarily, or in a discriminatory manner. If carriers cannot select the space, then there will inevitably be delay, additional cost, and increased litigation, as competitors are required to work their way through the gauntlet of unnecessary steps, poor space assignments, and ILEC challenges to competitors seeking to obtain space they are entitled to by the statute. In such circumstances, one cannot maintain that collocation is being provided in a just, reasonable, and nondiscriminatory manner, as required by Sections 251(c)(2), (c)(3), and (c)(6).

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<sup>105</sup> 47 U.S.C. § 251(c)(2)(C).

<sup>106</sup> 47 U.S.C. § 251(c)(3).

**b. Who selects space for the ILECs, its affiliates, and subsidiaries?**

Sections 251(c)(2), (c)(3) and (c)(6), all require the ILECs to provide just, reasonable and nondiscriminatory access to interconnection and access to UNEs. In considering compliance with these requirements the Commission must consider how the ILEC treats itself, as well as how it treats its affiliates and subsidiaries, not just how it treats competitors. The Commission must consider that currently the ILEC chooses where to locate its equipment within its office. Given the mandate of nondiscriminatory collocation, why should an ILEC choose where to locate its competitor's equipment?

What about the ILEC's affiliates and subsidiaries? Who chooses their space? What criteria are used to select that space? The Commission must ensure that the ILECs do not favor their subsidiaries and affiliates, or themselves for that matter, over competitors. Does the ILEC blindly choose where to collocate its affiliate, subsidiaries, and competitors *i.e.*, is the process blind so that the ILEC does not know to which carrier it is assigning collocation space? This is unlikely.

In a competitive market, an ILEC would locate its equipment in an efficient and cost-effective manner. To achieve the nondiscrimination requirements of Sections 251(c)(2), (c)(3), and (c)(6), the ILEC and collocators must all be to locate equipment in the same way.<sup>108</sup>

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(...continued)

<sup>107</sup> *Local Competition First Report and Order*, 11 FCC Rcd at 15612, ¶ 218.

<sup>108</sup> The Commission should consider requiring the ILECs to locate their equipment in a cost effective and space efficient manner. By instituting this requirement the Commission can prevent the ILECs from locating their equipment in a manner that occupies more space than is necessary. This requirement would achieve the same goal and complement the Commission's rule requiring the ILECs to remove obsolete unused equipment, *i.e.*, preserving space for collocation. *Advanced Services First Report and Order*, 14 FCC Rcd at ¶ 60; 47 C.F.R. § 51.321(i).



If the Commission or a state commission were assigned to determine where the ILECs placed their equipment, not only would ILECs object, the result would be less efficient placement of equipment. Just as the ILEC should be able to choose where it wants to locate its equipment, competitors should be allowed to choose where to locate their equipment in the central office. Otherwise, collocation will be discriminatory and the competitive market will not be approximated, frustrating the purposes of the Act.

The nondiscrimination requirements in Sections 251(c)(2), (c)(3), and (c)(6) entitle CLECs to obtain physical collocation consistent with the same considerations the ILECs use when planning where to locate their own equipment, *i.e.*, in a cost-effective, efficient location in the ILEC's office. The requesting carrier can be expected to choose what it considers the best possible space in which to collocate its equipment. Providing a competitor with a choice of where to collocate its equipment in the ILEC's office is the only way to ensure that it will receive just, reasonable, and nondiscriminatory collocation space.

Giving CLECs this ability is wholly consonant with Section 251(c)(6) under which an ILEC must continue to provide collocation in its offices until space where it is technically practical to collocate is exhausted.<sup>109</sup> Because Congress severely limited an ILEC's ability to prevent physical collocation, it is clear that Congress was not concerned about differences in the actual space. Why would – or should – Congress be concerned with this if the goal is to open ILEC networks to competition?

Since all space, ultimately, must be available for collocation consistent with the Commission's rules, the Commission must consider whether an ILEC should ever be permitted

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<sup>109</sup> See 47 U.S.C. § 251(c)(6).

to object to allowing a CLEC to use space “Z,” but not space “A.” The Joint Commenters submit that, apart from a clear showing of technical impracticability, the only possible answer is security. But, as discussed above, security is not a consideration under Section 251(c)(6). The Commission should, under no circumstances, accept the ILEC argument that security falls under the “not practical for technical reasons” umbrella. Security is not a technical concern.

Moreover, the Commission has already considered the security issue, and has found that there are security measures that can be used such that caged collocation is not necessary. Moreover, the D.C. Circuit agreed that “it is hardly surprising that the FCC opted to prohibit LECs from forcing competitors to build cages, *particularly given the alternative means available to LECs to ensure the security of their premises.*”<sup>110</sup> Security is just another red herring the ILECs have thrown out to delay collocation. The Commission should not condone any further attempts to frustrate collocation on these grounds.

The bottom line is that ILECs must provide physical collocation unless technically impractical or space is not available. To ensure that ILECs provide such physical collocation in a manner that comports with the Act, the Commission can either engage in heavy-handed regulation and oversee what collocation space is assigned to CLECs or, it can provide a mechanism where CLECs choose where to physically collocate space. If the task is left to ILECs, they will delay collocation, add costs, and require numerous appeals to already overworked and overburdened state commissions. Even if those state commissions are not overworked and overburdened, the ILECs will still “win,” as, at the very least, it will take the state commission time to resolve these disputes. As the ILECs, CLECs, and Commission know,

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<sup>110</sup> *GTE v. FCC*, 205 F. 3d at 425.

delaying collocation because of regulatory fiat delays competition and the benefits of competition.<sup>111</sup> The Commission can prevent this by providing CLECs with the ability to choose where they want to physically collocate their equipment.

**3. REVISING THE COMMISSION'S RULES TO ADDRESS THE COURT'S CONCERNS WHILE PROVIDING COMPETITORS WITH THE ABILITY TO CHOOSE WHERE TO COLLOCATE THEIR EQUIPMENT**

In accordance with the foregoing, the Coalition proposes the following procedure for governing the procedure for requesting and obtaining physical collocation in an ILEC office. This procedure meets the requirement that CLECs obtain just, reasonable, and nondiscriminatory collocation while acknowledging the ownership interest of ILECs in the property.

Within five (5) business days of receiving a collocation request, an ILEC must send a written response to the CLEC indicating whether space is available in that central office. Included in each response should be a map of the ILEC's office that the CLEC has requested to be collocated in. The map should show what space is occupied by ILEC and CLEC equipment, as well as any space the ILEC or other CLECs are planning to use within the next six months.<sup>112</sup> The map should also clearly designate unused space that falls within the limitations in Section 251(c)(6).<sup>113</sup> The letter must also include several dates within a ten-business-day period following the letter and times during normal business hours when CLECs can visit the ILEC's office. The CLEC may ask for alternative dates and times for such tours.

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<sup>111</sup> See Section VI.A, *infra*.

<sup>112</sup> It should be noted that section 251(c)(6) does not, on its face, allow reservation of unlimited space. However, to compromise with the ILECs and allow appropriate planning, the Joint Commenters make a proposal regarding the reservation of space in Section VI, *infra*.

<sup>113</sup> Section 251(c)(6) requires physical collocation unless "the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations." 47 U.S.C. § 251(c)(6).

Once CLECs receive this information, they should be able to request any unused space available on the ILEC's premises. CLECs must request such space in writing. Once the ILEC receives the CLEC's request for specific space, within ten (10) business days it must either accept the CLEC's request or reject it. If the ILEC rejects the CLEC's request, it must explain why it did so in writing for reasons consistent with the statute and Commission rules as well as offer at least two additional alternative spaces for physical collocation in the same office.

In order to reject a CLEC request, the ILEC must demonstrate to a state commission either (1) why the requested space is "not practical for technical reasons," or (2) that prior to the CLEC request, the ILEC or another carrier reserved the space.<sup>114</sup> In offering alternative physical collocation spaces, the ILEC must certify and demonstrate that the alternative space will (1) not cost materially more than the requested space in terms of installation, maintenance, and any other foreseeable costs; and (2) not take longer to provision than the requested space. If a state commission receives several rejection complaints against an individual ILEC, the Joint Commenters recommend the Commission be required to commence an enforcement action against the ILEC and have the ILEC immediately identify all space that meets the parameters of Section 251(c)(6). The CLECs involved should then be free to choose those remaining spaces without ILEC intervention.

During the time set out by these procedures, the ILEC and CLEC should be able to negotiate the physical collocation space. However, the Commission should make clear that ILECs may not use the process of rejecting CLEC collocation requests for specific space to delay collocation.

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<sup>114</sup> See Section VI, *infra*.

The above proposal provides ILECs and their competitors with all the protections of the statute. ILECs will be able to limit physical collocation per the limitations found in Section 251(c)(6). Meanwhile, if there is unused space in the ILEC office and there are no technical reasons for why the space cannot accommodate physical collocation, competitors will be able to interconnect and/or obtain access to UNEs at any technically feasible point in the ILEC's network. Providing the CLEC with a lesser role in determining physical collocation space would materially hinder the achievement of the goals behind Sections 251(c)(2), (c)(3), and 251(c)(6), and is not inconsistent with the plain meaning of those provisions. Moreover, the above-proposed mechanism for determining collocation space should reduce costs and limit delays in collocation. It accomplishes these goals by setting out a specific timetable and reducing the number of points on which ILECs and their competitors can disagree.

If a CLEC requests physical collocation without requesting specific space, the ILEC may not offer space that: (1) will be materially more costly than other available space; (2) will take longer to prepare for the requested collocation than other collocation space; and, (3) that is materially inferior to other available space on the basis of sound engineering principles or for other technical or operational reasons. If the ILEC fails to adhere to these requirements it would be violating the just, reasonable, and nondiscrimination requirements found in Sections 251(c)(2), (c)(3), and (c)(6).

**C. ALLOWING ILECs TO LIMIT COLLOCATION TO SEPARATE OR ISOLATED SPACE WOULD COMPROMISE THEIR OBLIGATIONS UNDER SECTION 251**

Unless there are technical reasons or limitations on space, ILECs should not be allowed to require CLECs to use separate or isolated collocation space. As discussed several

times above,<sup>115</sup> the only statutory limitation on physical collocation that the Commission finds would further the objectives of Sections 251(c)(2) or 251(c)(3) is space availability and practicality for technical reasons.<sup>116</sup> Requiring separate, isolated, walled or caged collocation will not increase space efficiency in ILEC offices. Indeed, walls, separations, and cages will take up additional space resulting in the inefficient use of space.<sup>117</sup> Moreover, walls, separations and cages will not alter the technical practicality of a collocation space. Even the D.C. Circuit found that “nothing in the statute can be read to *require* caged collocation, so the Commission surely was free to promulgate reasonable rules implementing physical collocation under a cageless regime.”<sup>118</sup> The only possible concern that the ILECs might have with not requiring isolated or separate collocation area is security. The Commission, however, has already determined that there are other methods for ensuring security.<sup>119</sup> Even the court noted that it was “hardly surprising that the FCC opted to prohibit LECs from forcing competitors to build cages, particularly given the alternative means available to LECs to ensure the security of their premises.”<sup>120</sup> Further, unless competitors can choose any technically feasible, unused space in the ILEC’s office, there is no way to ensure that the ILECs will not impose unjust, unreasonable, and/or discriminatory obligations on their competitors or segregate space so as to unnecessarily increase ILECs costs and frustrate competition.<sup>121</sup>

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<sup>115</sup> See *supra* Section IV., B., 1.

<sup>116</sup> See 47 U.S.C. § 251(c)(6).

<sup>117</sup> *Advanced Services First Report and Order*, 14 FCC Rcd at 4784-85, ¶ 42; *GTE v. FCC*, 205 F. 3d at 425.

<sup>118</sup> 205 F. 3d at 425.

<sup>119</sup> *Advanced Services First Report and Order*, 14 FCC Rcd at 4787-4789 ¶¶ 46-49.

<sup>120</sup> 205 F. 3d at 425.

<sup>121</sup> See *id.*

Given the D.C. Circuit's decision not to require caged collocation and Section 251(c)(6)'s limitation on ILECs denying physical collocation, it does not make sense to allow ILECs to require or request CLECs to collocate in separate or isolated areas. Even if ILECs were allowed to require separate or isolated collocation, what would happen when all of that space was exhausted? Assuming separate or isolated space were permissible, once separate or isolated space is legitimately exhausted, ILECs would still be required to offer physical collocation in other unused space on the premises unless it "is not practical for technical reasons or because of space limitations."<sup>122</sup> Accordingly, there is no reason to mandate separate or isolated space; not requiring separate or isolated space does not infringe on ILEC property rights. Allowing such isolation is only likely to increase procedural burdens on CLECs and to delay the introduction of advanced services. Allowing such isolation is only likely to increase CLECs' procedural hurdles to obtain collocation space, delaying the introduction of competitive services.

