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BELLSOUTH TELECOMMUNICATIONS, INC.  
DIRECT TESTIMONY OF W. KEITH MILNER  
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET NOS. 980946-TL, 980947-TL, 980948-TL, 981011-TL,  
981012-TL AND 981250-TL

APRIL 9, 1999

Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH  
BELLSOUTH TELECOMMUNICATIONS, INC.

A. My name is W. Keith Milner. My business address is 675  
West Peachtree Street, Atlanta, Georgia 30375. I am  
Senior Director - Interconnection Services for  
BellSouth Telecommunications, Inc. ("BellSouth"). I  
have served in my present role since February 1996 and  
have been involved with the management of certain  
issues related to local interconnection, resale and  
unbundling.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My business career spans over 28 years and includes  
responsibilities in the areas of network planning,  
engineering, training, administration and operations.

1 I have held positions of responsibility with a local  
2 exchange telephone company, a long distance company and  
3 a research and development laboratory. I have  
4 extensive experience in all phases of  
5 telecommunications network planning, deployment and  
6 operation (including research and development) in both  
7 the domestic and international arenas.

8

9 I graduated from Fayetteville Technical Institute in  
10 Fayetteville, North Carolina in 1970 with an Associate  
11 of Applied Science in Business Administration degree.  
12 I also graduated from Georgia State University in 1992  
13 with a Master of Business Administration degree.

14

15 Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC  
16 SERVICE COMMISSION? IF SO, BRIEFLY DESCRIBE THE SUBJECT  
17 OF YOUR TESTIMONY.

18

19 A. I testified before the state Public Service Commissions  
20 in Alabama, Florida, Georgia, Kentucky, Louisiana,  
21 Mississippi and South Carolina, the Tennessee  
22 Regulatory Authority and the Utilities Commission in  
23 North Carolina on the issues of technical capabilities  
24 of the switching and facilities network regarding the  
25 introduction of new service offerings, expanded calling

1 areas, unbundling and network interconnection.

2

3 Q. PLEASE DESCRIBE THE PURPOSE AND ORGANIZATION OF YOUR  
4 TESTIMONY BEING FILED TODAY?

5

6 A. My testimony is arranged into three main sections.  
7 First, I will address issues resulting from BellSouth's  
8 Petitions for Waiver and Temporary Waiver from the  
9 physical collocation requirements as set forth in the  
10 Telecommunications Act of 1996 (Act) and the Federal  
11 Communication Commission's (FCC) First Report and  
12 Order, FCC Order 96-325 and First Report and Order and  
13 Further Notice of Proposed Rulemaking, FCC Order 99-48.  
14 Second, I will address issues raised by parties and  
15 Commission staff identified in this proceeding  
16 (specifically, Issues 1,2,5 and 6) as well as discuss  
17 BellSouth's efforts to have building code officials  
18 approve BellSouth's requests for permits to build "wire  
19 mesh cages" to serve as enclosed physical collocation  
20 arrangements. Third, I will provide an overview of the  
21 testimony of the other BellSouth witnesses and explain  
22 each of their roles in the collocation process.

23

24 ***Issues resulting from BellSouth's Petitions for Waiver***  
25 ***and Temporary Waiver from the physical collocation***

1 requirements as set forth in the Telecommunications Act  
2 of 1996 (Act) and the Federal Communication  
3 Commission's (FCC) First Report and Order, FCC Order  
4 96-325 and First Report and Order and Further Notice of  
5 Proposed Rulemaking, FCC Order 99-48.

6  
7 Q. WHAT IS BELLSOUTH'S BASIC POSITION REGARDING THE ISSUES  
8 DISCUSSED BETWEEN BELLSOUTH AND PARTIES OF RECORD IN  
9 THIS PROCEEDING REGARDING COLLOCATION?

10  
11 A. Because the overall purpose of the 1996 Act is to open  
12 telecommunications markets to competition, facilities,  
13 such as collocation, are available as a result of the  
14 obligations imposed upon BellSouth under Sections 251  
15 and 252 and as a result of this Commission's orders in  
16 the arbitration proceedings between BellSouth and  
17 certain Alternative Local Exchange Carriers (ALECs).  
18 BellSouth has worked in good faith to fulfill its  
19 obligations. BellSouth has provided 51 physical  
20 collocation arrangements and 85 virtual collocation  
21 arrangements to ALECs in Florida, all of them in a non-  
22 discriminatory fashion by following consistent and  
23 well-established policies. Contrary to any assertion  
24 by ALECs, BellSouth's treatment of ALECs' collocation  
25 requests has been nondiscriminatory and consistent with

1 all state and federal rules and regulations. BellSouth  
2 stands ready to provide all of the items in both its  
3 interconnection agreements and collocation agreements  
4 with ALECs.

5

6 Q. PLEASE SUMMARIZE THE COLLOCATION REQUIREMENTS PLACED ON  
7 INCUMBENT LOCAL EXCHANGE CARRIERS ("ILECs") BY THE  
8 TELECOMMUNICATIONS ACT OF 1996 ("ACT") AND BY THE  
9 FEDERAL COMMUNICATIONS COMMISSION IN ITS FIRST REPORT  
10 AND ORDER FCC 96-325, ISSUED AUGUST 8, 1996.

11

12 A. Section 251(c)(6) of the Act establishes "The duty to  
13 provide, on rates, terms, and conditions that are just,  
14 reasonable, and nondiscriminatory, for physical  
15 collocation of equipment necessary for interconnection  
16 or access to unbundled network elements at the premises  
17 of the local exchange carrier, except that the carrier  
18 may provide for virtual collocation if the local  
19 exchange carrier demonstrates to the State commission  
20 that physical collocation is not practical for  
21 technical reasons or because of space limitations.  
22 Paragraphs 555 through 607 of the FCC's First Report  
23 and Order 96-325 provide the FCC's discussion of the  
24 background, discussion, and conclusions reached  
25 regarding collocation.

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Q. PLEASE SUMMARIZE THE COLLOCATION REQUIREMENTS THE FCC PLACED ON INCUMBENT LOCAL EXCHANGE CARRIERS ("ILECs") IN ITS RECENT ORDER FCC 99-48 ISSUED MARCH 31, 1999.

