



DOCKET FILE COPY ORIGINAL

1801 California Street, Suite 4900  
Denver, Colorado 80202  
Phone 303 672-2974  
Facsimile 303 295-6973

**Blair A. Rosenthal**  
Senior Attorney

ERRATUM  
CC DOCKET NO. 98-147

RECEIVED  
NOV 15 2000  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

November 15, 2000

Ms. Magalie Roman Salas  
Secretary – Federal Communications Commission  
Room TW-A325  
Portals II  
445-12<sup>th</sup> Street, S.W.  
Washington, DC 20554

Dear Ms. Salas:

On November 14, 2000, Qwest Communications International Inc. filed its Reply Comments in CC Docket No. 98-147 via the Commission's Electronic Comment Filing System. Due to a technical difficulty with the ECFS, Qwest was unable to upload the attachments and service certificate associate with the pleading. The ECFS technical support staff has been contacted as to the difficulty Qwest has experienced with this pleading and with another recent pleading. (Qwest has successfully filed pleadings electronically via ECFS routinely in the past.) As of yet there has been no explanation or potential solution proffered by the ECFS staff. Qwest remains committed, however, to working with the ECFS staff to determine the cause of these recent technical difficulties (the contact person on this matter at Qwest is Richard Grozier, who can be reached on 303-672-2862).

At the instruction of Ms. Janice Myles, this erratum serves to include the attachments and service certificate which Qwest was not able to file electronically due to the system error. The text of the Reply Comments, which was filed electronically, is also included so that the Secretary has a complete copy of the Reply Comments for the record. All copy and courtesy copy recipients were served with a complete copy of the Reply Comments.

Please do not hesitate to contact me at the above should you have any questions.

Respectfully,

Blair A. Rosenthal

(RW)  
11/15/00  
98-147

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

RECEIVED

NOV 15 2000

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter 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 )

REPLY COMMENTS OF  
QWEST COMMUNICATIONS INTERNATIONAL INC.

Robert B. McKenna  
Blair A. Rosenthal  
Suite 700  
1020 19th Street, N.W.  
Washington, DC 20036  
(303) 672-2861

Attorneys for

QWEST COMMUNICATIONS  
INTERNATIONAL INC.

Of Counsel,  
Dan L. Poole

November 14, 2000

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY .....	ii
I. REPLY COMMENTS ON THE SECOND FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 98-147. ....	1
A. Meaning of “Necessary” under Section 251(c)(6) and Application to Multi-Functional Equipment .....	1
B. Cross-Connections between Collocators .....	5
C. Selection of the Actual Physical Collocation Space .....	6
D. Line Card Collocation at Remote Incumbent LEC Premises .....	7
E. Provisioning Intervals .....	8
F. Space Reservation Policies .....	8
II. REPLY COMMENTS ON THE FIFTH FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 96-98 CONCERNING DENSE WAVE DIVISION MULTIPLEXING. ....	9

## SUMMARY

In its reply comments, Qwest does not agree with those commenters that advocate an unduly narrow definition of “necessary.” Qwest submits that a given piece of equipment is “necessary” under Section 251(c)(6) of the Act if that equipment is actually used for interconnection or access to UNEs, and collocation of the equipment is necessary for the equipment to be used in a competitively meaningful fashion. With respect to multi-functional equipment, Qwest further submits that if the primary purpose and use of a given piece of equipment meets the “necessary” standard, then the CLEC should be permitted to collocate the equipment even if it performs other reasonable ancillary functions that do not constitute interconnection or UNE access. Similarly, although an incumbent LEC need not allow a CLEC to collocate for the *sole purpose* of cross-connecting with another CLEC, once two CLECs have lawfully obtained collocation under the “necessary” standard, they should be allowed to cross-connect with one another.

With respect to the allocation of collocation space within an incumbent LEC’s central office, Qwest submits that the incumbent, and not the CLEC, is in the best position to allocate the incumbent’s central office space. An incumbent LEC must act reasonably in doing so, however.