**D. THE COMMISSION SHOULD NOT ALLOW SEPARATE ENTRANCES**

Similarly, the Commission should not allow separate entrances because they only make sense if CLEC equipment is separated from the ILEC's equipment. If CLEC equipment is not separated from ILEC equipment, as it need not be for the foregoing reasons,<sup>123</sup> CLECs need access to the same space as ILECs. The Commission already requires that ILECs provide competitors with direct access to their equipment.<sup>124</sup> Moreover, separate entrances would add unnecessary expense and delay to the collocation process. Separate entrances could also waste

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<sup>122</sup> 47 U.S.C. § 251(c)(6).

<sup>123</sup> *See supra* Section IV.,C.

<sup>124</sup> *Advanced Services First Report and Order*, 14 FCC Rcd at 4788-4789.

space, as new doors, walls and hallways would be needed to create separate entrances.<sup>125</sup> The only justification for separate entrances would be to ensure security. The Commission and the court already have recognized that there are adequate alternative methods for meeting the security requirements of the ILECs.<sup>126</sup> Therefore, separate entrances are not only not required by the statute, they work against the goals of the statute by imposing additional costs, adding delay, and using space that might otherwise be used for collocation.<sup>127</sup>

**E. THE COSTS OF SECURITY FOR CAGELES COLLOCATION SHOULD BE ALLOCATED ON A COMPETITIVELY NEUTRAL BASIS**

The Joint Commenters urge the Commission to take this opportunity to establish a cost allocation model for equitable recovery of ILEC costs added by security measures related to collocation. Both ILECs and CLECs benefit from the security measures installed on the ILEC's premises as the Commission found in the *Advanced Service Order*.<sup>128</sup> As a result, the ILEC and CLECs should each pay for their share of these costs on a competitively neutral basis. The cost model should be based on square footage used by the ILEC and CLECs on the ILEC's premises, similar in concept to constructs that the Commission has found acceptable to share interim

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<sup>125</sup> As discussed above, the FCC considers the "efficient use of collocation space to be crucial to the continued development of the competitive telecommunications market." *Advanced Services First Report and Order*, 14 FCC Rcd at 4784-85, ¶ 42.

<sup>126</sup> *Advanced Services First Report and Order*, 14 FCC Rcd at 4784-85, ¶ 42; *GTE v. FCC*, 205 F. 3d at 425.

<sup>127</sup> *See GTE Service Corp.*, 205 F. 3d at 425.

<sup>128</sup> *Advanced Services First Request and Order*, 14 FCC Rcd at 4787-88, ¶ 47 ("the incumbent LEC may not impose...security requirements that result in increased collocation costs without the concomitant benefit of providing necessary protection of the incumbent LEC's equipment.") *See also New York Telephone Company*, Opinion and Order in Module 2 (Collocation), Case 98-C-1357, Opinion No. 00-08 (NY PSC, June 1, 2000) ("NY PSC Collocation Order" at 30) ("CLECs are not the only beneficiaries" of security measures).



number portability costs.<sup>129</sup> In such a model, the ILEC should pay the percentage of costs based on the percentage of square footage of space it uses in the premises while each CLEC should pay for the costs based on the square footage it uses. This is equitable since the ILEC, presumably, has more equipment to protect. The need for more express guidance is made manifest by the difficulties that some State commissions have had when facing these issues.<sup>130</sup>

**V. CROSS CONNECTIONS BETWEEN COLLOCATORS ARE NECESSARY FOR INTERCONNECTION AND ACCESS TO UNES WITHIN THE MEANING OF SECTION 251(C)(6)**

**A. WHEN ONE COLLOCATED CARRIER CONNECTS TO ANOTHER INTERCONNECTED WITH THE ILEC OR BUYING ACCESS TO UNES, A CROSS-CONNECT BETWEEN THE TWO IS INTEGRALLY RELATED TO SUCH INTERCONNECTION OR ACCESS**

**1. CROSS-CONNECTIONS BETWEEN COLLOCATED CARRIERS ARE INTEGRALLY RELATED TO THE PURPOSES OF SECTIONS 251(C)(2) AND 251(C)(3) AND THE OPERATIONS OF INTERCONNECTION AND ACCESS TO UNES**

When a carrier providing competitive interoffice transport collocates and connects to a carrier that is directly purchasing UNES from the ILEC, for example, the transport carrier facilitates and supports the other carrier obtaining access to interconnection and UNES.<sup>131</sup> But

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<sup>129</sup> *Telephone Number Portability*, 11 FCC Rcd 8352, 8419-23 (FCC found that, for example, a cost recovery allocation based on each carrier's number of access lines in a service area would be competitively neutral).

<sup>130</sup> *See, e.g., NY PSC Collocation Order* at 30 ("The record lacks any clear indication of the proper disallowance or share to be assigned to Bell Atlantic-New York"); *compare Petition of Competitive Carriers*, Dockets Nos. 981834-TP *et al.*, Order No. PSC-00-0941-FOF-TP (Fl. PSC May 11, 2000) (The Florida PSC found that costs of security arrangements that benefit collocating carriers *and* the ILEC must be recovered from both the ILEC and collocating carriers based on relative use of square footage in the central office).

<sup>131</sup> The Joint Commenters do not intend to imply by these comments that cross-connects should only be found necessary to enable collocators to access alternate suppliers of interoffice transport. Cross-connects are also necessary, for example, if the Commission finds that ILECs are not required to provide splitter functionality as a UNE. In that event, (continued...)

for the collocation of the transport carrier, the second carrier might not find it justifiable to collocate and interconnect or access the ILEC's UNEs. The Commission should hold, therefore, that the transport carrier's collocation and thus its cross-connection is "necessary" for the purpose of interconnection and access to UNEs by the second carrier. Certainly, the transport carrier, even if through the second carrier, is interconnecting with the ILEC and accessing its UNEs. That is its purpose for being there: otherwise other collocating carriers would have no need for its services. In short, the Commission should conclude that collocation and cross-connects are needed to further the goals of 251(c)(2) and 251(c)(3), and are thus necessary for the reasons discussed in Section III.

**2. THE DEVELOPMENT OF A COMPETITIVE TRANSPORT MARKET WOULD FURTHER THE PURPOSES OF SECTIONS 251(C)(2) AND 251(C)(3) OF THE ACT**

In addition to facilitating interconnection and access to UNEs by other collocators, collocation by a transport carrier furthers other Section 251(c) goals. In the *UNE Remand Order*, the Commission found that requesting carriers are impaired without access to unbundled dedicated and shared transport. The Commission held that "self-provisioning ubiquitous interoffice transmission facilities, or acquiring these facilities from non-incumbent LEC sources, materially increases a requesting carrier's costs of entering a market or of expanding the scope of its service, delays broad-based entry, and materially limits the scope and quality of a requesting carrier's service offerings."<sup>132</sup> The Commission found that self-provisioned transport and transport from non-ILEC sources "is not sufficiently available as a

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(...continued)

UNE-platform providers and collocating data CLECs will be dependent upon carrier-carrier cross-connects within the ILEC premises to provide their services.

<sup>132</sup> *UNE Remand Order*, at ¶ 321.

practical, economic, and operational matter to warrant exclusion of interoffice” from unbundling requirements.<sup>133</sup> Because third party providers and self-provisioning were insufficient, the Commission mandated interoffice transport as a UNE under Section 251(c)(3).

Denial of collocation for competitive transport providers would have a chilling effect on carriers’ abilities to provide advanced services and would conflict with the act’s pro-competitive goals. In paragraph 84 of the *Second Further Notice*, the Commission seeks comment on the effect that various definitions of “necessary” would have on the ability of collocators to provide the services they wish to offer, and specifically, whether providers of dark fiber or interoffice transport services may collocate in ILEC central offices. As a threshold issue, of course these carriers can, and indeed already are, collocated throughout the country. They are providing a telecommunications service – interoffice transport and dark fiber – to themselves and to other requesting carriers. Congress could not have intended interoffice transport providers to operate at a disadvantage and to preserve interoffice transport as an ILEC monopoly indefinitely. Any definition of “necessary” that would deny collocation to these carriers and restrict this line of business to a perpetual monopoly by ILECs would be in conflict with Act.

Providers of interoffice transport and dark fiber need collocation in order to connect their networks directly to the ILEC where they themselves are purchasing UNEs from the ILEC, and to connect indirectly to the ILEC when they are providing services as carriers’ carriers to other CLECs. The Act’s purpose is to promote competition, including advanced services competition, not to place artificial limits on such competition. There simply is no policy justification for a reading of the Act that would deny carrier's carriers the opportunity to

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<sup>133</sup> *UNE Remand Order*, at ¶ 321.

collocate and cross-connect to CLECs, or for CLECs to connect to each other. Many of these carriers represent the cutting edge of technology and the promise of unlimited bandwidth sought after by both businesses and individual consumers. As the Commission correctly suggested in the *Second Further Notice*, a definition of “necessary” that would prevent such carriers from providing a desired service would conflict with the purposes of Sections 251(c)(2), (c)(3), and (c)(6) as well as the goals of the Act. In addition, such a definition, by placing competing providers at a disadvantage *vis a vis* the ILEC would be unjust, unreasonable, and unreasonably discriminatory in violation of Sections 251(c)(2), (c)(3), and (c)(6) of the Act.

Innovative carriers such as the Joint Commenters and others are attempting to provide competitive transport services as an alternative to many different types of carriers offering advanced services. These carriers provide virtually unlimited bandwidth through state-of-the-art fiber deployments. ILECs have pointed to this “frenzy” of fiber deployment as an indicia that competition is growing. However, restricting these carriers’ ability to collocate would stop this fiber deployment and the competition it represents in its tracks, forcing carriers to rely solely on ILEC transport.<sup>134</sup>

Numerous carriers stand ready and waiting to provide unbundled transport to CLECs and, ultimately, to relieve ILECs of this UNE obligation, but their progress thus far has been thwarted. A significant reason that third party providers have not deployed ubiquitous networks as the Commission envisioned stems from their difficulty in negotiating collocation, and increasingly, their inability to obtain carrier-carrier cross-connects in the wake of *GTE v.*

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<sup>134</sup> At least one ILEC, Qwest, recently stated in a teleconference through counsel that its fiber resources are being strained in the former U S West region. Given the potential shortage in availability of fiber from ILECs, the Commission should not consider placing restrictions on the many carrier’s carrier CLECs waiting to provide this service.

*FCC*. To the extent interoffice transport alternatives do exist, it is because ILECs have voluntarily agreed to allow collocation and cross-connects to a handful of carriers. The few instances of voluntary action, however, have not obviated the need for action by the Commission. Voluntary commitments can be reversed at the ILEC's whim when existing contracts expire.

As the Commission recognized in the *UNE Remand Order*, denial of collocation and cross-connections for competitive transport providers would substantially limit the ability of competitors to transport telecommunications traffic generated through interconnection or access to UNEs.<sup>135</sup> Failure to allow cross-connects and collocation for interoffice transport providers will prevent the development of competitive alternatives for interoffice transport, leaving competitors dependent on the ILEC. Carving a perpetual monopoly for ILECs for this crucial part of the network is in conflict with Congress's intent and the statutory objectives in the Act. In contrast, allowing collocation and cross-connects will further the purposes of Section 251 such as the rapid introduction of competition into all markets and the promotion of facilities-based competition, investment, innovation, and deregulation.

**B. THE COMMISSION SHOULD DEFINE CROSS CONNECTIONS BETWEEN COLLOCATORS TO BE A UNE**

In the event the Commission concludes that co-carrier cross-connects and collocation by transport carriers are not necessary under Section 251(c)(6), the Commission should establish cross-connects as independent UNEs. Cross-connects are ubiquitous within an ILEC's network and there can be little doubt they are network elements. Moreover, cross connections between collocators satisfy the definition of the Commission's existing dedicated

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<sup>135</sup> See *UNE Remand Order*, at ¶ 332.

transport and inside wiring network elements. “Dedicated transport” is defined as incumbent LEC transmission facilities dedicated to a particular customer or carrier that provide telecommunications between wire centers owned by incumbent LECs or requesting telecommunications carriers, or between switches owned by incumbent LECs or requesting telecommunications carriers.<sup>136</sup> ILEC-provided cross-connections over existing cable routes within an ILEC premises, which often contain multiple wire centers, satisfies the existing definition of Dedicated Transport. Because it fits within this existing definition, cross-connections, like dedicated transport, also should be found to be a network element.<sup>137</sup>

Similarly, cross connections also fit the definition of another already declared UNE, inside wiring. Inside wire is defined as all loop plant owned by the incumbent LEC on end-user customer premises as far as the point of demarcation, including the loop plant near the end-user customer premises. Under the Commission’s rules, carriers may access the inside wire subloop at any technically feasible point including, but not limited to, the network interface device, the minimum point of entry, the single point of interconnection, the pedestal, or the pole. Access to an ILEC-provided cross-connection over existing cable routes within a central office is essentially similar, providing additional justification for the Commission to declare a cross connection UNE.