A. In its recently issued order, the FCC placed new requirements on incumbent LECs. These new requirements include the following:

1. Permit shared cage collocation.
2. Permit "cageless" collocation as that term is defined in the FCC's recent Order.
3. When space is not available for physical collocation, permit collocation in adjacent Controlled Environment Vaults (CEVs) and similar structures.
4. Permit collocation of all types of equipment required for interconnection or access to unbundled network elements (UNEs).
5. Permit requesting parties to tour central offices after having been informed that space is not available to accommodate requests for physical collocation.
6. Provide lists of central offices within which no space is available for physical collocation.
7. Remove obsolete, unused equipment in order to

- 1 accommodate requests for physical collocation.
- 2 8. Permit a collocator access to its equipment without
- 3 the need for a security escort.
- 4 9. Permit a collocator direct access to its equipment
- 5 without the requirement for a physical separation
- 6 between the collocator's equipment and the
- 7 equipment of other collocators or the equipment of
- 8 the ILEC.
- 9 10. Permit collocators to place as little as a single
- 10 rack of equipment in its collocation arrangement.
- 11 11. Permit any other collocation arrangement that has
- 12 been made available by another ILEC unless the ILEC
- 13 rebuts before the State commission the presumption
- 14 that such an arrangement is technically infeasible.

15

16 BellSouth is analyzing the FCC's recent Order but knows

17 that the Order will have some impact on this

18 proceeding. The following paragraphs discuss instances

19 where BellSouth's policies are consistent with the

20 requirements of the FCC's recent Order, as well as

21 outline areas of the FCC's Order with which BellSouth

22 is concerned.

23

24 Q. DOES BELLSOUTH OFFER SHARING OF COLLOCATION CAGES

25 BETWEEN TWO OR MORE CARRIERS?

1 A. Yes. Even before the FCC issued its recent Order,  
2 BellSouth's policy was to allow the sharing of  
3 collocation arrangements between two or more carriers  
4 in those cases where space is unavailable for physical  
5 collocation. The FCC's Order would apparently go  
6 beyond BellSouth's offer and require sharing of  
7 collocation "cages" without the precondition of a space  
8 exhaust situation.

9

10 Q. WHAT IS MEANT BY THE TERM "CAGELESS" COLLOCATION?

11

12 A. The FCC's recent Order does not specifically define  
13 "cageless" collocation. In paragraph 42, however, it  
14 may be implied that what the FCC refers to as  
15 "cageless" collocation is met by the requirement that  
16 "incumbent LECs must allow competitors to collocate in  
17 any unused space in the incumbent LEC's premises,  
18 without requiring the construction of a room, cage, or  
19 similar structure, and without requiring the creation  
20 of a separate entrance to the competitor's collocation  
21 space." While there is no industry accepted definition  
22 of this term, heretofore BellSouth has used the term  
23 "cageless" collocation to mean a physical collocation  
24 arrangement that is not separated by walls or other  
25 structures from the physical collocation arrangements

1 of other collocators, but is separated by a wall or  
2 similar structure from BellSouth's equipment within the  
3 BellSouth central office. BellSouth also uses the term  
4 "unenclosed physical collocation arrangement" to  
5 describe this same arrangement.

6

7 Q. DOES BELLSOUTH PROVIDE CAGELESS COLLOCATION AND, IF SO,  
8 WHAT TYPES OF CAGELESS COLLOCATION DOES BELLSOUTH  
9 PROVIDE?

10

11 A. Yes. Consistent with BellSouth's use of the term  
12 "cageless" collocation, where local building code  
13 permits the placement of unenclosed arrangements, these  
14 unenclosed arrangements will be located in the area  
15 designated for physical collocation within the  
16 BellSouth premises. A collocator may designate a  
17 specific amount of unenclosed space, provided that such  
18 designation is adequate to accommodate the requested  
19 equipment installation per industry standards.  
20 Alternatively, if a square footage amount is not  
21 designated, floor space will be assigned to accommodate  
22 for wiring and maintenance aisle space based on the  
23 shadow print of the equipment and racking plus a factor  
24 of 2.5 times the shadow print. This factor equates to  
25 one-half of the width for industry standard forward and

1 rear wiring aisle space required for an equipment bay.  
2 There is no minimum square footage requirement for  
3 unenclosed collocation space, which allows the  
4 collocator to request only the amount of space required  
5 for its equipment.

6

7 Q. DOES BELLSOUTH BELIEVE THERE ARE MINIMUM SIZE  
8 REQUIREMENTS FOR ENCLOSED ("CAGED") COLLOCATION  
9 ARRANGEMENTS?

10

11 A. Yes. The applicable building codes and safety codes  
12 establish the effective minimum square footage that  
13 must be provided in enclosed collocation arrangements  
14 in addition to the floor space "footprint" of the  
15 collocated equipment itself. BellSouth's policy  
16 heretofore has been that enclosed physical collocation  
17 arrangements must be at least 100 square feet. This  
18 policy was based on the belief that a physical  
19 collocation arrangement of 100 square feet would result  
20 in conformance with applicable building codes and  
21 safety codes. The FCC apparently believes that  
22 enclosed physical collocation arrangements of less than  
23 100 square feet may still result in conformance with  
24 applicable building codes and safety codes.

25

1       Based on requests for physical collocation received to  
2       date, BellSouth has identified certain locations where  
3       the code officials have insisted on fire-rated walls  
4       separating individual arrangements. For example, fire-  
5       rated walls are required in most South Florida LATA  
6       offices requested to date and most Southeast Florida  
7       LATA offices requested to date. BellSouth has  
8       proactively worked with local code officials throughout  
9       its region to overcome building code restrictions  
10      regarding the construction of physical collocation  
11      space.

12  
13    Q.   DO YOU BELIEVE THAT THE FCC'S RULES IN ITS RECENT ORDER  
14       CREATE A POTENTIAL CONFLICT WITH STATE OR LOCAL  
15       BUILDING CODE ORDINANCES?