Qwest agrees with those commenters who assert that card-at-a-time collocation is not presently feasible, and should not be required. But the Commission should stand ready to revisit this issue in the future if technology evolves to the point where certain issues, including interoperability with systems and software and OSS support, are resolved.

With respect to space reservation, Qwest supports the proposal that the Commission adopt national standards for space reservation, which would allow both the CLEC and incumbent LEC to efficiently plan and utilize space within a central

office. Qwest does not, however, support the suggestion that the Commission impose firm space occupancy deadlines; these are issues best left to negotiations between parties. Moreover, the Commission does not have sufficient information in the record to presently adopt national rules on this matter.

Finally, Qwest does not agree with the commenters who suggest that the optical wavelengths created with the use of dense wave division multiplexing (DWDM) equipment should be designated as UNEs. Such wavelengths are a capability of a fiber loop that are derived by placing DWDM equipment on the fiber, and are not themselves UNEs.

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

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

**REPLY COMMENTS OF  
QWEST COMMUNICATIONS INTERNATIONAL INC.**

Qwest Communications International Inc. (“Qwest”) hereby submits its reply comments to certain issues raised in the *Second and Fifth Further Notices of Proposed Rulemaking* in the above-captioned proceedings.<sup>1</sup>

**I. REPLY COMMENTS ON THE SECOND FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 98-147.**

**A. Meaning of “Necessary” under Section 251(c)(6) and Application to Multi-Functional Equipment**

Qwest agrees that the definition of “necessary” offered by Cisco<sup>2</sup> presents a reasonable approach to implementing the language of Section 251(c)(6) of the Act. Specifically, under Cisco’s standard, equipment is “necessary” for purposes of Section 251(c)(6) “when its function or functions effectuate interconnection or access to unbundled network elements . . . and could not be performed offsite as a

---

In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *Order on Reconsideration and Second Further Notice of Proposed Rulemaking* and *Fifth Further Notice of Proposed Rulemaking*, CC Docket Nos. 98-147, 96-98 (Aug. 10, 2000).

<sup>2</sup> See Comments of Cisco Systems, Inc.

practical, economic, or operational matter.”<sup>3</sup> This is similar to the standard proffered by Qwest in its initial Comments: “a piece of equipment [is] ‘necessary’ for interconnection or access to network elements when that equipment is actually used for one or both of those purposes and collocation is necessary for the equipment to be used in a competitively meaningful fashion.”<sup>4</sup> Both of these definitions would recognize that a meaningful definition of “necessary” can be crafted that is based on economic principles.

Qwest does not agree with the commenters that advocate an unduly narrow interpretation of the term “necessary.” For instance, SBC suggests that the Commission’s inquiries as to the meaning of “necessary” have already been answered by the D.C. Circuit, and that the Commission cannot—apparently under any circumstances—require incumbent LECs to permit either cross-connects between CLECs or the collocation of multi-functional equipment.<sup>5</sup> Similarly, Verizon suggests that collocated equipment may contain only those features and functions that meet the “necessary” test; thus, under Verizon’s definition, even multi-functional equipment that meets the necessary standard with respect to some functions or features could not be collocated at all.<sup>6</sup>

While the Commission is obviously bound by the holdings of the D.C. Circuit, the *GTE* Decision does not answer all of the questions raised in this proceeding. Rather, the D.C. Circuit ordered a remand because the Commission failed to establish a limiting principle with respect to its interpretation of “necessary,” and to

---

<sup>3</sup> *Id.*, at 1 (emphasis omitted).

<sup>4</sup> Qwest Comments at 3.

<sup>5</sup> SBC Comments at 10-14.