Cross-connects would qualify as network elements under the Commission’s current framework for identifying UNEs. Cross-connects, - simple fiber or copper cable connectors between two pieces of equipment - extremely low-tech cable splices, are ubiquitous

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<sup>136</sup> *UNE Remand Order*, at ¶ 322 (citing *Local Competition First Report and Order*, 11 FCC Rcd at 15718, ¶ 440).

<sup>137</sup> This comports with the practice in Texas, where dark fiber cross-connects are a UNE under Texas’ “T2A” model interconnection agreement.

throughout the ILECs' networks and are currently used to connect the ILECs' own equipment as well as that of CLECs within the ILEC central office. Carrier-to-carrier cross connects, would be considered non-proprietary elements and, therefore, would be evaluated under the "impair" standard applicable to non-proprietary elements. Such elements, whether used by CLECs to interconnect with each other or to obtain access to interoffice transport offerings, must be unbundled under the "impair" standard. The Commission found in its *UNE Remand Order* that an incumbent LEC's failure to provide access to a non-proprietary network element "impairs" a requesting carrier within the meaning of Section 251(d)(2)(B) if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element materially diminishes a requesting carrier's ability to provide the services it seeks to offer. In order to evaluate whether there are alternatives actually available to the requesting carrier as a practical, economic, and operational matter, the Commission looks at the totality of the circumstances associated with using an alternative. In particular, the Commission considers the cost, timeliness, quality, ubiquity, and operational issues associated with use of the alternative. In addition, the Commission also considers whether unbundling obligations will further the goals of the Act, such as the rapid introduction of competition into all markets, the promotion of facilities-based competition, investment, and innovation, will reduce regulation, provide certainty in the market, and whether the unbundling obligations will be administratively practical for the Commission to apply.

Pulling a single piece of fiber up – which can cost as much as \$100,000 per fiber pull – for each CLEC customer of the interoffice transport provider would be prohibitively expensive and economically wasteful, for such additional expense would be totally unnecessary

if the ILEC permits such carriers to collocate in the central office or establish a “stable manhole” as described below. Such additional expense - ultimately borne by the end-user customer - would dictate that no carrier could afford the interoffice transport provider’s service, and therefore, that the service would not be available. In addition, the predictability offered by the Commission declaring cross-connects to be a UNE would allow carrier’s carriers to deploy ubiquitous networks reaching every ILEC central office, thereby furthering competition, the creation of new networks, and removing reliance on ILEC facilities. Accordingly, lack of access to carrier-to-carrier cross-connects would impair the provision of service by collocated CLECs and carrier’s carriers. The Commission should mandate that these elements be unbundled.

That the lack of cross connects impairs requesting carriers becomes readily apparent by considering the CLECs’ alternative course of action if cross connections are not available. Using cross-connects, a two-foot long jumper of cable can be used to interconnect CLECs collocated in the central office. Often, these carriers are located a mere few feet away within the ILEC central office. With cageless collocation some collocated CLECs are so close to one another that they are actually touching. Absent cross-connects, the two carriers would need to deploy hundreds of feet of cable, and possibly additional electronics, in order to interconnect somewhere outside of the ILEC central office.

Requiring expensive pulls of fiber outside of the central office to accomplish what could be done with a much shorter piece of cable within the central office, maybe as little as two feet in some cases, is unnecessary and wasteful. Cross-connects also are needed to avoid the inconvenience caused to commuters and pedestrians caused by digging new conduit outside the ILEC central office, typically located in the busiest part of a central business district, to make a interconnection that could have been made using a short cross-connect of cable. Indeed, in



many communities, space in public right of way is actually becoming depleted and should not be hastily wasted for such purposes when such an obvious and efficient alternative is available. Requiring carriers to go outside of the central at considerable expense is an unnecessary burden placed on competitors. Such a requirement is an impairment on CLECs. Accordingly, cross-connects are “necessary” pursuant to the Act.

**C. THE COMMISSION SHOULD MODIFY ITS COLLOCATION RULES TO INCLUDE THE “STABLE MANHOLE” IN ITS DEFINITION OF “PREMISES”; ALTERNATIVELY, THE COMMISSION SHOULD DECLARE THAT MFN’S “STABLE MANHOLE ZERO” PROPOSAL IS MANDATED PURSUANT TO THE ACT**

The high cost of multiple “pulls” of fiber to various CLEC and other customers collocating within the same ILEC central office forecloses CLECs from self-provisioning transport, as described above. To the extent that the Commission finds a carrier may not collocate or cross-connect to other collocators under Section 251(c)(6), as sought above, the Commission should adopt the “Stable Manhole Zero” proposal described in the *Second Further Notice*.

As the Commission stated in the *Second Further Notice*, an ILEC central office may be surrounded by 8-10 different manholes. Currently, the ILEC exercises exclusive discretion over determining which of these manholes will act as a point of entry for the fiber of collocated carriers (this is usually designated as “manhole zero” for that particular carrier). It is not unusual for the ILEC to assign different collocated carriers different manholes as a method of accessing the central office. Because fiber providers do not know in advance which of these manholes their customer will be using, they cannot know which manholes should be included on their backbone network. Once the network is built, if the ILEC designates a different manhole zero for the customer, the fiber provider must dig up the streets to build conduit from its backbone network to that particular manhole.

“Stable Manhole Zero” removes this problem. The “stable manhole” configuration would enable carriers to establish points of fiber distribution entirely outside the ILEC’s central office, i.e., at two ILEC manholes that provide access to the office, allowing a carrier to build entrance conduit directly from the manholes to the ILEC’s central office vault. Absent such an arrangement, a competitive interoffice transport provider will have no way of knowing where its customers will be located, and will be forced to tear up streets each time it receives a new customer, at prohibitive expense to the customers, and great inconvenience to the citizens where the build takes place. With “Stable Manhole Zero,” one (or more) interoffice transport providers can build to all of the ILEC central offices, providing an alternative to the ILEC’s transport. CLECs can then obtain fiber from this provider through the typical means that it employs when it receives fiber from the ILEC: by pulling a strand of fiber up from the “stable” manhole to its collocated equipment.<sup>138</sup>

In *GTE v. FCC*, the D.C. Circuit indicated that “no good reason” was given in the *Advanced Services Order* why a competitor, as opposed to the ILEC, should choose where to establish collocation on the LEC’s premises. As explained in Section IV, the Joint Commenters believe that CLECs must have that ability to further the purposes of Sections 251(c)(2) and 251(c)(3). Nonetheless, in this context, a competitive transport provider is obligated to tear up the streets and deploy fiber to manholes that surround the central office one CLEC and interexchange carrier customer at a time, the delay and expense of such a buildout would destroy the economies of the fiber distribution. In contrast, if an ILEC designates two manholes through

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<sup>138</sup> Where a CLEC is self-provisioning transport and directly purchasing UNEs, it should be permitted to cross-connect to other carriers so that they may use its excess fiber.

which it would pull cable to reach all collocated carriers within the central office, it would ensure efficient fiber distribution.

Using this justification, the Commission should modify its definition of “premises” to expressly provide for “stable manhole” collocation, even in instances where there is no space exhaustion in the ILEC central office. Nothing in Section 251(c)(6) suggests that collocation must take place in the ILEC central office at all. Accordingly, collocation in stable manholes should be permitted, at least for interoffice transport providers that do not intend to directly serve end-users from the ILEC central office. Moreover, the same reasoning set forth above that requires the Commission to declare a carrier-to-carrier cross connect UNE also mandates that, in the alternative, the Commission amend its collocation rules to require designation of diverse stable manholes.

**D. AT A MINIMUM, THE ACT REQUIRES THAT ILECs PROVIDE A TARIFFED CROSS-CONNECT SERVICE TO SATISFY THEIR INDIRECT INTERCONNECTION OBLIGATIONS**

In paragraph 89 of the Notice, the Commission asks whether an ILEC can be compelled to provide cross-connects under other provisions of the Act, such as Sections 251(a)(1). The answer is “yes.” Section 251(a)(1), in conjunction with Section 201(a), authorizes the Commission to take this step. However, this tariffed availability is no substitute for any of the relief sought above and in fact is the least preferred of all the alternatives described herein.

Section 251(a)(1) imposes on all carriers the duty to interconnect “directly or indirectly” with the facilities and equipment of other telecommunications carriers. Section 201(a), in turn, requires ILECs to provide telecom services on request, pursuant to just and reasonable rates. As a result, ILECs are required by the Act to provide tariffed services to effect

indirect interconnection. This obligates ILECs to provide CLECs with a cross-connection service, pursuant to tariff. Whether or not the Commission establishes cross-connects as a form of direct interconnection and access to UNEs – and we explain above that it should – the Commission must find that ILECs are obligated by the Act to provide cross-connect service.

Section 201(a) authorizes the Commission, where necessary or desirable in the public interest, to order common carriers to establish physical connections with other carriers, whether or not the common carriers might choose to do so voluntarily.<sup>139</sup> Similarly, the separate language in Section 201(a) requiring telephone companies to "furnish communications service upon reasonable request" independently gives the Commission authority to order the LECs to provide interconnection services to carriers, or even to noncarrier interconnectors.<sup>140</sup> In the past, the Commission has used its authority under Section 201 to produce substantial public interest benefits by removing unnecessary barriers to increased competition.<sup>141</sup>

Should the Commission determine that it lacks authority under *GTE v. FCC* to mandate carrier-to-carrier cross connects pursuant to Section 251 of the Act, it should require LECs to provide such cross connects on a tariffed basis pursuant to its power to require interconnection under Sections 201 and 251 of the Act. The Commission should require ILECs to file this service in their federal tariffs. Because the Commission authority for such action would derive from Section 201, such a service need not be priced at TELRIC as would be required under Section 251. However, the service must be priced on a cost basis, as required by

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<sup>139</sup> *Expanded Interconnection With Local Telephone Company Facilities*, Memorandum Opinion and Order, 59 FR 38922 (1994) at ¶ 18. See, also, e.g., *Lincoln Tel. & Tel. Co. v. FCC*, 659 F2d 1092, 1103-06 (DC Cir 1981); *Bell Telephone Co. of Pa. v. FCC*, 503 F2d 1250, 1268-73 (3rd Cir 1974), *cert. denied*, 422 US 1026 (1975).

<sup>140</sup> *Expanded Interconnection Order* at ¶ 19.

<sup>141</sup> *Id.*

Section 202 of the Act. As the Commission recognized in the *UNE Remand Order*, that cross-connections would be available pursuant to tariff would not render them unnecessary.<sup>142</sup>

**VI. THE COMMISSION SHOULD ADOPT ADDITIONAL NATIONAL COLLOCATION STANDARDS**

**A. THE COMMISSION'S 90-DAY PROVISIONING INTERVAL FOR CAGED PHYSICAL COLLOCATION SHOULD BE SHORTENED FOR CAGELESS COLLOCATION, VIRTUAL COLLOCATION, MODIFICATIONS TO EXISTING COLLOCATION ARRANGEMENTS, AND COLLOCATION WITHIN REMOTE ILEC STRUCTURES**

In the *Second Further Notice*, the Commission seeks comment on the adoption of overall maximum provisioning intervals for different types of collocation arrangements. The Commission specifically asks whether the 90-day provisioning interval adopted in the *Order* for caged collocation should be shortened for other types of collocation such as cageless collocation.<sup>143</sup>

The Joint Commentors strongly support the adoption of national standards for the provisioning of *all* types of collocation. As the Commission recognizes in its *Order*, the timely provisioning of collocation space is essential to the CLECs' ability to compete effectively in the markets for advanced services and other telecommunications services.<sup>144</sup> A delay in the deployment of collocation space causes significant competitive injury to a CLEC in a number of ways. If a CLEC's collocation space is not available in a timely manner, the CLEC will likely be forced to delay services to new markets and, perhaps, to signed customers. If these customers have not developed significant affinity for the CLEC, they may become frustrated with the delays and decide to take service from one of the CLEC's competitors, including the ILEC.

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<sup>142</sup> *UNE Remand Order*, ¶ 354.

<sup>143</sup> *Second Further Notice*, ¶¶ 114-115.