16  
17    A.   Yes. I do not expect all code officials to be  
18       completely familiar with the FCC's requirements  
19       pertaining to physical collocation. In the day-to-day  
20       permit request and approval process, BellSouth cannot  
21       commence certain construction work within its central  
22       offices without first acquiring the necessary permits.  
23       While code officials at the state and local levels are  
24       implementing the FCC's rules, I am concerned that  
25       delays may be experienced as BellSouth requests

1           necessary permits. While I am not a lawyer, I am aware  
2           that the doctrine of preemption may ultimately result  
3           in the FCC's rules taking precedence over any  
4           conflicting state or local ordinances; however, I  
5           believe it will take some time for any resulting  
6           conflicts to be resolved. Further, the FCC cannot  
7           expect BellSouth to knowingly violate applicable  
8           building and safety codes and code officials cannot  
9           expect BellSouth to knowingly violate applicable FCC  
10          rules.

11

12   Q.     HAS BELLSOUTH ENCOUNTERED PROBLEMS IN PROVIDING  
13           COLLOCATION SPACE DUE TO BUILDING CODE REQUIREMENTS?

14

15   A.     Yes. A major problem in providing space has been the  
16           interpretation by code officials of collocation space  
17           as "multi-tenant" occupancy. Because of this  
18           interpretation, BellSouth has been required to provide  
19           fire-rated walls between collocators, even those  
20           requesting unenclosed space. Additionally, the fire-  
21           rated wall requirement does not allow BellSouth to  
22           provide wire cage enclosures.

23

24   Q.     WHAT ACTIONS HAS BELLSOUTH TAKEN TO ALLEVIATE THE  
25           PROBLEMS CAUSED BY THE MULTI-TENANCY INTERPRETATION

1 THAT REQUIRES FIRE-RATED WALL CONSTRUCTION?

2

3 A. At BellSouth's request, Telcordia Technologies  
4 (formerly known as Bell Communications Research or  
5 Bellcore) wrote a letter to the Southern Building Code  
6 Congress International (SBCCI). In the letter,  
7 Telcordia asked for support of BellSouth's position  
8 that the spaces should be treated as areas of "like"  
9 equipment, and that they should not require fire-rated  
10 walls. The response from the SBCCI supported  
11 BellSouth's position. However, the reply also  
12 cautioned that the code official is the final authority  
13 on these issues. A copy of the letter from Telcordia  
14 to the SBCCI, and also the response from the SBCCI are  
15 attached as exhibit WKM-1.

16

17 Since receiving the favorable letter from the SBCCI,  
18 BellSouth and its architects have visited the code  
19 authorities in numerous municipalities requesting  
20 approval to construct wire cage enclosures instead of  
21 fire-rated walls. After discussing the contents of the  
22 SBCCI correspondence to the various authorities,  
23 tentative verbal approval to utilize the wire cage  
24 construction was granted by the majority of the  
25 jurisdictions. Discussions have been held with both

1 the Fire Marshall and the Building Code Department at  
2 Dade County and the Building Code Department at Broward  
3 County. Both jurisdictions have given tentative verbal  
4 approval. The Fire Marshall and the Building Code  
5 Department in the City of Sunrise also gave tentative  
6 verbal approval. The City of Plantation, both the Fire  
7 Marshall and the Building Code Official, advised that  
8 they will be requiring fire-rated separation between  
9 all collocations, including those requesting non-  
10 enclosed space. The issue has been discussed with the  
11 Boca Raton officials, but they have not yet indicated  
12 their intentions.

13

14 Once several code official approvals were granted,  
15 BellSouth developed a wire cage specification utilizing  
16 welded wire panels. This material provides grounding  
17 capabilities that are far superior to chain link fence  
18 material.

19

20 Q. WHAT ARE SOME OF THE ANTICIPATED PROBLEMS THAT  
21 BELLSOUTH ANTICIPATES IN RECEIVING PERMITS FOR THE WIRE  
22 CAGE ENCLOSURES?

23

24 A. One obvious problem is that some code authorities may  
25 continue to require fire-rated separations. As

1 mentioned previously, the officials at the City of  
2 Plantation advised, after BellSouth's discussion of the  
3 support by the SBCCI and other area code officials,  
4 that the City of Plantation will require fire-rated  
5 separation between all collocators, including those  
6 requesting unenclosed space. An additional concern is  
7 that the fire code officials under the NFPA 101 life  
8 safety code may continue to require fire-rated  
9 ingress/egress to and from the collocation space. Such  
10 rated ingress/egress was required in the Cypress  
11 central office and the Fort Lauderdale Main Relief  
12 central office. At the Cypress central office, a rated  
13 corridor had to be constructed through the equipment  
14 room. This construction was difficult because it had  
15 to be constructed beneath the cable racking. The  
16 corridor had to be constructed in such a way that  
17 BellSouth's technicians and the collocator's  
18 technicians, could have future safe access to the  
19 cables. In the Fort Lauderdale Main Relief central  
20 office, a new rated corridor was constructed through  
21 the equipment room to the side of the building. At the  
22 side of the building, a new door was cut through the  
23 concrete panels of the exterior wall. Because the  
24 doorway was above grade, a ramp had to be constructed  
25 for egress from the building. Additionally, NFPA 101

1 requires rated separation between different  
2 occupancies, such as between equipment occupancies and  
3 administrative office space.

4

5 Q. WHERE HAS BELLSOUTH OBTAINED BUILDING PERMITS FOR WIRE  
6 CAGE ENCLOSURES?

7

8 A. A building permit that includes wire cage construction  
9 was obtained for the construction at BellSouth's Coral  
10 Ridge central office (in South Florida) on March 17,  
11 1999. Additionally, permits covering cage construction  
12 were granted for the Jacksonville-Clay central office  
13 on March 17, 1999, and for the Orlando-Colonial central  
14 office on March 23, 1999.

15

16 Q. WHAT IS THE STATUS OF BELLSOUTH'S EFFORTS REGARDING  
17 APPROVALS OF THE WIRE CAGE ENCLOSURE?

18

19 A. BellSouth has directed that their architects request  
20 approval of wire cage enclosures for all new physical  
21 collocation requests. In instances where the code  
22 officials do not approve future requests for wire cage  
23 enclosures, the architect has been directed to arrange  
24 a meeting with BellSouth and the code authority to  
25 discuss the SBCCI letter, and other jurisdictions that

1 have approved the wire cage. It is believed that  
2 successes in some jurisdictions will help gain  
3 approvals from other code authorities.

4  
5 Q. WHAT IS A "CEV"?