<sup>6</sup> Verizon Comments at 6-8.

provide the Commission with the opportunity to provide a “better explanation” for the rules that were vacated.<sup>7</sup>

In addition, the *GTE* Decision does not preclude the Commission from permitting the collocation of multi-functional equipment that otherwise meets the necessary standard. The “necessary” standard speaks to the right to collocate equipment, not the right to use such equipment once it has been collocated. If the primary purpose and use of a given piece of equipment meets the “necessary” standard, then the CLEC should be permitted to collocate the equipment even if it performs other reasonable ancillary functions that do not constitute interconnection or UNE access.<sup>8</sup> In this regard, the comments of Covad are on point: once a given piece of multi-functional equipment meets the “necessary” test, it would be unjust and unreasonable to preclude collocation of that equipment simply because such equipment possesses other functionalities.<sup>9</sup>

Finally, it is not at all certain that the collocation of multi-functional equipment necessarily requires more space or power. While it is true that adding

---

<sup>7</sup> *GTE Service Corp. v. FCC*, 205 F.3d 416, 424 (D.C. Cir. 2000).

<sup>8</sup> Qwest Comments at 9.

<sup>9</sup> Covad Comments at 16-17. Although Qwest agrees with Covad on this particular matter, Qwest takes issue with Covad’s mischaracterization that U S WEST “unilaterally reneged on its interconnection agreement and pre-emptively sued Covad with regard to the rates, terms and charges for cageless physically collocation.” Covad Comments at 8 n. 7. In truth, U S WEST reneged on nothing; instead, following the D.C. Circuit’s decision in *GTE v. FCC*, U S WEST challenged a requirement that it allow the collocation of ATM switches. This challenge was based on a specific clause in the parties’ interconnection agreement providing that the parties agreed to be bound by the D.C. Circuit’s decision. This suit was later withdrawn. Moreover, Covad’s criticisms are belied by praise for U S WEST’s (now Qwest’s) cageless collocation practices in a different forum. Specifically, before the California Public Utilities Commission in an arbitration with Pacific Bell, Covad witness, Thomas Regan, testified that the relationship between Covad and then-U S WEST with respect to cageless collocation was “extremely good” (Tr. at 9326, see Attachment 1), and was “working excellent [sic],” (*id.* at 9331).

functionality to existing equipment will often increase the size of the equipment, it does not follow that the additional functionalities inherent in state-of-the-art equipment will necessarily result in an increase in size. In these cases, an overly restrictive use limitation would be undesirable: CLECs would be forced to install obsolete equipment or be precluded from using installed equipment in the most efficient manner.

Furthermore, Qwest's experience as a CLEC/DLEC demonstrates that multi-functional equipment will not necessarily require more space. As a CLEC/DLEC Qwest employs an optical-fiber-based-network architecture, which is radically different than the copper-based example given by SBC.<sup>10</sup> With Qwest's current architecture, using Cisco SONET 15454 equipment, Qwest can place up to 4 OC48's or 40GB in one bay. In fact, one of Qwest's vendors is in the final stages of lab testing equipment with a similar capacity density that also provides ATM and Internet-protocol functionality. This equipment has roughly the same footprint and power consumption as Cisco's 15454, and is available for standard deployment at this time. In the next 6 to 12 months, Qwest expects it will be able to obtain equipment from vendors that will increase the service density of one bay from 100% to 1000%—again with roughly the same footprint as Qwest's current equipment—while reducing the power consumption. In working with state-of-the-art equipment vendors, Qwest has observed that the capacity density of equipment is increasing while the power consumption is decreasing. In simple terms, a single bay of new technology will provide more capacity and additional feature functionality over the existing technology but use less power. Accordingly, SBC's suggestion that multi-

---

<sup>10</sup> SBC Comments at 12 n. 10.

functional equipment will necessarily lead to a taking of more incumbent LEC space than the Act authorizes is not well-founded.<sup>11</sup>

### B. Cross-Connections between Collocators

Although Qwest agrees that an incumbent LEC need not allow a CLEC to collocate for the *sole purpose* of cross-connecting with another CLEC,<sup>12</sup> Qwest does not believe that it would be just and reasonable to deny two CLECs, who are otherwise lawfully collocated,<sup>13</sup> to cross-connect with one another. In this regard, Qwest does not agree with the advocacy of SBC and Verizon, for example, who would preclude any cross-connections—even for those CLECs who otherwise meet the necessary standard for collocation. Indeed, once a physical taking is authorized through a demonstration of the “necessary” standard, a CLEC should not be denied other just and reasonable terms and conditions of such collocation that are related to the CLEC’s provision of its own services, so long as the primary purpose of the equipment remains interconnection or access to UNEs.<sup>14</sup>