<sup>144</sup> *Order*, at ¶ 17.

Delays in the availability of collocation space also impact the CLEC's own construction schedule at the central office in question. Such delays forces a CLEC to reschedule its agreements with vendors to complete construction work on site. Expensive equipment and transmission facilities must be left idle, and cannot be placed into revenue-bearing service. The costs associated with delays in the availability of collocation space are compounded for those CLECs that are building networks nationwide. Typically these CLECs attempt to collocate equipment in hundreds of central offices in a roll-out schedule that coordinates financing, equipment purchasing, site preparation, marketing, and the like on a rolling market-by-market basis. Thus, delays at one site can effectively force the CLEC to delay the implementation of service in other markets that are farther down on the schedule. This lack of certainty in schedule implementation can have broader ramifications for the CLEC, as the inability to adhere to a firm business plan can negatively impact the CLEC's ability to attract and maintain capital financing.

In its *Order*, the Commission recognized that ILECs have the incentive and ability to delay the availability of collocation space for CLECs in adopting provisioning intervals for caged collocation.<sup>145</sup> The incentive and ability of the ILECs to behave in an anticompetitive manner do not magically disappear if collocation is provided in a different fashion. Indeed, the record in this proceeding suggests that the ILECs, forced by the Commission's rules to provision caged collocation within 90 days, have simply shifted their anticompetitive tactics to other forms of collocation. For example, Southwestern Bell and Ameritech have reportedly insisted on as long as 180 days to provision cageless collocation space – twice as long as required to provision

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<sup>145</sup> See *Order*, ¶ 22.

caged collocation space, which requires more work.<sup>146</sup> Some CLECs have been asked by Ameritech to accept inferior collocation intervals for *all* types of collocation in order to obtain cageless collocation.<sup>147</sup> Verizon ties its intervals for cageless collocation to the presence or absence of a cage for its own equipment, with longer intervals (105 business days v. 90 business days) quoted if Verizon's own equipment is not secured.<sup>148</sup>

These instances underscore the need to adopt national standards for provisioning forms of collocation other than caged. Fortunately, the only issue that must be addressed is the length of the interval for each type of collocation. To that end, the Joint Commentors recommend that the Commission limit application of the 90-day provisioning interval adopted in the *Order* to caged collocation. The Commission's standards for cageless, virtual, and collocation within remote structures should specify 60 days as the maximum provisioning interval, simply because these forms of collocation can reasonably be provisioned materially more quickly than caged collocation. Modifications to existing collocation arrangements, such as expansion of cages, additions to cageless arrangements, and additional power outlets, should be provisioned within 30 days.

The states have generally recognized that the work required for an ILEC to provision caged collocation is much more extensive than the work required to provision other forms of collocation, and thus that shorter intervals are appropriate in the latter case. For example, Florida has established 60 days as the provisioning interval for virtual collocation

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<sup>146</sup> Ex Parte Filing of BroadSpan Communications, Inc. in CC Docket No. 98-147, Dec. 12, 1999, at 2.

<sup>147</sup> Ex Parte Filing of Covad Communications Company in CC Docket No. 98-147, Aug. 10, 1999 at 2.

<sup>148</sup> *Id.* at 5.

under “ordinary conditions.”<sup>149</sup> Texas allows 55 days for the provisioning of cageless collocation in active collocation space when the CLEC installs its own bays.<sup>150</sup> The experience of at least some CLECs suggests that it has not been difficult for SWBT in Texas to meet this requirement.<sup>151</sup> Texas has also set intervals for modifications to existing physical collocation space. The interval set for provisioning many of the modifications specified is 30 days or less.<sup>152</sup>

In adopting national standards for provisioning intervals, the Commission should clearly establish that these standards are a ceiling and not a floor. As demonstrated by the record in this proceeding and the discussion herein, the states have provided – and should continue to provide – important guidance in determining what provisioning intervals are appropriate and necessary to facilitate effective competitive entry. Thus, the states should have the flexibility to respond to specific issues by mandating shorter provisioning intervals for the ILECs than provided in the Commission rules. Should an ILEC meet a state-established provisioning interval that is shorter than the national standard, such action should give rise to a rebuttable presumption that the provisioning interval is technically feasible in any state served by that ILEC. This approach is consistent with the “best practices” rule adopted by the Commission in

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<sup>149</sup> *In re Petition of Metropolitan Fiber Systems of Florida, Inc. for Arbitration with BellSouth Telecommunications, Inc. Concerning Interconnection Rates, Terms, and Conditions, Pursuant to the Federal Telecommunications Act of 1996*, Docket No. 960757-TP, Order No. PSC-96-1579-FOF-TP, at 102 (FL PSC Dec. 31, 1996).

<sup>150</sup> *Investigation of Southwestern Bell Telephone Company’s Entry Into the Texas InterLATA Telecommunications Market, Project No. 16251*, Order No. 51 Approving Time Intervals for Provisioning Collocation Under Revised Physical Collocation Tariff, at 1 (Texas PUC Aug. 18, 1999) (*Texas Commission Order No. 51*).

<sup>151</sup> See December 3, 1999 Ex Parte Filing of DSLnet Communications, LLC in CC Docket No. 98-147 at 2 (reporting that SWBT completed construction of 11 cageless collocation arrangements for DSLnet in November 1999 within the 55-day construction interval).

<sup>152</sup> *Texas Commission Order No. 51* at 3-5.



its *Advanced Services Order*<sup>153</sup> and is already being followed by some states.<sup>154</sup> Similarly, the Commission should hold that if an ILEC provides more expeditious collocation to an affiliate, subsidiary, or strategic partner, such shorter interval must become the standard for competitive requesting carriers.

**B. THE COMMISSION SHOULD ADOPT NATIONAL STANDARDS FOR COLLOCATION SPACE RESERVATION SIMILAR TO THOSE ADOPTED BY THE STATES**

In the *Second Further Notice*, the Commission seeks comment on whether it should adopt national standards for collocation space reservation that would apply where a state does not set its own standard.<sup>155</sup> The Joint Commentors strongly urge the Commission to adopt a national space reservation policy.

As the Commission recognizes in its *Order*, excessive space reservations can create artificial space exhaustion that would prevent the timely deployment of advanced services.<sup>156</sup> Furthermore, the ILECs have every incentive to reserve space for their own use or the use of their affiliates, since such action limits the amount of collocation space available to competitors. Indeed, the record in this proceeding suggests that some CLECs have already encountered situations in which ILECs have reserved significant amounts of space within their central offices for their own advanced services equipment.<sup>157</sup> While the Joint Commentors recognize the needs of ILECs to reserve space to meet the future requirements of their customers,

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<sup>153</sup> *Advanced Services First Report and Order*, 11 FCC Rcd at 4786-4787 ¶ 45.

<sup>154</sup> For example, Connecticut has imposed on Southern New England Telephone Company the same provisioning intervals adopted by Texas for SWBT. *See Application of the Southern New England Telephone Company for Approval of a Tariff for Collocation*, Docket No. 99-08-05, Connecticut Dept. of Public Utility Control, March 9, 2000, at 56.

<sup>155</sup> *Second Further Notice*, ¶ 117.

<sup>156</sup> *Second Further Notice*, ¶ 50.

those needs must be balanced against the needs of competitors to gain access to valuable central office space, and against the interest of the Commission in ensuring that the CLECs have an opportunity to compete. As such, the suggestions of some ILECs that they must be able to reserve space for their equipment for as long as 10 years<sup>158</sup> are simply unreasonable.

Under these circumstances, the establishment of national standards on collocation space reservation would serve the public interest. In establishing these standards, the Commission should follow the lead of those states such as California,<sup>159</sup> Florida,<sup>160</sup> Texas,<sup>161</sup> and Washington<sup>162</sup> that have already adopted space reservation policies. Based on the approaches of these states, the Joint Commenters submit that the Commission should permit reservations of space by ILECs to 12 months for transmission equipment<sup>163</sup> (including but not limited to concentration equipment, multiplexers, and multifunction or integrated equipment performing,

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(...continued)

<sup>157</sup> Sprint Corp. Reply to Oppositions to Sprint's Petition for Partial Reconsideration and/or Clarification in CC Docket No. 98-147, July 27, 1999, at 8.

<sup>158</sup> SBC Communications, Inc. Opposition to Sprint's Petition for Partial Reconsideration and/or Clarification in CC Docket No. 98-147, July 12, 1999, at 9.

<sup>159</sup> *Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Decision 98-12-069, Rulemaking 93-04-003 (Cal. PUC Dec. 17, 1998) ("California Commission Order").

<sup>160</sup> *In re Petition of Competitive Carriers for Commission Action to Support Local Competition in BellSouth Telecommunications, Inc. Service Territory*, Docket No. 981834-TP, Order No. PSC-00-0941-FOF-TP (Fla. PSC May 11, 2000 ("Florida Commission Order").

<sup>161</sup> *Investigation of Southwestern Bell Telephone Company's Entry Into the Texas InterLATA Telecommunications Market, Project No. 16251*, Order No. 59 Approving Revised Physical and Virtual Collocation Tariffs (Texas PUC Oct. 29, 1999) (*Texas Commission Order No. 59*).

<sup>162</sup> *In re MFS Communication Company, Inc., Petition for Arbitration Pursuant to 47 U.S.C. § 252(b) of the Interconnection Rates, Terms and Conditions with U S West Communications, Inc.*, Docket No. UT-960323 (Wash. Util. and Trans. Comm. Sept. 11, 1998) ("Washington Commission Decision").

*inter alia*, transmission functions) and to 18 months for all other equipment, *e.g.*, pure switches.<sup>164</sup> Non-ILECs (including ILEC affiliates and subsidiaries) should be allowed to reserve space for no more than 12 months, since the types of equipment they are permitted to collocate are either transmission equipment or multifunction or integrated equipment. Such reservations must be supported by legitimate and demonstrable anticipated need and should be subject to challenge by CLECs on an expedited basis. Moreover, the Commission should also make clear that ILECs may not deny requests for physical collocation in specific space (per the procedures set forth in Section IV. B.3., *supra*, on the basis that the space is reserved for virtual collocation.<sup>165</sup>

Adopting the national space reservation standards proposed herein will help ensure that central office space is used in an efficient manner and that CLECs have the ability to reserve space and enter new markets, thereby promoting competition to the ultimate benefit of U.S. consumers.

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(...continued)

<sup>163</sup> See *Texas Commission Order No. 59* at 3; *Washington Commission Decision* at ¶11; *California Commission Order* at 187.

<sup>164</sup> See *Florida Commission Order* at 93.

<sup>165</sup> See *Washington Commission Decision* at 57. As rereferenced in the attached letter (Attachment 1) from Edward A. Yorkgitis, Jr., Counsel for Light Networks, to Raelynn Tibayan Remy, Deputy Division Chief, Investigations and Hearings, Enforcement Bureau, FCC, dated February 11, 2000, page 2, at least one carrier has requested cageless collocation at the same office. While the Joint Commenters understand that BellSouth has accommodated Light Networks to its satisfaction in resolving the disputes in this letter, the Commission should make clear that CLECs cannot be denied cageless collocation and offered virtual collocation as a substitute.

**VII. CONSISTENT WITH THE TECHNOLOGY NEUTRAL UNDERPINNINGS OF THE ACT, THE COMMISSION SHOULD CLARIFY THAT ILECS MUST PROVIDE ACCESS TO ALL UNBUNDLED LOOPS, INCLUDING LOOP ELECTRONICS AND TRANSMISSION EQUIPMENT PROVIDING DWDM OR SIMILAR MULTIPLEXING FUNCTIONALITY**

In the *Fifth FNPRM* the Commission seeks comment on whether it should amend its loop unbundling rules<sup>166</sup> to provide CLECs with unbundled access to individual optical wavelengths generated by Dense Wave Division Multiplexing (“DWDM”) equipment deployed by ILECs in addition to the DS1, DS3, fiber and other high capacity loops that are currently required to be offered on an unbundled basis pursuant to Section 251(c)(3) of the Act.<sup>167</sup> In addition, the Commission asks whether the features, functions and capabilities of the subloop such as various quality of service (“QoS”) classes such as Constant Bit Rate (“CBR”) and Variable Bit Rate (“VBR”) must be made available to competitors even if the ILEC is not itself utilizing such capability, and whether the provision of such access over the same fiber feeder facility presents interference or congestion issues that could lead to service degradation.<sup>168</sup>

The Joint Commenters submit that the Commission should amend its loop unbundling rules to require unbundled access to the loops consisting of optical wavelengths generated by DWDM equipment, in addition to DS1, DS3, fiber, other high capacity loops. Further, the Commission should clarify that as part of their unbundling obligations, the ILEC must provide access to all technically feasible transmission speeds and quality of service classes, including CBR and VBR, even if the ILEC does not offer such QoS classes itself.