6  
7 A. The term "CEV" stands for Controlled Environment Vault.  
8 It is a separate, stand-alone structure containing  
9 equipment to regulate the "environment" within it such  
10 as air temperature. The CEV, in some cases, is buried  
11 with an entryway at ground level for ingress and  
12 egress. In this context, the CEV is used to house  
13 telecommunications equipment outside a central office  
14 building. It is called a vault because it is often  
15 constructed of steel reinforced, poured concrete wall,  
16 floor, and ceiling members.

17  
18 Q. WHAT IS BELLSOUTH'S POLICY REGARDING COLLOCATION IN  
19 ADJACENT CEVs AND SIMILAR STRUCTURES IN CASES WHERE  
20 SPACE IS NOT AVAILABLE FOR PHYSICAL COLLOCATION?

21  
22 A. BellSouth's policy heretofore has been to not allow  
23 collocators to construct or otherwise procure CEVs and  
24 similar structures on BellSouth's property. The FCC's  
25 rules would apparently require BellSouth to accommodate

1 such a request to the extent technically feasible.

2

3 Q. IS IT YOUR OPINION THAT THE FCC'S RECENT RULES  
4 PERMITTING THE PLACEMENT OF ADJACENT CEVS OR SIMILAR  
5 STRUCTURES HAS CHANGED THE FCC'S DEFINITION OF THE TERM  
6 "PREMISES"?

7

8 A. No. First of all, the Telecommunications Act of 1996  
9 does not provide a definition for the term "premises",  
10 nor is the term discussed in the legislative history.  
11 In the FCC's Order 96-325, the FCC defined the term  
12 "premises" as follows:

13 "We therefore interpret the term 'premises'  
14 broadly to include LEC central offices, serving  
15 wire centers and tandem offices, as well as all  
16 buildings or similar structures owned or leased by  
17 the incumbent LEC that house LEC network  
18 facilities. We also treat as incumbent LEC  
19 premises any structures that house LEC network  
20 facilities on public rights-of-way, such as vaults  
21 containing loop concentrators or similar  
22 structures." [Paragraph 573]

23

24 Further, I believe that if the FCC intended to broaden  
25 its definition further, it could have done so in its

1 recent Order. It did not do so, instead the FCC would  
2 permit "the new entrant to construct or otherwise  
3 procure such an adjacent structure, subject only to  
4 reasonable safety and maintenance requirements."

5

6 Q. DO ADJACENT CEVs OR SIMILAR STRUCTURES FIT THE FCC'S  
7 DEFINITION OF THE TERM "PREMISES"?

8

9 A. No. The FCC's definition of adjacent CEVs and similar  
10 structures is inconsistent with its own definition of  
11 "premises" and the Act's requirement for collocation  
12 within BellSouth's premises. This is because the  
13 resulting structure, whether constructed by the  
14 collocator or otherwise procured, would not be owned by  
15 BellSouth and thus would not fit the definition of  
16 being any one of the types of structures named in the  
17 FCC's definition; specifically, "LEC central offices,  
18 serving wire centers and tandem offices, as well as all  
19 buildings or similar structures owned or leased by the  
20 incumbent LEC that house LEC network facilities."  
21 Further, the resultant structure constructed or  
22 otherwise procured by the collocator (that is, the  
23 adjacent CEV or similar structure) would not fit the  
24 FCC's definition because it would not house BellSouth's  
25 "network facilities." To summarize, the FCC's

1 requirement for adjacent CEVs and similar structures is  
2 inconsistent with the requirements of the Act that  
3 BellSouth provide collocation at its premises because  
4 adjacent CEVs and similar structures are not  
5 BellSouth's premises and the equipment housed within  
6 the adjacent CEV or similar structure is not part of  
7 BellSouth's network facilities.

8

9 Q. HAVE OTHER PARTIES SOUGHT TO FURTHER BROADEN THE FCC'S  
10 DEFINITION OF THE TERM "PREMISES"?

11

12 A. Apparently so. Some parties have suggested that  
13 buildings that house BellSouth's administrative or  
14 other support personnel and which are on parcels of  
15 land adjacent to or near BellSouth's central offices  
16 should likewise be considered "premises" under the  
17 FCC's definition. Since these buildings do not house  
18 network facilities (that is, switches or transmission  
19 equipment, for example), they are not subject to  
20 requirements for collocation.

21

22 Q. THE FCC'S RULES REQUIRE THAT INCUMBENT LECs ALLOW ALL  
23 EQUIPMENT USED FOR INTERCONNECTION OR ACCESS TO UNES TO  
24 BE COLLOCATED. WHAT TYPE OF EQUIPMENT DOES THE FCC'S  
25 RECENT ORDER SPECIFICALLY REQUIRE?

1 A. Paragraph 28 of the FCC's March 31, 1999 Order requires  
2 the collocation of Digital Subscriber Line Access  
3 Multiplexers (DSLAMs), routers, Asynchronous Transfer  
4 Mode (ATM) multiplexers, and Remote Switching Modules.  
5 BellSouth had heretofore allowed collocation of all of  
6 these equipment types plus "stand-alone" switching  
7 equipment. Given that the FCC's Order in paragraph 30  
8 does not require collocation of equipment used solely  
9 to provide enhanced services, BellSouth believes it is  
10 already in compliance with the FCC's requirements.

11

12 Q. DOES BELLSOUTH ACCOMMODATE TOURS OF CENTRAL OFFICES IN  
13 WHICH A REQUESTING PARTY HAS BEEN DENIED SPACE FOR  
14 PHYSICAL COLLOCATION?

15

16 A. Yes. As this Commission is aware, BellSouth has hosted  
17 a number of tours for parties who requested physical  
18 collocation in a given BellSouth central office but  
19 were denied due to space exhaustion. The FCC's recent  
20 rules would apparently require BellSouth to conduct  
21 such a tour within ten (10) days of the denial of  
22 space.

23

24 Q. WHAT IS BELLSOUTH'S POLICY REGARDING PRODUCTION OF  
25 LISTS OF CENTRAL OFFICES WITHIN WHICH SPACE IS NOT

1 AVAILABLE FOR PHYSICAL COLLOCATION?

2

3 A. BellSouth evaluates its ability to provide physical  
4 collocation and assesses the local building code  
5 requirements and/or restrictions on a per request  
6 basis. BellSouth has over 1,600 central offices in its  
7 nine-state region. Because BellSouth has not processed  
8 requests for collocation in every municipality within  
9 its region, BellSouth cannot predict with certainty  
10 where the local code officials will allow unenclosed  
11 physical collocation space. Further, BellSouth  
12 believes such a list would be difficult to maintain  
13 accurately given the constantly changing situation in  
14 each of BellSouth's central offices. BellSouth is  
15 investigating means by which it can keep ALECs informed  
16 of the availability of space within BellSouth's central  
17 offices.