For instance, where Qwest has obtained a collocation space, it may wish to provide transport services for another collocated CLEC’s traffic that originates from

---

<sup>11</sup> *See id.*

<sup>12</sup> Notwithstanding the contrary suggestions of MFN, *see* MFN Comments at 5 n. 2, it has always been the position of U S WEST (not Qwest) that a CLEC must make a showing under the “necessary” standard and thereby obtain a collocation space *before* it may obtain a cross-connection with another CLEC pursuant to Section 251(c)(6).

<sup>13</sup> That is, by demonstrating that the primary purpose and use of a given piece of equipment meets the “necessary” standard.

<sup>14</sup> Obviously, the space used for cross-connects would give rise to an independent physical taking and attendant obligation for just compensation. Given the resemblance between the typical cross-connect facilities and the cable box on Mrs. Loretto’s roof, there can be no question that cross-connection rights would increase the Government’s just compensation liability. *See Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 434-35 (1982).

unbundled loops purchased by the other CLEC. Similarly, in some locations, Qwest may utilize the fiber network of another collocated carrier in order to transport traffic originating from Qwest customers via unbundled loops that Qwest receives at its collocation site. Where the transport provider is also collocated in the same central office as Qwest, Qwest would arrange for a cross-connection in order to hand off the traffic.

In short, Qwest believes that it would not be just and reasonable under Section 251(c)(6) to deny cross-connection opportunities to CLECs that have otherwise demonstrated that the collocation of their equipment meets the "necessary" standard.<sup>15</sup>

Alternatively, the Commission is authorized under Section 201(a) to require a common carrier to provide telecommunications services, including interconnection services, to other carriers.<sup>16</sup> There can be little doubt that the Commission can require an incumbent LEC to provide special access services between two locations outside the incumbent's central office. Similarly, for CLECs that have otherwise lawfully obtained collocation in the central office of an incumbent LEC, the Commission can require the incumbent to provide a special access interconnection service (*i.e.*, a cross-connection service) within the incumbent's central office.

### **C. Selection of the Actual Physical Collocation Space**

Qwest agrees with Verizon that the incumbent, and not the CLEC, is in the best position to assign this collocation space.<sup>17</sup> The incumbent is aware of pending

---

<sup>15</sup> See 47 U.S.C. § 251(c)(6).

<sup>16</sup> See Focal Comments at 18-19 (citing *Expanded Interconnection with Local Telephone Company Facilities*, Report and Order and Notice of Proposed Rulemaking, CC Docket No. 91-141, 7 FCC Rcd 7369, ¶ 120 (1992)); see also Comments of Joint Commenters at 59-61.

<sup>17</sup> Verizon Comments at 14-15.

requests by other CLECs, as well as the requirements of the incumbent itself, and is the only party that can properly allocate space, plan the overall functional use of the central office, and engineer the common systems of power and HVAC for the central office. Moreover, the incumbent is ultimately responsible for the functioning of the central office in the event of an emergency or disaster. For these reasons, only the incumbent should be empowered to allocate space within its central offices.

As indicated in Qwest's opening comments,<sup>18</sup> and in contrast to the apparent position of Verizon,<sup>19</sup> however, Qwest submits that an incumbent LEC could violate Section 251(c)(6) of the Act if it intentionally placed a requesting carrier in a collocation space that is difficult to use or isolated when more suitable space is available, absent a legitimate business reason for doing so.<sup>20</sup> In practice, Qwest will engineer space requests in the most efficient manner for both parties and does not intentionally place a CLEC in an area that would increase costs due to distance from terminating frames and power. In all events, incumbents and not the CLECs, are in the best position to assign space for collocation requests.