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<sup>166</sup> 47 C.F.R. § 51.319(a)(1).

<sup>167</sup> *Fifth FNPRM*, ¶¶120-121.

<sup>168</sup> *Id.*, ¶ 125.

**A. THE COMMISSION SHOULD AMEND ITS UNBUNDLING RULES TO CLARIFY THAT ILECS MUST PROVIDE UNBUNDLED ACCESS TO ALL FEATURES AND FUNCTIONS OF THE LOOP INCLUDING THOSE FEATURES AND FUNCTIONS PROVIDED BY DWFM FUNCTIONALITY**

It is undeniable that the Act does not distinguish among the services that competing carriers may deploy over UNEs. In fact, in establishing the access standards for UNEs, Congress directed the Commission to consider whether “the failure to provide access to such network elements would impair the ability of the *telecommunications carrier seeking access to provide the services that it seeks to offer*.”<sup>169</sup> In other words, CLECs have the discretion to determine what services and technologies they wish to provide over UNEs purchased from the ILEC. Moreover, CLECs have a statutory right to provide any telecommunications service that the UNEs it is buying are technically capable of supporting. In the *UNE Remand Order* the Commission clarified that the technologically neutral underpinnings of the Act inform the loop unbundling obligation. The Commission concluded that ILECs must make available all types of loops, including “all features, functions, and capabilities of the transmission facilities, including dark fiber and attached electronics.”<sup>170</sup> The Commission stated that its “intention is to ensure that the loop definition will *apply to new as well as current technologies*, and to ensure that competitors will continue to be able to access loops as an unbundled network element as long as that access is required pursuant to section 251(d)(2) standards.”<sup>171</sup>

Obviously, the 251(d)(2) standards are in full force and effect, and accordingly, the Joint Commenters urge the Commission to amend its loop unbundling rules as described

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<sup>169</sup> 47 U.S.C. § 251(d)(2)(B) (emphasis added).

<sup>170</sup> *UNE Remand Order*, ¶ 167.

herein. Moreover, consonant with this request the Joint Commenters urge the Commission to adopt the rule clarifications requested in the ALTS Loop Provisioning Petition:<sup>172</sup>

- Hold that Rule 51.319 requires ILECs to provide high-capacity loops, including DS-1 and DS-3 level loops, to any requesting CLEC on an unbundled and nondiscriminatory basis;
- Hold that Rule 51.319 requires ILECs to provide entire loops to CLECs providing integrated voice and data services over a shared line;
- Adopt maximum intervals for provisioning of UNE loops and subloop elements;
- Require ILECs to provide nondiscriminatory access to all subloops and subloop components, including intra-building wiring, wherever possible and in a manner that will support provision of multiple services over a shared line;
- Require ILECs to promptly establish reasonable rates for all subloops and subloop components, including intra-building wiring;
- Determine a federal deadline by which all ILEC OSS interfaces must electronically provide all loop information to which the ILEC has access;
- Ensure that all loop de-conditioning charges and other recurring and non-recurring charges adhere to forward-looking, incremental cost principles; and
- Set *prima facie* federal penalties for ILEC failure to comply with these rules.

Only in this way can the Commission assure that the benefits of broadband communications services are competitively available to all Americans as soon as technically and economically feasible.

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(...continued)

<sup>171</sup> *Id.* (emphasis added).

<sup>172</sup> *Pleading Cycle Established for Comments on ALTS Petition for Declaring Ruling: Loop Provisioning*, DA 00-114 (rel. May 24, 2000).

**B. CLECs MUST HAVE ACCESS TO ALL FEATURES, FUNCTIONS AND CAPABILITIES OF FIBER SUBLOOPS, INCLUDING ALL TRANSMISSION SPEEDS AND QoS CLASSES, INCLUDING CBR AND VBR**

As noted above, the Commission sought comment on whether access to all features functions and capabilities of the subloop created by DLC deployment includes “access to all technically feasible transmission speeds and QoS classes such as Constant Bit Rate (“CBR”) and real time and non-real time Variable Bit Rate (“VBR”) that exist in the attached electronics.”<sup>173</sup> In addition, the Commission sought comment “on whether the provision of multiple CBR and or VBR channels, circuits, paths, or connections over the same fiber feeder facility would cause interference or congestion that could lead to service degradation” and “on how to eliminate or control such interference.”<sup>174</sup> The Commission also asked whether, in providing access to the features, functions, and capabilities of the subloop, whether ILECs must provide access to all technically feasible transmission speeds and QoS classes even if the incumbent (or any ILEC affiliate) is not itself using such capability.

The Joint Commenters submit that ILECs should be required to provide access to all technically feasible transmission speeds and QoS classes that exist in the attached electronics of the loop. As the Commission recognized in the *Line Sharing Order*, the risk of interference from provision of multiple channels over the same facility is minimal and easily managed.<sup>175</sup> In the *Line Sharing Order* the Commission declined to adopt a federal rule on specific methods of achieving spectrum compatibility and instead deferred to conclusions to be reached by industry

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<sup>173</sup> *Fifth FNPRM*, ¶ 125.

<sup>174</sup> *Id.*

<sup>175</sup> *Line Sharing Order*, ¶ 111-118 (1999).

standards setting bodies.<sup>176</sup> However, the Commission concluded that “use of generic power spectral density (“PSD”) masks and/or a calculation-based approach appears to be the best means to address spectrum compatibility. Taken together, these two mechanisms should protect network integrity while maximizing deployment of new competing technologies.”<sup>177</sup>

A similar conclusion is reasonable in the context of the subloop. Accordingly, ILECs should be required to provide all transmission speeds and QoS classes even if they do not utilize them themselves. ILECs should not be permitted to hide behind the convenient excuse of service degradation, interference, or congestion without providing the Commission with specific evidence thereof. Therefore, the Joint Commenters submit that the Commission should adopt the same presumption of acceptability for deployment and standards regarding degradation of signals in this proceeding as it did in the *Line Sharing Order*.<sup>178</sup> All service levels should be priced at forward-looking, incremental cost. Where there is imminent risk of inadequate capacity to meet future demand, ILECs should be required to install the appropriate electronics to provide as much capacity on the facility as the loop is practically capable of supporting.

The Act allows CLECs to determine the services they wish to provide over UNEs, subject only to the technology-neutral definitions of the Act. No basis exists within the Act for discriminating against a CLEC based on the service offerings provided by CLEC, or the manner

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<sup>176</sup>

*Id.*

<sup>177</sup>

*Id.*

<sup>178</sup>

In the *Line Sharing Order* the Commission codified rules that govern when a loop technology is presumed acceptable for deployment. The circumstances include when the technology: (1) complies with existing industry standards; (2) has been approved by an industry standards body, the Commission, or any state commission; or (3) has been successfully deployed by any carrier without significantly degrading the performance of other services.



in which the CLEC decides to provide those services. The Commission should make these obligations clear.

**VIII. IN ORDER TO FACILITATE SUBLOOP UNBUNDLING, THE COMMISSION SHOULD MODIFY ITS RULES TO CLARIFY THE OBLIGATION OF ILECS TO PROVIDE PHYSICAL COLLOCATION AT ALL REMOTE LOCATIONS, INCLUDING REMOTE TERMINALS, CONTROLLED ENVIRONMENTAL VAULTS, HUTS AND CABINETS**

In the *Fifth FNPRM* the Commission seeks comment on whether deployment of new network architectures necessitates any modifications to, or clarification of, its rules.<sup>179</sup> The Joint Commenters submit that the deployment of new network architectures, including fiber transmission facilities, increasingly deeper into the network and closer to the end-user makes necessary the re-examination of the Commission's unbundling and collocation rules. As the comments of competitive providers of advanced services in the Project Pronto proceeding indicated, their ability to obtain nondiscriminatory access to the remote terminal through, principally, collocation is increasingly critical, as the remote terminal gains primacy in the evolving telecommunications network.<sup>180</sup> Indeed, the Commission itself has observed that "the remote terminal has, to a substantial degree, assumed the role and significance traditionally associated with the central office."<sup>181</sup>

As discussed below, the Joint Commenters submit that the Commission should modify its rules to clarify: 1) the obligation to provide physical and virtual collocation at any remote premises; 2) ensure the ability of competitive carriers to cross-connect at any remote

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<sup>179</sup> See *Fifth FNPRM*, ¶ 123.

<sup>180</sup> See ALTS Comments, CC Docket No. 98-141, at 12 (filed Mar. 3, 2000); DATA Comments, CC Docket No. 98-141, at 17 (filed Mar. 3, 2000); Prism Comments, CC Docket No. 98-141, at 16 (filed Mar. 3, 2000).

<sup>181</sup> *UNE Remand Order*, ¶ 218.

terminal; 3) provide nondiscriminatory access to OSS interfaces necessary to order subloops; 4) ensure that CLECs have nondiscriminatory access to remote loop testing ability; and 5) adopt rules establishing a “SEEL” consisting of the copper subloop distribution and the fiber feeder with multiplexing.

**A. RECENT DEVELOPMENTS UNDERScore THE NEED FOR COLLOCATION IN REMOTE TERMINALS**

The most recent event highlighting the evolution of the telecommunications network and the need for corresponding Commission rule changes was SBC’s announcement of “Project Pronto”<sup>182</sup> and its subsequent petition for modification of the SBC Merger Conditions.<sup>183</sup> The centerpiece of Project Pronto is the deployment of 20,000 new or upgraded remote terminals, in conjunction with the deployment of an overlay network architecture consisting of “Next Generation” digital loop carrier (“NGDLC”) systems installed at the remote terminal, as well as the deployment of additional fiber transmission facilities between its central offices and remote terminals.

CLECs, such as xDSL services, must have continued access to copper loop facilities in order to provide advanced services to their customers, as discussed above.<sup>184</sup> Project Pronto and similar initiatives ostensibly will bring advanced services to a larger number of ILEC customers. However, the same architecture that brings fiber closer to end user premises will, by eliminating or severely diminishing the supply of homerun copper loops, simultaneously threaten

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<sup>182</sup> SBC Communications, Inc., *SBC Launches \$ 6 Billion Broadband Initiative* (Oct. 18, 1999) (disseminating information about SBC’s Project Pronto initiative to the press) (*SBC Project Pronto Press Release*). See *Communications Daily, SBC Details \$ 6 Billion Spending Plan to Increase Broadband Access*, 1999 WL 7580611 (Oct. 19, 1999).

<sup>183</sup> See February 15, 2000, SBC letter requesting an interpretation, waiver, or modification of the *Merger Conditions* to allow its incumbent LECs to own equipment at 2 (“*SBC Waiver Request*”).

the ability of competing providers of advanced services to compete for advanced services customers. As the Commission has acknowledged:

in cases where the incumbent multiplexes its copper loops at a remote terminal to transport the traffic to the central office over fiber DLC facilities, a requesting carrier's ability to offer xDSL service to customers served over those facilities will be precluded, unless the competitor can gain access to the customer's copper loop before the traffic on that loop is multiplexed.<sup>185</sup>

Unless the Commission amends its rules to ensure both nondiscriminatory access to remote terminals and the maintenance of the existing infrastructure used to reach consumers, the deployment of fiber-fed remote terminals will harm competition and will slow the deployment of advanced services technology in contravention of Sections 251 and 706 of the Act.<sup>186</sup> In order to avoid short-circuiting the deployment of advanced services and technologies, the Commission must ensure that its unbundling and collocation rules do not distinguish between (i) central office-based services and technologies and (ii) remote terminal-based services and technologies. Countenancing ILEC efforts to carve a "remote terminal exception" out of the Act would not only be contrary to the Act's technologically neutral underpinnings, but it would hobble the ability of competing carriers to provide both POTS and advanced services.

In adopting the Order modifying the *SBC/Ameritech Merger Conditions* in which Project Pronto was discussed, the Commission took pains to acknowledge that:

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(...continued)

<sup>184</sup> See Section III. C.

<sup>185</sup> *UNE Remand Order*, ¶ 218.

<sup>186</sup> Pub. L. 104-104, 110 Stat. 153, Title VII, § 706 (Feb 8, 1996), *codified at* 47 C.F.R. § 157, Note.

“we are examining issues relating to competitive access to remote terminals in a general rulemaking proceeding.”<sup>187</sup> Although that rulemaking will not alter our determination here to permit SBC’s incumbent LECs to own the plug-in cards and associated OCDs [in its remote terminals], SBC will be bound by any rules ultimately developed in that proceeding that affect the way in which SBC’s incumbent LECs provide access to remote terminals. Nothing we do in this Order is intended to prejudice in any way the outcome of that rulemaking.”<sup>188</sup>

Accordingly, the Joint Commenters ask the Commission to amend its collocation rules as described below.