18

19 Q. WHAT IS BELLSOUTH'S POLICY REGARDING THE REMOVAL OF  
20 OBSOLETE, UNUSED EQUIPMENT IN ORDER TO ACCOMMODATE  
21 REQUESTS FOR PHYSICAL COLLOCATION?

22

23 A. First of all, BellSouth believes the FCC intended to  
24 use the terms "obsolete" and "unused" together to avoid  
25 disagreements regarding an incumbent LEC's obligations

1 to modernize its network to replace older vintage but  
2 still functional equipment. Otherwise, a collocator  
3 might demand that the incumbent replace an analog  
4 switching system with a newer, physically smaller,  
5 digital switch in order to free up space for physical  
6 collocation. I do not believe this is what the FCC  
7 intended, nor would such a requirement make economic  
8 sense. Thus, BellSouth believes its policy heretofore  
9 is compliant with the FCC's rules in Order 99-48.

10

11 Q. PLEASE ADDRESS THE FCC'S PRESUMPTION THAT ANY  
12 COLLOCATION ARRANGEMENT OFFERED BY ANY OTHER ILEC IS  
13 TECHNICALLY FEASIBLE?

14

15 A. BellSouth is troubled by the breadth of this  
16 presumption as well as the uncertainty inherent in such  
17 a requirement.

18

19 Q. THE FCC'S RECENT RULES REQUIRE PHYSICAL COLLOCATION OF  
20 AS LITTLE AS ONE BAY OF EQUIPMENT IF SPACE IS  
21 AVAILABLE. DOES THIS REQUIREMENT IMPOSE UPON BELLSOUTH  
22 THE DUTY TO ALLOW COMMINGLING OF A COLLOCATOR'S  
23 EQUIPMENT WITH BELLSOUTH'S EQUIPMENT OR ANOTHER ALEC'S  
24 EQUIPMENT?

25

1 A. No. For network reliability and safety reasons,  
2 BellSouth does not permit physical collocation of  
3 equipment that is commingled with its own equipment.  
4 By use of the term "commingling" I mean that a single  
5 bay (which is the framework used to mount equipment)  
6 would be used to accommodate the equipment of BellSouth  
7 and the equipment of one or more collocators on  
8 different shelves within that bay. BellSouth is  
9 permitted to impose reasonable security measures in  
10 association with its physical collocation offering.  
11 Carriers that do not wish to utilize physical  
12 collocation arrangements may elect to utilize virtual  
13 collocation arrangements as the carrier's first choice.  
14 Virtual collocation allows the "commingling" of  
15 equipment that some carriers apparently want; however  
16 in such an arrangement, BellSouth (rather than the  
17 collocator) performs any required equipment  
18 maintenance. Thus, network security and reliability  
19 are not degraded while still allowing the benefits of  
20 commingling of equipment.

21  
22 Q. PLEASE ADDRESS THE FCC'S REQUIREMENT IN ITS RECENT  
23 ORDER THAT PERMIT COLLOCATORS DIRECT ACCESS TO ITS  
24 EQUIPMENT WITHOUT BEING ESCORTED BY BELL SOUTH PERSONNEL  
25 AND WITHOUT THE COLLOCATOR'S EQUIPMENT BEING PHYSICALLY

1 SEPARATED BY A WALL OR OTHER STRUCTURE FROM BELLSOUTH'S  
2 EQUIPMENT OR THE EQUIPMENT OF OTHER ALECS.

3

4 A. The FCC's Order raises serious concerns that must be  
5 addressed in order to retain the level of network  
6 reliability and security that currently exists and  
7 which end user customers and regulators have come to  
8 expect. While I am in no way suggesting that an ALEC  
9 would intentionally disrupt service provided by another  
10 carrier or would intentionally damage, disable or  
11 reconfigure the equipment or facilities of another  
12 carrier, I believe that a simple reading of today's  
13 newspaper headlines reveals the need for stringent  
14 control over the access to and operation of the public  
15 telephone network. It would be a relatively easy task  
16 for those who sought to commit terroristic acts to  
17 first become certificated as an ALEC, then seek minimal  
18 collocation arrangements in a number of strategic  
19 central offices and later use direct access to such  
20 collocation arrangements as the means to gain access  
21 that would otherwise have been denied. Although the  
22 FCC suggests that the ILEC may install monitoring and  
23 access devices such as card readers as means of  
24 maintaining network reliability and security, I am  
25 concerned regarding the effectiveness of such measures

1 to repulse criminal acts. Even taking at face value  
2 that effective security measures could be put in place,  
3 such measures will take time to implement and before  
4 the completion of such implementation, the public  
5 telephone network, both BellSouth's network and the  
6 networks of other service providers, would be at  
7 significant risk.

8  
9 *Issues raised by parties and Commission staff*  
10 *identified in this proceeding (specifically, Issues*  
11 *1,2,5 and 6) and BellSouth's efforts to have building*  
12 *code officials approve BellSouth's requests for permits*  
13 *to build "wire mesh cages" to serve as enclosed*  
14 *physical collocation arrangements.*

15  
16 **Issue 1: What obligation does BellSouth have to make**  
17 **space available at these central offices to permit**  
18 **physical collocation pursuant to the Act and applicable**  
19 **state and federal requirements?**

20  
21 **Q. WHAT IS BELLSOUTH'S POSITION AS TO ITS OBLIGATION TO**  
22 **MAKE SPACE AVAILABLE FOR PHYSICAL COLLOCATION REQUESTED**  
23 **BY ALECS?**

24  
25 **A. BellSouth's contention is that neither the**

1 Telecommunications Act of 1996 ("Act") nor the rules of  
2 the Federal Communications Commission (FCC) require  
3 BellSouth to make relocations and renovations to  
4 accommodate requests for physical collocation  
5 arrangements. The Federal Communications Commission 47  
6 CFR Chapter 1 51.321 (e) states "An incumbent LEC shall  
7 not be required to provide for physical collocation of  
8 equipment necessary for interconnection or access to  
9 unbundled network elements at the incumbent LEC's  
10 premises if it demonstrates to the state commission  
11 that physical collocation is not practical for  
12 technical reasons or because of space limitations."