#### **D. Line Card Collocation at Remote Incumbent LEC Premises**

Qwest agrees with the comments of Alcatel and Nortel insofar as they indicate that card-at-a-time collocation is not presently feasible.<sup>21</sup> As indicated in Qwest's initial comments, shelf-at-a-time collocation allows a CLEC an equal

---

<sup>18</sup> Qwest Comments at 24.

<sup>19</sup> Verizon Comments at 15.

<sup>20</sup> To rise to the level of a violation, however, the incumbent's actions would need to be fairly egregious. An incumbent LEC's property remains the property of the incumbent until occupied by the government or its beneficiary, and the Commission should be very careful before it finds that an incumbent has behaved unreasonably in allocating its own property to CLECs.

<sup>21</sup> Alcatel Comments at 19; Nortel Comments at 4.

opportunity to provide what the incumbent provides. Until the technology evolves to the point where a card can stand-alone and other issues such as interoperability with systems and software, and OSS support are resolved, card-at-a-time collocation is not workable, and should not be required. Again, while it seems unlikely that card-at-a-time collocation will prove feasible in the near term, if these issues are resolved, the Commission should stand ready to revisit card collocation.

#### **E. Provisioning Intervals**

In addition to its initial comments, Qwest has set forth its position on collocation intervals in two separately filed documents: a Petition for Clarification or, in the Alternative, Reconsideration, and a Petition for Conditional Waiver.<sup>22</sup> In short, Qwest—as both an incumbent LEC and as a CLEC/DLEC—advocates realistic and reasonable intervals. While short intervals may theoretically favor CLECs, in practice, short intervals that cannot realistically be met create havoc for both the incumbents and the CLECs.

#### **F. Space Reservation Policies**

Qwest supports the Sprint recommendation that the Commission adopt national standards for space reservation policies.<sup>23</sup> Reservation of collocation space allows both the CLEC and incumbent LEC to efficiently plan and utilize space within the central office. Qwest recommends that the Commission adopt a standard reservation timeframe of one year for the placement of transmission equipment within a central office space. This interval is in parity with intervals followed by Qwest for the placement of transmission equipment. Qwest also reserves space for five years for power equipment and three years for switching equipment. Finally,

---

<sup>22</sup> These documents are attached as Attachments 2 and 3.

<sup>23</sup> Sprint Comments at 33.

Qwest requires that 50% of non-recurring charges be paid at the time of reservation.

With respect to Verizon's suggestion that the Commission impose firm space occupancy deadlines after a collocation space has been prepared, Qwest submits that such issues are best left to negotiations between parties. Moreover, whether a given CLEC has abused the collocation process by not actually utilizing its collocation space is a factually-intensive determination that is best left to the states to consider on a case-by-case basis. The Commission does not have sufficient information in the record—or a demonstrated need—to presently adopt national rules on this issue.

**II. REPLY COMMENTS ON THE FIFTH FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 96-98 CONCERNING DENSE WAVE DIVISION MULTIPLEXING.**

Qwest does not agree with the commenters who suggest that the optical wavelengths created with the use of dense wave division multiplexing (DWDM) equipment should be designated as UNEs.<sup>24</sup> DWDM equipment provides a capability on a fiber loop. This capability is derived by combining the DWDM equipment with the physical media (*i.e.*, the fiber). Because CLECs can access the physical fiber at the Fiber Distribution Point (a standard access point in the network), CLECs can derive this capability by placing their own DWDM equipment on the fiber. Accordingly, an optical wavelength is not a UNE itself, but is rather a capability of the fiber loop that is inherent in the fiber, and that CLECs can easily derive by combining the fiber with DWDM equipment.

---

<sup>24</sup> See, *e.g.*, Comments of Allegiance Telecom at 31; Comments of Joint Commenters at 68; Focal Comments at 29.

Respectfully submitted,

QWEST COMMUNICATIONS  
INTERNATIONAL INC.

By: Blair A. Rosenthal  
Robert B. McKenna  
Blair A. Rosenthal  
Suite 700  
1020 19th Street, N.W.  
Washington, DC 20036  
(303) 672-2861

Its Attorneys

Of Counsel,  
Dan L. Poole

November 14, 2000