**B. THE ACT AND THE COMMISSION’S COLLOCATION RULES REQUIRE THAT ACCESS TO THE SUBLOOP BE PROVIDED ON A NON-DISCRIMINATORY BASIS**

The Act and existing Commission rules impose upon ILECs the duty to provide subloops to any requesting CLEC. This obligation is dual: section 51.319(a)(2) of the Commission’s rules requires ILECs to provide “nondiscriminatory access, in accordance with §51.311 and Section 251(c)(3) of the Act, to the local loop and subloop, including inside wiring owned by the incumbent LEC, on an unbundled basis to any requesting telecommunications carrier for the provision of a telecommunications service.”<sup>189</sup> Specifically, in the *UNE Remand Order*, the Commission expanded its definition of a loop “to include all features, functions, and capabilities of the transmission facilities, including dark fiber and attached electronics [excluding DSLAMS].”<sup>190</sup> This requirement extends to the subloop, that portion of the loop extending from

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<sup>187</sup> See *In the Matter of Ameritech Corp., Transferor and SBC Communications, Transferee for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24 25, 63 90, 95 and 101 of the Commission’s Rules*, CC Docket 98-141, *Second Memorandum Opinion and Order*, FCC 00-336 (rel. Sept. 8, 2000). (“*Project Pronto Order*”).

<sup>188</sup> *Project Pronto Order*, ¶ 29.

<sup>189</sup> 47 C.F.R. § 51.319(a)(1).

<sup>190</sup> *UNE Remand Order*, ¶ 167; 47 C.F.R. § 51.319(a)(1).

a remote access terminal to the customer's premises, without which carriers cannot "minimize their reliance on the incumbents' facilities" in order to reach customers.<sup>191</sup> The Commission indicated that:

Incumbents must provide unbundled access to the high frequency portion of the loop at the remote terminal as well as the central office. Our subloop unbundling rules and presumptions allow requesting carriers to access copper wire relatively close to the subscriber, which is critical for a competitive carrier to offer services using xDSL technology over the high frequency network element.<sup>192</sup>

In addition, the Commission has required that ILECs "provide competitors with access to unbundled loops regardless of whether [the ILEC] uses integrated digital loop carrier technology, *or similar remote concentration devices*, for the particular loop sought by a competitor."<sup>193</sup>

The second basis for the requirement that ILECs provide access to the subloop is Section 51.311 of the Commission's rules. Section 51.311 requires that ILECs provide "access to such unbundled network element[s], that [is] at least equal in quality to that which the incumbent LEC provides to itself." However, the ability of competitive carriers of advanced services to obtain the requisite access to the subloop is threatened by Project Pronto-type initiatives. Indeed, in granting the modification to the *SBC Ameritech Merger Conditions*, the Commission acknowledged that "SBC's Advanced Services Affiliate will no longer be seeking collocation in remote terminals on the same terms (or same scale) as it otherwise would have because it will have no need to collocate equipment in remote terminals. As a result, competing

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<sup>191</sup> *UNE Remand Order*, ¶ 205; 47 C.F.R. § 51.319(a)(2).

<sup>192</sup> *See Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 14 FCC Rcd 20912, ¶ 91 (Dec. 9, 1999) ("*Line Sharing Order*"); *UNE Remand Order*, at ¶¶ 207, 217-18.

<sup>193</sup> *See Local Competition Order*, 11 FCC Rcd 15499, ¶ 383 (1996) (emphasis added); *see UNE Remand Order*, ¶ 218

carriers would effectively lose the right to obtain similar collocation arrangements on nondiscriminatory rates, terms, and conditions.”<sup>194</sup>

Accordingly, the Joint Commenters urge the Commission to modify its collocation rules to make crystal clear the obligation that ILECs have to provide collocation at any remote terminal, controlled environmental vault, hut, or cabinet in order to ensure that subloops are accessible to any carrier, for any service, on a just, timely and nondiscriminatory basis.

**C. PHYSICAL COLLOCATION AT REMOTE PREMISES IS TECHNICALLY FEASIBLE AND NECESSARY**

Collocation at the remote terminal is technically feasible and necessary to achieve the objectives of Sections 251(c)(2) and 251(c)(3). The Commission should amend its rules expressly to recognize this reality. Indeed, in establishing “a rebuttable presumption that the subloop can be unbundled at any accessible terminal in the outside loop plant” the Commission tacitly recognized that remote terminal collocation is technically feasible.<sup>195</sup> The Joint Commenters submit that now the Commission must amend its collocation rules explicitly to require physical collocation at the remote premises.

The Commission already has a sufficient record to amend its rules as the Joint Commenters propose. Indeed, the Commission stated in the *UNE Remand Order* that “we intend

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<sup>194</sup> *Project Pronto Order* at ¶ 24. In the *SBC/Ameritech Merger Order* at n.674 the Commission noted that the Advanced Services Affiliate “will wait in line for collocation, petition to open closed offices, and otherwise deal with the same collocation and OSS implementation problems experienced by competitive LECs.”

<sup>195</sup> *UNE Remand Order*, ¶ 223. In tacitly requiring remote terminal collocation and rejecting ILEC claims that such collocation is not technically feasible, the Commission noted that “incumbent LECs raised similar doubts as to whether collocation would be feasible at central offices. As indicated by the number of collocation arrangements in place today, these doubts were not well-founded.” *UNE Remand Order*, ¶ 221.

to make collocation available at all accessible terminals on the loop, [although] we acknowledge that the incumbent's network was not designed to house additional equipment of competitors.”<sup>196</sup> Nonetheless, the Commission's rules unequivocally require that ILECs allow competitors to collocate in “all buildings or similar structures owned or leased by the incumbent LEC that house LEC network facilities.”<sup>197</sup> Obviously, then, this requirement includes remote terminals.

However, in deploying new network topologies, such as those contemplated by Project Pronto, ILECs seem to be attempting to carve out exceptions for the requirement that they permit collocation in remote terminals, or similar structures. SBC's petition for waiver of the *Merger Conditions* emphasized that “the physical space limitations of RTs” will have the effect of *precluding collocation for all but a few CLECs*, and that moreover, the new remote terminals slated to be deployed by SBC as part of Project Pronto will have “little or no excess space [for collocation].”<sup>198</sup> SBC, while acknowledging its collocation obligations under the Commission's rules, is frank in its stark evaluation of the opportunity for competitors to collocate at the remote terminal. SBC admits, in essence, that under the configuration now blessed by the Commission, the deployment of Project Pronto will not accommodate collocation in any commercially meaningful way. In granting SBC's request for waiver of the *SBC/Ameritech Merger Conditions*, the Commission merely required SBC to collaborate with the competitive industry to address and solve the collocation issues presented by the deployment of Project Pronto.<sup>199</sup> However, in this rulemaking the Commission must amend its rules to

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<sup>196</sup> *UNE Remand Order*, ¶ 221.

<sup>197</sup> *Local Competition First Report and Order*, ¶ 573.

<sup>198</sup> *SBC Waiver Request*, 2 (emphasis added).

<sup>199</sup> *Project Pronto Order*, ¶ 37.

clarify that SBC, and indeed all ILECs, must provide collocation in remote terminals, CEVs, and huts.

Specifically, the Commission must unequivocally state that the obligation to provide physical collocation does not end at the central office. Rather, the same exact obligations applicable to central office collocation are applicable to remote terminals and associated structures, including cost allocation and existing space allocation rules. The requirements of Section 251(c)(6) and the Commission's rules, including the requirement to impose only cost-based rates for collocation facilities<sup>200</sup> and the obligation to provision collocation space on a first-come, first-served basis apply with equal force to remote terminals. Section 251(c)(3) cannot be fully implemented nor its purposes fully served absent such interconnection rights. Therefore, the Commission must amend its rules in order to eliminate any question in that regard. ILECs deploying Project Pronto-type proposals, which cite increasingly small cabinets and remote terminals as a reason for them to be granted an exception from the Commission's collocation rules, must be set straight. The Commission must not allow ILECs deploying fiber-fed remote terminals to be the arbiters of the Commission's collocation rules. Rather, with the trend toward smaller, smarter equipment and the corresponding decrease in the amount of space necessary to allow physical collocation, the ability to collocate at the remote terminal in accordance with the Commission's rules is even more uncomplicated.

The Joint Commenters propose that the Commission require that ILECs reserve, at a minimum, 50% of space in new remote premises (i.e., remote terminals, CEVs, cabinets and huts that house ILEC equipment) for use by CLECs to physically collocate their equipment. In

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<sup>200</sup> *Local Competition First Report and Order*, ¶¶ 570-581, *Advanced Services First Report and Order*, ¶¶ 20-24.



existing remote premises, all remaining available space must be reserved for such purposes, not to exceed 50% of the total space in the premises.

In addition, the Commission should require ILECs to allow competing carriers to place their own line cards in remote terminals. Even where physical collocation space is available, it may be cost prohibitive to collocate a traditional DSLAM at a remote terminal. Alternatively, the means to connect the DSLAM to the unbundled fiber feeder network element may not be commercially viable. The Joint Commenters note that Illinois has ordered Ameritech to install Covad's and Rhythms' line cards in Ameritech's remote terminals.<sup>201</sup> Where equipment is not capable of being physically collocated within same remote premises due to interference or size restrictions, the Commission should expressly require that collocation arrangements must be made available on ILEC-controlled premises adjacent to the remote terminals and CLECs should automatically be granted easements or access to same rights of way available to ILECs. Only by amending its rules in this fashion can the Commission ensure that the procompetitive goals of the Act, including Section 251(c) and Section 706, are met.

**D. VIRTUAL COLLOCATION AT REMOTE PREMISES SHOULD BE AVAILABLE AS AN OPTION TO BE EXERCISED AT THE REQUESTING CARRIER'S – NOT THE ILEC'S – DISCRETION**

The Joint Commenters submit that the Commission should amend its rules to specifically and unequivocally provide competitive providers of advanced services with the legal right to elect to virtually collocate – solely at their option – equipment at all accessible terminals on the loop. Like the obligation to provide physical collocation at remote premises, the

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<sup>201</sup> See Petitions of Covad Communications Co. and Rhythms Links, Inc. for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Amendment for Line Sharing to the Interconnection Agreement with Illinois Bell  
(continued...)

Commission has tacitly recognized the rights of CLECs to virtually collocate equipment at remote premises, noting in the *UNE Remand Order* that “in some cases, technicians may not need to enter the cabinet or vault at all because virtual collocation arrangements will satisfy the needs of all parties.”<sup>202</sup> Under Section 51.321(b) of the Commission’s rules, CLECs have the right to obtain access to UNEs through any technically feasible method, including either physical or virtual collocation. Specifically, Section 51.321(b) provides, in relevant part, that: “technically feasible methods of obtaining interconnection or access to unbundled network elements include, but are not limited to: physical collocation and virtual collocation at the premises of an incumbent LEC;” and that an “incumbent LEC that denies a request for a particular method of obtaining interconnection or access to unbundled network elements on the incumbent LEC’s network must prove to the state commission that the requested method of obtaining interconnection or access to unbundled network elements at that point is not technically feasible.”<sup>203</sup> Therefore, under the Commission’s existing rules, ILECs already must provide virtual collocation at the CLEC’s option. However, in the Joint Commenters’ experience, ILECs continue to insist that virtual collocation is available only at the ILEC’s option. Accordingly, the Commission should amend its rules in order to eliminate any room for argument from the ILEC that a CLEC, at its option, has the right to virtually collocate equipment.

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(...continued)

Telephony Company d/b/a Ameritech Illinois, Docket Nos. 00-0312/00-0313, Arbitration Decision, Aug. 17, 2000, at 32.

<sup>202</sup> *UNE Remand Order*, ¶ 221.

<sup>203</sup> 47 C.F.R. § 51.321(b) and (d).

The conventional wisdom holds that physical collocation is inherently superior to virtual collocation. In certain circumstances, however, virtual collocation may be preferable for particular CLECs. Although the Commission has long recognized that “interconnection through physical collocation is the optimal means to realize [the] benefits of [expanded interconnection],” it acknowledges that “virtual collocation also produces [the] benefits [of physical collocation] and is in the public interest.”<sup>204</sup> CLECs may seek virtual collocation arrangements for a number of reasons, including to take advantage of potential efficiencies in maintenance, operations or testing. Therefore the Commission should amend its rules to provide that CLECs have the right to exercise the option to virtually collocate, even if physical collocation is possible, including at the remote terminal. Such rights should include, but not be limited to, the right place ILEC-purchased line cards in remote terminals, and should be available upon request to CLECs. Moreover, in promulgating its rules, the Commission should not require transfer of title of collocated equipment to the ILEC. Furthermore, the Commission should make explicit that all rates for ILEC-provided installation, maintenance and repair should be cost-based.