13

14 Q. DOES EITHER THE ACT OR THE RULES SET FORTH BY THE FCC  
15 REQUIRE BELLSOUTH TO REMOVE ITS WORKING EQUIPMENT OR TO  
16 RELINQUISH ADMINISTRATIVE AREAS WITHIN ITS CENTRAL  
17 OFFICES IN ORDER TO ACCOMMODATE REQUESTS FOR  
18 COLLOCATION SPACE?

19

20 A. The Act simply states that space limitations justify a  
21 State commission to grant a physical collocation  
22 waiver. Neither the Act nor the FCC's rules specify to  
23 what purposes BellSouth may use the space within its  
24 central offices. Accordingly, the term "use" has its  
25 plain language meaning here. In paragraph 579 of the

1 FCC's First Report and Order in Docket 96-325, the FCC  
2 states:

3  
4 "We believe that section 251(c)(6) generally  
5 requires that incumbent LECs permit the  
6 collocation of equipment used for interconnection  
7 or access to unbundled network elements. Although  
8 the term "necessary", read most strictly, could be  
9 interpreted to mean "indispensable," we conclude  
10 that for the purposes of section 251(c)(6)  
11 "necessary" does not mean "indispensable" but  
12 rather "used" or "useful." This interpretation is  
13 most likely to promote fair competition consistent  
14 with the purposes of the Act."

15  
16 This same doctrine of fairness should be applied to  
17 BellSouth's use of its own space within its central  
18 offices. Not only do these central offices house  
19 telecommunications equipment (including switching,  
20 transmission, power, and ancillary equipment) but also  
21 the people, tools, and computers, used to administer,  
22 provision, maintain, and repair such telecommunications  
23 equipment.

24

25 Q. DOES THE ACT DEFINE THE TERM "TELECOMMUNICATIONS

1 EQUIPMENT"?

2

3 A. Yes. Section 3(a)50 states:

4

5 "The term 'telecommunications equipment' means  
6 equipment, other than customer premises equipment,  
7 used by a carrier to provide telecommunications  
8 services, and includes software integral to such  
9 equipment (including upgrades)."

10

11 The equipment within BellSouth's central offices is not  
12 customer premises equipment and thus falls under this  
13 definition since individually and collectively it is  
14 used to provide telecommunications services. While  
15 other parties to this proceeding may argue that some or  
16 all of these purposes are not "indispensable" and argue  
17 that BellSouth must relocate or dispose of  
18 administrative space, employee break rooms and the  
19 like, all of these constitute productive use of floor  
20 space.

21

22 Q. HOW DOES THE FCC DEFINE THE TERM "TECHNICALLY  
23 FEASIBLE"?

24

25 A. The FCC's 47 CFR 51.5 states "Interconnection access to

1 unbundled network elements, collocation, and other  
2 methods of achieving interconnection or access to  
3 unbundled network elements at a point in the network  
4 shall be deemed technically feasible absent technical  
5 or operational concerns that prevent the fulfillment of  
6 a request by a telecommunications carrier for such  
7 connection, access, or methods. A determination of  
8 technical feasibility does not include consideration of  
9 economic, accounting, billing, space or site concerns,  
10 except that space and site concerns may be considered  
11 in circumstances where there is no possibility of  
12 expanding the space available. The fact that an  
13 incumbent LEC must modify its facilities or equipment  
14 to respond to such a request does not determine whether  
15 satisfying such request is technically feasible. An  
16 incumbent LEC that claims that it cannot satisfy such  
17 request because of adverse network reliability impacts  
18 must prove to the state commission by clear and  
19 convincing evidence that such interconnection, access,  
20 or methods would result in specific and significant  
21 adverse network reliability impacts."

22

23 Q. WHAT IS THE IMPACT OF EQUIPMENT RELOCATION AND  
24 REARRANGEMENT ON NETWORK RELIABILITY AND SECURITY?

25

1 A. The potentially negative impact on network reliability  
2 and security resulting from equipment relocation or  
3 rearrangement must be assessed on a case-by-case basis.  
4 However, equipment relocations and rearrangements, by  
5 industry practice, have long been approached in a  
6 generally conservative manner given the potential for  
7 significant service disruption, not only affecting the  
8 equipment being relocated or rearranged but also  
9 adjacent equipment or equipment that shares common  
10 resources with the equipment being relocated or  
11 rearranged.

12

13 Q. WHAT HAS BELLSOUTH'S GENERAL EXPERIENCE BEEN REGARDING  
14 THE IMPLEMENTATION OF ITS PHYSICAL COLLOCATION  
15 OFFERING?

16

17 A. While the majority of requests have gone smoothly,  
18 BellSouth has also encountered real, and frankly,  
19 unexpected roadblocks. Among the roadblocks BellSouth  
20 has encountered are: permit and inspection delays;  
21 building code restrictions; customer errors/  
22 modifications on applications and firm orders which  
23 require rework; certified vendor errors and shortages  
24 of equipment.

25

1 Issue 2: What factors should be considered by the  
2 Commission in making its determination on BellSouth's  
3 Petitions for Waiver and Temporary Waiver of the  
4 requirement to provide physical collocation for the  
5 following central offices:  
6

- 7 a) Daytona Beach Port Orange
- 8 b) Boca Raton Boca Teeca
- 9 c) Miami Palmetto
- 10 c) West Palm Beach Gardens
- 11 d) North Dade Golden Glades
- 12 e) Lake Mary

13  
14 Q. WOULD YOU EXPLAIN WHAT FACTORS ARE CONSIDERED WHEN  
15 DETERMINING SPACE ALLOCATION FOR COLLOCATION?  
16

17 A. To determine space allocation or availability for  
18 collocation in any of BellSouth's central offices,  
19 several factors have to be assessed. These factors are  
20 outlined in the FCC's First Report and Order, paragraph  
21 604, et al. These factors fall into the following  
22 categories:  
23

- 24 1. Existing building configuration such as the  
25 building outline and physical capacity of the

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25

structure.