**E. THE ABILITY TO CROSS CONNECT MUST BE PROVIDED AT THE REMOTE TERMINAL**

In the *Fifth FNPRM*, the Commission seeks comment on the technically feasible points for accessing copper distribution portion of the loop and the fiber feeder portion of the loop at remote terminal locations; and specifically, whether ILECs should be required to modify

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<sup>204</sup> See *Expanded Interconnection With Local Telephone Company Facilities*, 9 FCC Rcd 5154, ¶ 10 (1994) (“*Expanded Interconnection Order*”); see also *Special Access Expanded Interconnection Order*, 7 FCC Rcd at 7378; *Switched Transport Expanded Interconnection Order*, 8 FCC Rcd at 7383.

their facilities to allow carriers to interconnect and access the subloop at the remote terminal.<sup>205</sup>

The Joint Commenters submit that the Commission should clarify that ILECs must allow competitors to cross connect at the remote terminal on the same basis that cross connection is allowed at the central office. Moreover, as demonstrated above, the Commission should clarify that CLECs should be able to cross connect to one another.

In the *Local Competition First Report and Order*, the Commission concluded that ILECs must provide cross-connect facilities between an unbundled loop and a requesting carrier's collocated equipment.<sup>206</sup> The Commission reaffirmed this obligation in the *UNE Remand Order* and required that charges for cross-connect facilities meet the cost-based standard of section 252(d)(1).<sup>207</sup> Further, the Commission reiterated that the terms and conditions of providing cross-connect facilities must be reasonable and nondiscriminatory pursuant to section 251(c)(3).<sup>208</sup> The Commission recognized that "such a requirement is needed wherever a competitor seeks access to the loop, because cross-connection offers a potential bottleneck, and incumbents may have the incentive to impose unreasonable rates, terms, and conditions for cross-connect facilities."<sup>209</sup>

The Commission's analysis applies with equal force to cross connections that occur at the remote terminal. Failure to require ILECs to allow competitors to access the subloop at the remote terminal would hobble the ability of competitors to service customers just as it would if the Commission failed to provide access to the loop at any other bottleneck point in

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<sup>205</sup> *Fifth FNPRM*, ¶ 133.

<sup>206</sup> *See Local Competition First Report and Order*, ¶ 386.

<sup>207</sup> *UNE Remand Order*, ¶ 179.

<sup>208</sup> *Id.*

<sup>209</sup> *Id.*

the network. Granting ILECs a monopoly over the subloop is in direct conflict with the Commission's cross connect analysis as well as the letter and spirit of the Act. In contrast, requiring cross-connects at the remote terminal will further the Act's purposes including promoting the rapid introduction of advanced services into all markets, the promotion of facilities-based competition, investment, and innovation, and deregulation.

The Joint Commenters therefore submit that the Commission should amend its rules to specifically require that cross connections at any remote premises be allowed, and that such cross connections should be "internal" (*i.e.*, in the remote terminal). However, if adjacent collocation must be used, the Commission's rules should mandate that such adjacent arrangements be provided in such a way that cross-connections to UNEs at a remote terminal from adjacent locations are possible. Furthermore, the Joint Commenters submit that remote terminal cross-connections must be priced the same way as central office cross connections, that is, in compliance with Section 251(d)(1).

**F. THE COMMISSION SHOULD AMEND ITS RULES TO REQUIRE ILECs TO PROVIDE NONDISCRIMINATORY ACCESS TO OSS INTERFACES NECESSARY TO ORDER SUBLOOPS AND ENSURE THAT CLECs HAVE NONDISCRIMINATORY ACCESS TO REMOTE LOOP TESTING FUNCTIONS**

In the *Fifth FNPRM* the Commission sought comment on what modifications, if any, to the Commission's rules governing ILECs's operational support systems ("OSS") are necessary in order to ensure CLECs nondiscriminatory access under section 251(c)(3) for purposes of placing orders for loops and subloops, including the features, functions, and capabilities of the fiber feeder portion of the loop.<sup>210</sup> In addition, the Commission sought comment on operational issues stemming from the deployment of fiber-fed remote terminal

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<sup>210</sup> *Fifth FNPRM*, ¶ 128.

architectures, including its effects on the ability of carriers to test and monitor loop and subloop facilities and equipment.<sup>211</sup> The Joint Commenters submit that the Commission must amend its rules to ensure that, as next generation architectures are deployed, competitive providers of advanced services are guaranteed nondiscriminatory access to all OSS functions necessary to place orders for all features and functions of the fiber feeder portion of the subloop. Further, the Commission must amend its rules to ensure that CLECs have access to the remote subloop testing functions on a nondiscriminatory basis, and are capable of performing the testing function on their own behalf to the extent technically feasible and that the ILECs possess the same ability.

The Commission recognized in its *Local Competition First Report and Order* that nondiscriminatory access to OSS “is essential to promote viable competitive entry.”<sup>212</sup> Therefore, the Commission must ensure that the appropriate OSS functionalities are available to all CLECs providing competitive services through ILEC-owned remote terminals, and specifically, that CLECs are able to gain access to all OSS functions necessary to place orders for all features and functions of the fiber feeder portion of the subloop. ILECs will predictably trot out their usual array of arguments that such OSS functionality is not technically feasible. As it has in the past, the Commission should see through these smokescreens. In ensuring that ILECs meet the obligation to provide CLECs ordering capability for the subloop and its features and functions, the Commission should take an approach similar to the one it took in the *Line Sharing Order* where the Commission ordered ILECs to “work with competitive LECs on an

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<sup>211</sup> *Id.*

<sup>212</sup> *Local Competition First Report and Order*, ¶ 516.; see also *SBC Texas Order*, CC Docket No. 00-65, *Memorandum Opinion and Order*, FCC 00-238 (rel. June 30, 2000); *Bell Atlantic New York Order*, 15 FCC Rcd at 3989-90; *BellSouth South Carolina Order*, 13 FCC Rcd at 585.

ongoing basis to design, implement, and maintain efficient and effective OSS interfaces . . . [that provide access to] the loop in the same ordering and provisioning time intervals that the incumbent provides for its own xDSL-based service” and that such OSS interfaces be developed on a collaborative basis.<sup>213</sup>

In addition, the Commission should require that such OSS interfaces be made available no later than 180 days following the release of the Commission’s order in the *Fifth FNPRM*.<sup>214</sup> Further, as it did in the *Line Sharing Order*, the Commission should admonish the BOCs that “that a failure to implement OSS modifications within the time frame we contemplate in this Order could be grounds for finding that a BOC is not providing nondiscriminatory access to unbundled network elements under section 271 of the Act.”<sup>215</sup>

Besides having nondiscriminatory access to ordering functionalities, once loops are ordered and provisioned, CLECs must have the ability to perform testing of loops to the same extent as the ILEC. The Joint Commenters submit that in order to comply with the requirement that ILECs provide nondiscriminatory access to UNEs pursuant to Section 251(c)(6) of the Act, the ILECs must provide access to the same remote loop testing functionality as the ILECs make available to themselves. The Commission has a track record of recognizing and enforcing such

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<sup>213</sup> The Commission noted that the OSS development plan should: “include specific details of the process including, a timeline outlining how the collaborative effort will proceed, with milestones for resolution of issues, and the names and all necessary contact information for the employee who will be responsible for addressing business complaints that arise in the collaboration process and during the negotiation of the relevant interconnection agreements or amendments.” *Line Sharing Order*, ¶ 130.

<sup>214</sup> *Line Sharing Order*, ¶ 130.

<sup>215</sup> *Line Sharing Order*, ¶¶ 106-107.

obligations.<sup>216</sup> The Commission recognized such an obligation in the *Line Sharing Order*, rejecting a proposal that CLECs be required to rely on the incumbent LEC's testing of loops in a line sharing arrangement.<sup>217</sup> The Commission noted that the inability to perform testing on its own behalf, or in a less efficient way than the ILEC, "creates an opportunity for discriminatory incumbent LEC activity, such as the imposition of artificial delays and requirements for unnecessary and costly manual intervention by either the competitive LEC or incumbent LEC."<sup>218</sup> Accordingly, the Commission concluded that:

*We stress that incumbents may not use their control over loop testing access points and mechanisms for anti-competitive or discriminatory purposes, and that we will remain attentive and ready to respond to any reported anti-competitive incidents relating to competitive LEC access to loop testing mechanisms.*<sup>219</sup>

Similarly, the Commission should apply the same obligation to ILECs in the context of remote terminals, and ensure that CLECs do not suffer discrimination due to an inability to conduct their own testing of loops provisioned through remote terminals. Moreover, the Commission must amend its rules to require that CLECs have nondiscriminatory access to fiber feeder plant (i) in conjunction with copper distribution plant and any attached electronics, or (ii) as a subloop element separate from copper distribution.

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<sup>216</sup> In the *Bell Atlantic-New York Order*, the Commission recognized the importance of the ability of competing carriers to provision and test their own xDSL loops. *See Bell Atlantic New York Order*, ¶ 319.

<sup>217</sup> *Line Sharing Order*, ¶ 117

<sup>218</sup> *Id.*

<sup>219</sup> *Line Sharing Order*, ¶¶ 117-118 (emphasis added).



**G. THE COMMISSION SHOULD ADOPT A NEW BROADBAND UNE, THE SUBLOOP ENHANCED EXTENDED LOOP (“SEEL”)**

In the *Fifth FNPRM*, the Commission sought comment generally on “whether the deployment of new network architectures necessitates any modification to or clarification of the Commission’s rules concerning subloops, as well as those pertaining to line sharing.”<sup>220</sup> The Joint Commenters submit that in addition to the other modifications to the Commission’s rules discussed in these comments, the Commission should amend its rules and establish an “intraloop EEL” known as the Subloop Enhanced Extended Loop or “SEEL” consisting of : 1) the copper subloop distribution; and 2) the fiber subloop feeder, with multiplexing. Establishment of the SEEL is necessary to guarantee that the unbundled loop is capable of supporting advanced services, consistent with the Commission’s unbundling and nondiscrimination rules which entitle CLECs to the full features, functionalities, and capabilities of the loop, regardless of transmission media or existence of remote concentration devices or other loop electronics.

In the *UNE Remand Order* in ordering that the subloop be made available as a UNE, the Commission concluded that lack of access to unbundled subloops “materially diminishes a requesting carrier’s ability to provide services it seeks to offer,” and that

access to subloop elements is likely to be the catalyst that will allow competitors, over time to deploy their own complementary subloop facilities, and eventually to develop competitive loops. Lack of access to subloops discourages competitive LECs from attempting to combine their won feeder plant with the incumbent distribution plan to minimize their reliance on the incumbents’ facilities.<sup>221</sup>

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<sup>220</sup> *Fifth FNPRM*, ¶ 123.

<sup>221</sup> *UNE Remand Order*, ¶ 205.

As the Commission acknowledged in the *Fifth FNPRM*, since the release of the *UNE Remand Order* “there have been a number of developments, including new product introductions.”<sup>222</sup> The Joint Commenters agree with the Commission that new developments, including the announcement of the plan to deploy on a massive basis, remote terminals in conjunction with DLC architecture, necessitates that the Commission establish the SEEL.

In light of the penetration of fiber deeper into the neighborhood under Project Pronto-type initiatives, the SEEL is the necessary analog of the EEL. When requiring that the EEL be made available in those areas where ILECs have withdrawn access to unbundled switching element, the Commission recognized that the EEL levels the competitive playing field by allowing CLECs “to aggregate loops at fewer collocation locations and increase their efficiencies by transporting aggregated loops over efficient high-capacity facilities to their central switching location. Thus, the cost of collocation can be diminished through the use of the EEL.”<sup>223</sup> The establishment of a “SEEL” would provide similar efficiencies by obviating the need for competitive providers of advanced services to collocate at each and every remote terminal (which, as noted above, ILECs admit have very limited space for collocation) serving customers that competitive providers wish to reach.<sup>224</sup>

The SEEL meets the 251(d)(2)(B) “impair” standard for unbundling.<sup>225</sup> In the *UNE Remand Order* the Commission concluded that the failure to provide access to a non-

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<sup>222</sup> *Fifth FNPRM*, ¶ 119.

<sup>223</sup> *UNE Remand Order*, ¶ 288.

<sup>224</sup> That is not say that the Commission must not provide both collocation at remote terminals as we as the SEEL.

<sup>225</sup> The Section 251(d)(2)(A) “necessary” standard modifies only those elements that are “proprietary in nature.” Because no component of the Broadband UNE is “proprietary in nature” it is unnecessary to undertake an analysis of the applicability of that section to the  
(continued...)

proprietary network element “impairs” a requesting carrier within the meaning of section 251(d)(2)(B) if, taking into consideration the availability of alternative elements outside the incumbent’s network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element materially diminishes a requesting carrier’s ability to provide the services it seeks to offer.<sup>226</sup> In order to evaluate whether there are alternatives actually available to the requesting carrier as a practical, economic, and operational matter, the Commission examines the totality of the circumstances associated with using an alternative. Specifically, the Commission considers the cost, timeliness, quality, ubiquity, availability of the element from a third-party provider, and operational issues associated with use of the alternative.<sup>227</sup>

In requiring that ILECs provide unbundled access to the subloop, the Commission concluded that “lack of access to unbundled subloops at technically feasible points throughout the incumbent’s loop plant will impair a competitor’s ability to provide services that it seeks to offer..., and self-provisioning subloop elements, like the loop itself, would materially raise entry costs, delay broad-based entry, and limit the scope and quality of the competitive LEC’s service offerings.”<sup>228</sup> Indeed, the Commission concluded that subloop elements “are the most time-

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(...continued)

Broadband UNE. *See UNE Remand Order*, ¶ 208 (“The record does not indicate, nor do commenters argue, that subloops are proprietary. Moreover, we do not discern any copyright, patent, or trademark secrecy implications to subloop unbundling.”)

<sup>226</sup> *UNE Remand Order*, ¶¶ 51-100.

<sup>227</sup> *Id.*

<sup>228</sup> *UNE Remand Order*, ¶ 209.

consuming and expensive network element to duplicate on a pervasive scale, and that the cost of self-provisioning subloops can be prohibitively expensive.”<sup>229</sup>

Applying these factors to the SEEL, the result of the analysis is the same: it is clear that self provisioning and third party supplier alternatives for transport and subloop elements are not cost-effective, ubiquitous, or timely available. Moreover, the lack of access to fiber feeder and necessary electronics materially diminishes requesting carriers’ ability to provide competitive advanced services. Furthermore, the Commission acknowledged in the *UNE Remand Order* that “that the incumbent’s network was not designed to house additional equipment of competitors.”<sup>230</sup> Accordingly, the Joint Commenters submit that the Commission should take a double-barreled approach to this collocation crunch, by both amending its collocation rules to allow remote terminal collocation, *and* by amending its rules to recognize the SEEL as described herein.<sup>231</sup>

**IX. THE COMMISSION SHOULD AMEND ITS RULES TO REQUIRE ILECS TO NOTIFY COMPETING CARRIERS AT LEAST TWELVE MONTHS PRIOR TO PLANNED ROLLOUT WHERE THEY ARE DEPLOYING FIBER LOOP FACILITIES AND SHOULD BE REQUIRED TO MAINTAIN EXISTING COPPER FACILITIES IN THOSE AREAS FOR A TEN-YEAR TRANSITION PERIOD**

In its approving SBC’s petition to modify the *Merger Conditions*, the Commission concluded that SBC’s commitments to: (1) refrain from retiring any copper pairs for one year; (2) refrain from retiring (over a three year period) more than 5% of the copper pairs

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<sup>229</sup> *Id.*, ¶ 212.

<sup>230</sup> *UNE Remand Order*, ¶ 221.

<sup>231</sup> In the alternative, the Commission should make clear that where NGDLC-provided loops are found in the ILEC network, they constitute a combination of UNEs, copper distribution subloop, multiplexer(s), and fiber feeder subloop that must be provided in combinations subject to Section 51.315(b) of the FCC rules.

terminated on the Main Distribution Frames of its central offices; (3) disclose the ILEC's general decision-making criteria for retiring any copper plant; (4) notify CLECs of its intent to retire any copper plant at least 180 days before such retirement; and (5) provide competitors with an opportunity to buy any copper plant marked for retirement at net book value or the highest competitive bid satisfied the public interest.<sup>232</sup> The Joint Commenters submit that the Commission, consistent with the disclaimer made by the Commission – that the action taken in the Pronto order in no way prejudged the outcome of this proceeding – should amend its rules as described in these comments.

Deployment of fiber-fed remote terminals can increase competition only if they supplement, but do not replace, the existing infrastructure used to reach consumers. As the Commission has recognized, the continued utility of competitive provider's investment in advanced services facilities is dependent upon access to suitable copper facilities to reach its customers. The Commission has acknowledged: "in cases where the incumbent multiplexes its copper loops at a remote terminal to transport the traffic to the central office over fiber DLC facilities, a requesting carrier's ability to offer xDSL service to customers served over those facilities will be precluded, unless the competitor can gain access to the customer's copper loop before the traffic on that loop is multiplexed."<sup>233</sup>

Under Project Pronto-type architectures, however, many of the customers targeted by competitive providers of advanced services will be served by remote terminals with a combination fiber/copper loop. Unless the Commission takes steps to ensure that competitors can continue to provide their services, regardless of whether SBC has deployed a remote

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<sup>232</sup> *Project Pronto Order*, App. A.

terminal, Project Pronto will harm competition and will slow the deployment of advanced services technology in contravention of Section 706 of the 1996 Act.<sup>234</sup> Furthermore, the ILECs will be given carte blanche to perform an end-run around their Section 251(c)(3) unbundling requirements.

The solution to this problem is to 1) require ILECs to notify competitors at least 12 months prior to the deployment of remote terminals; and 2) require ILECs to continue to maintain their existing copper loop infrastructure so that these loops may be provided as network elements to requesting telecommunications carriers. The Commission should prohibit ILECs from removing currently in-service copper facilities when they overlay remote terminals over the existing architecture. As Jato proposed in the Project Pronto proceeding, ILECs that deploy Project Pronto-type network architectures should be required to maintain copper loop plant as unbundled network elements for at least a transition period of 10 years.<sup>235</sup> The Joint Commenters support adoption of that requirement here for all ILECs. The existing copper loops will continue to be useful for DSL and other purposes for at least this time period, especially if bridge taps or load coils necessary only for POTS service are removed from the loops. No pro-competitive purpose would be served by removing these valuable and still functional facilities from the pool of available loops. By contrast, preservation of these loops for a transition period

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(...continued)  
<sup>233</sup> *Id.*, ¶ 2.

<sup>234</sup> Pub. L. 104-104, 110 Stat. 153, Title VII, § 706 (Feb 8, 1996), *codified at* 47 C.F.R. § 157, Note.

<sup>235</sup> *See Ex Parte* Letter of Jato Communications, CC Docket No. 98-141 (May 23, 2000) (“*Jato Ex Parte*”).

will ensure that carriers have access to network elements necessary to provide non-ADSL based services, now and in the future.

As Jato and other Commenters demonstrated in the Project Pronto proceeding, such a requirement does not require the Commission to expand the Commission's unbundling obligations.<sup>236</sup> The existing copper loops already deployed in the ILEC networks are "network elements" subject to Section 251(c)(3) obligations regardless of whether the ILEC deploys remote terminals in its service territory.<sup>237</sup> The Commission has already made clear that "dead count" loops and "vacant" copper in the network are within the definition of an unbundled loop.<sup>238</sup> Once an ILEC deploys fiber-fed remote terminals, the existing copper loop capacity becomes capacity that is "in place and easily called into service" as an unbundled local loop.<sup>239</sup> Therefore, even if the ILEC were not using these loops to serve their own customers, the copper should continue to be made available to competitive providers of DSL services such as Jato as an unbundled local loop network element.

Moreover, the obligation to provide these copper loops on an unbundled basis applies with full force to loops provided through DLC arrangements such as is proposed by SBC. The Commission's rules requires ILECs to "provide competitors with access to unbundled loops regardless of whether [the ILEC] uses integrated digital loop carrier technology, *or similar remote concentration devices*, for the particular loop sought by a competitor."<sup>240</sup> Often, ILECs provide access to DLC-served customers through the use of a "spare" copper loop that bypasses

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<sup>236</sup>

*Id.*

<sup>237</sup>

*Id.*

<sup>238</sup>

*See UNE Remand Order*, ¶ 174.

<sup>239</sup>

*Id.*

<sup>240</sup>

*Local Competition First Report and Order*, ¶ 383; *UNE Remand Order*, ¶ 218.

the DLC. As Jato explained in its *ex parte* in the Project Pronto proceeding, deployment of Project Pronto-type network architectures would, in effect, cause all of an ILEC's existing loops replaced by fiber to become "spare" loops.<sup>241</sup> Therefore, wherever an ILEC migrates a customer to the DLC environment proposed in a Project Pronto-type architecture, the ILEC has an obligation to provide unbundled loops to requesting carriers using the all-copper facilities. Accordingly, the Commission should amend its rules to make explicit this obligation.

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<sup>241</sup> *Jato Ex Parte.*



## X. CONCLUSION

For the foregoing reasons, the Joint Commenters request that the Commission build upon its earlier *Local Competition First Report and Order* and *Advanced Services First Report and Order* and adopt the collocation rules proposed herein. The Commission should clarify and expand its collocation and unbundling rules to remove additional barriers to entry not addressed in previous orders and further level the playing field. The rules advocated herein are required to ensure that ILECs provide physical collocation as needed to implement fully Sections 251(c)(2) and 251(c)(3) of the Act and achieve the pro-competitive statutory purposes of the 1996 Act.

Respectfully submitted,

By: \_\_\_\_\_  
Brad E. Mutschelknaus  
Jonathan E. Canis  
Edward A. Yorkgitis Jr.  
Joan Griffin  
Ross A. Buntrock  
David Kirschner  
David Konuch  
KELLEY DRYE & WARREN LLP  
1200 19<sup>th</sup> Street, N.W.  
Washington, D.C. 20036  
(202) 955-9600  
(202) 955-9782 (fax)

Attorneys for the Joint Commenters

ARBROS COMMUNICATIONS CO.  
1100 Wayne Avenue  
8<sup>th</sup> Floor  
Silver Spring, MD 20910

THE ASSOCIATION FOR  
LOCAL TELECOMMUNICATIONS  
SERVICES  
888 17<sup>th</sup> Street, N.W.  
Suite 900  
Washington, D.C. 20006

COMPETITIVE TELECOMMUNICATIONS  
ASSOCIATION  
1900 M Street, N.W., Suite 800  
Washington, D.C. 20036

E.SPIRE COMMUNICATIONS, INC.  
133 National Business Parkway  
Suite 200  
Annapolis Junction, MD 20701

FAIRPOINT COMMUNICATIONS SOLUTIONS,  
INC.  
6324 Fairview Road  
4<sup>th</sup> Floor  
Charlotte, NC 28210

INTERMEDIA COMMUNICATIONS INC.  
3625 Queen Palm Drive  
Tampa, FL 33169

JATO COMMUNICATIONS CORP.  
1099 18<sup>th</sup> Street, Suite 700  
Denver, CO 80202

KMC TELECOM INC.  
1755 North Brown Road  
Lawrenceville, GA 30043

METROMEDIA FIBER NETWORK  
One Lexington Avenue  
White Plains, NY 10601

NEWSOUTH COMMUNICATIONS, INC.  
2 North Main Street  
Greenville, SC 29601

PATHNET COMMUNICATIONS  
11729 Sunrise Valley Drive  
Reston, VA 20191

## **CERTIFICATE OF SERVICE**

I, Charles M. Hines III, hereby certify that on this 12<sup>th</sup> day of October, 2000, I served copies of the attached Joint Comments by hand on the following:

Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Janice Myles  
Common Carrier Bureau  
Policy & Program Planning Division  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Dorothy Attwood  
Chief, Common Carrier Bureau  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Jordan Goldstein  
Legal Advisor to  
Commissioner Susan Ness  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Rebecca Beynon  
Legal Advisor, Common Carrier Matters, to  
Commissioner Harold Furchtgott-Roth  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Deena Shetler  
Legal Advisor to  
Commissioner Gloria Tristani  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Kyle Dixon  
Legal Advisor to  
Commissioner Michael K. Powell  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Christopher J. Wright  
General Counsel  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Michelle Carey  
Common Carrier Bureau  
Policy & Program Planning Division  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

William A. Kehoe III  
Common Carrier Bureau  
Policy & Program Planning Division  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Carol Matthey  
Deputy Bureau Chief  
Common Carrier Bureau  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Anna Gomez  
Senior Legal Advisor to  
Office of the Chairman  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

International Transcription Service  
1231 20<sup>th</sup> Street, N.W.  
Washington, D.C. 20036

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Charles M. Hines III

# **Attachment 1**

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