2. Space usage and forecasted demand.

Other factors that also potentially impact space allocation or availability for collocation include Code and regulatory factors at the national, state, and local level such as the National Fire Protection Act, the Southern Building Code, and local county and municipal codes. Space design practices act as another set of codes specifying space allocation meets the safety needs for employees, vendors, and customer service provided by the building and its occupants.

Details of these factors are further discussed in the testimony of Mr. Jim Bloomer.

**Issue 5: Should BellSouth's Petitions for Waiver and Temporary Waiver of the requirement to provide physical collocation in the following central offices be granted:**

- a) Daytona Beach Port Orange
- b) Boca Raton Boca Teeca
- c) Miami Palmetto
- c) West Palm Beach Gardens

1 d) North Dade Golden Glades

2 e) Lake Mary

3

4 Q. HAVE YOU READ MR. BLOOMER'S TESTIMONY, AND DO YOU AGREE  
5 WITH HIS ASSESSMENT OF SPACE ALLOCATION FOR THE CENTRAL  
6 OFFICES MENTIONED ABOVE?

7

8 A. I have read Mr. Bloomer's testimony and agree with his  
9 assessment that no available space exists in any of the  
10 above mentioned central offices for physical  
11 collocation. I have also personally visited each of  
12 these offices and have taken part in the tours of these  
13 six central offices that were attended by  
14 representatives of certain ALECs as well as members of  
15 the Commission's staff. Based on my review of the  
16 application of relevant factors and having taken these  
17 tours, I support BellSouth's Petitions for Waiver and  
18 Temporary Waiver in these six central offices.

19

20 **Issue 6: If the Commission determines that a waiver**  
21 **request should be denied, how should BellSouth**  
22 **effectuate FCC Rule 47 CFR § 51.323 (f) (1) in**  
23 **processing requests for physical collocation in those**  
24 **central offices?**

25

1 Q. WHAT ACTION DOES BELLSOUTH BELIEVE THIS COMMISSION  
2 SHOULD TAKE SHOULD THE COMMISSION DETERMINE THAT A  
3 WAIVER REQUEST SHOULD BE DENIED?  
4

5 A. BellSouth believes that, in the event the Commission  
6 determines that space is available for physical  
7 collocation in a given central office for which  
8 BellSouth has filed a waiver, that the Commission  
9 should specify the amount of space it has determined is  
10 available.  
11

12 Q. BY WHAT PROCESS WOULD BELLSOUTH THEN OFFER THE SPACE  
13 IDENTIFIED BY THE COMMISSION AS AVAILABLE FOR PHYSICAL  
14 COLLOCATION TO REQUESTING CARRIERS?  
15

16 A. Once the Commission's Order is final and unappealable,  
17 BellSouth will allocate that amount of space to  
18 requesting carriers on a "first come, first served"  
19 basis. Because BellSouth has kept records of the date  
20 of each request and the amount of space requested for  
21 physical collocation, BellSouth would offer the space  
22 to be allocated in the same order and for the same  
23 amount of floor space as had been originally requested.  
24 By "request" I mean the original application for  
25 physical collocation space rather than a "firm order"

1 for space. Briefly, a telecommunications carrier  
2 provides BellSouth an application for a physical  
3 collocation arrangement of a given size in a particular  
4 BellSouth central office. BellSouth analyzes the  
5 application to determine whether space exists such that  
6 the request may be accommodated. In cases where  
7 sufficient space is not available, the requesting party  
8 is so informed.

9

10 Q. HOW SHOULD BELLSOUTH TREAT CASES WHERE THE REQUESTING  
11 CARRIER DECLINES THE OFFER OF THE AMOUNT OF SPACE IT  
12 HAD ORIGINALLY REQUESTED, OR IF THE REQUESTING CARRIER  
13 AGREES TO A SMALLER AMOUNT OF SPACE THAN WAS ORIGINALLY  
14 REQUESTED?

15

16 A. Should a requesting carrier decline the offer of the  
17 amount of space it had originally requested, or if the  
18 requesting carrier agrees to accept the offer of a  
19 smaller amount of space than had been originally been  
20 requested, BellSouth will consider that requesting  
21 carrier's original request to have been fulfilled. If  
22 any of the space found by the Commission to be  
23 available for physical collocation remains to be  
24 allocated, BellSouth would offer other requesting  
25 carriers their originally requested amount of floor

1 space respectively (on a first come, first served  
2 basis) and would continue the process until all floor  
3 space had been allocated or until all requesting ALECs  
4 had either accepted or declined the offer of space. At  
5 the point the amount of space identified by the  
6 Commission as available for physical collocation  
7 becomes allocated, BellSouth's Waiver Request would be  
8 considered as granted obviating or eliminating the need  
9 for BellSouth to re-file a physical collocation waiver  
10 request in that central office.

11

12 *Overview of the testimony of the other BellSouth*  
13 *witnesses and explain each of their roles in the*  
14 *collocation process.*

15

16 Q. PLEASE PROVIDE THE NAMES AND GENERAL RESPONSIBILITIES  
17 OF EACH OF THE OTHER BELLSOUTH WITNESSES IN THIS  
18 PROCEEDING.

19

20 A. The other BellSouth witnesses are as follows:

21

22 Mr. Thomas Fortenberry is Manager of Network  
23 Forecasting and is responsible for forecasting growth  
24 for future years of individual products or groups of  
25 products within a Wire Center.

1 The following individuals serve as Area Managers -  
2 Circuit Capacity Management. These individuals  
3 supervise the preparation of forecasts and plans for  
4 central office power equipment:

- 5 • Mr. John MacDonald is Area Manager in the South  
6 Florida Capacity Management organization and has  
7 responsibilities for managing the Common Systems  
8 Capacity Management (CSCM) group, Power Capacity  
9 Management (PCM) group, and the Transmission/Video  
10 Engineers for South Florida.
- 11 • Mr. Robert Fisher is a Power Capacity Manager in  
12 the North Florida Capacity Management organization  
13 and responsible for the planning and deployment of  
14 power equipment and standby engine/alternators for  
15 two central offices in this proceeding.

16  
17 The following individuals serve as Area Managers -  
18 Circuit Capacity Management. These individuals  
19 supervise the preparation of circuit forecasts and  
20 plans (for example, trunk forecasts) used by others to  
21 ensure that adequate circuit capacity is available when  
22 and where needed.

- 23 • Ms. Susan Smith is Area Manager - Circuit Capacity  
24 Management in the South Florida Capacity  
25 Management District and has the responsibility of

- 1 supervising Circuit Capacity Management for
- 2 Broward and Palm Beach County.
- 3 • Mr. Alan Levak is Area Manager - Circuit Capacity
- 4 Management in the South Florida Capacity
- 5 Management District and has the responsibility of
- 6 supervising Circuit Capacity Management for Miami-
- 7 Dade and Monroe County.
- 8 • Mr. Kenneth Krick is Area Manager - Circuit
- 9 Capacity Management in the North Florida Capacity
- 10 Management District and has the responsibility of
- 11 supervising Circuit Capacity Management for the
- 12 Orlando, Daytona, and Indian River areas.

13

14 The following individuals serve as Area Managers -

15 Switch Capacity Management. They are responsible for

16 managing work activities required to plan, design, and

17 provision equipment for switching relief for all types

18 of central office switching systems.

- 19 • Mr. Shakur Bolden is Area Manager - Switch
- 20 Capacity Management Network Operations - North
- 21 Florida Capacity Management.
- 22 • Mr. William Perez is Area Manager - Switch
- 23 Capacity Management Network Operations - South
- 24 Florida Capacity Management.
- 25 • Mr. Thomas Forness is Area Manager - Switch

1 Capacity Management Network Operations - South  
2 Florida Capacity Management.

3  
4 Ms. Barbara Cruit is the Director of South Florida  
5 Capacity Management and is responsible for the overall  
6 Capacity Management process utilized by BellSouth  
7 Capacity Managers to determine the equipment  
8 requirements for forecasted growth for each of the six  
9 central offices at issue in this proceeding.

10  
11 The following individuals serve as Area Managers -  
12 Common Systems Capacity Management. They are  
13 responsible for managing work activities required to  
14 plan, design, and provision equipment referred to as  
15 "common systems". These common systems include all  
16 types of equipment and facilities other than switching  
17 and transmission equipment.

18 • Mr. Guy Ream who is a Common Systems Capacity  
19 Manager - Network Operations and has  
20 responsibility for monitoring and coordinating  
21 plans for equipment additions or removals in  
22 central offices.

23 • Mr. Miguel Rodriguez who is a Common Systems  
24 Capacity Manager - Network Operations and has  
25 responsibility for maintaining building study

1 plans, for two central offices in this proceeding,  
2 that define growth strategy for all classes of  
3 central office equipment.

4 • Mr. Robert Cook who is a Common Systems Capacity  
5 Manager and has responsibility for maintaining  
6 building study plans, for two one central office  
7 in this proceeding, that define growth strategy  
8 for all classes of central office equipment.

9 • Mr. Louis Caban who is a Common Systems Capacity  
10 Manager - Network Operations and has  
11 responsibility for maintaining building study  
12 plans, for one central office in this proceeding,  
13 that define growth strategy for all classes of  
14 central office equipment.

15

16 Mr. George Mainer is Director - Network Operations,  
17 South Florida and has responsibility for maintenance  
18 and provisioning activities for central offices in the  
19 Miami-Dade area.

20

21 Mr. Jim Bloomer is Manager - Facility Planning -  
22 Property and Services Management and is responsible for  
23 assigning company floor space in existing buildings and  
24 developing plans for future space allocations.

25

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2

3 A. Yes.



*Ronald Martin, AIA, CFM*  
*Building Standards and*  
*Codes, Fire Safety*

8 Corporate Plaza, 3C104  
Plainsboro, NJ 08854

[rmartin@codes.us.bellcore.com](mailto:rmartin@codes.us.bellcore.com)  
Phone 732-689-3753  
Fax 732-856-2230

Date: July 6, 1998

Subject: Standard Building Code  
Request for Formal Interpretation  
704.3 - Tenant fire separation

File: 3860/98-266

To: Mark Chubb  
SBCCI  
900 Montclair Road  
Birmingham, AL 35213

Dear Mark,

I appreciate the time you took several weeks ago when I called for assistance in requesting an interpretation from SBCCI on code requirements for *tenant fire separations* as delineated in Section 704.3 of the 1997 Standard Building Code. Please consider this letter as a request for a Formal Interpretation of Section 704.3 as it applies to collocation of telecommunications equipment in telecommunications facilities.

In order for you to better understand some uncommon telecommunications industry terminology, I have provided definitions of a few terms:

- *Collocation* is defined as the action of a Competitive Local Exchange Carrier (CLEC, or start-up telecommunications service providers as they are referred), locating their equipment in the building of an Incumbent Local Exchange Carrier (ILEC) such as BellSouth, GTE, Southwestern Bell, etc. Collocation is an FCC tariffed practice, and has become routine and widespread across the country in all ILEC companies. The CLEC leases space and building services in the ILEC's building, and installs either their own switch, or transmission equipment that is connected to the incumbent's switch and cabling through separate lease arrangements. Generically, the CLEC's equipment is the same as the ILEC's equipment. Virtually all incumbents require that the CLEC's equipment be NEBS compliant.
- *NEBS* (Network Equipment Building Systems) are publicly available generic requirements published and maintained by Bellcore (AT&T has their own version). NEBS sets forth minimal requirements for grounding, ESD, RFI, earthquakes, fire protection, and a host of other stringent requirements to assure safe and dependable telecommunications service. NEBS can be likened to a building code or standard for the telecommunications industry. Regarding fire protection requirements, equipment manufacturers such as Lucent or Nortel submit equipment (either separate line cards, full shelves, or complete cabinets) to Bellcore's testing facility in Chester NJ for technical auditing. NEBS has three levels of compliance, and the fire protection requirements are the same for all three levels.

BS-98-1

As interpreted by some local code officials, Section 704.3 of the Standard Code requires my client, BellSouth, to erect 1-hour walls, not only between their equipment and the CLEC's equipment, but between each of the CLECs' spaces. The cost of these partitions and the resulting costs of associated electrical and HVAC alterations are very high in many cases, due to the amount of overhead cabling that must be properly firestopped. These costs are passed on to the competitors who complain that they don't have these restrictions in the other ILEC's facilities. (BellSouth is exclusively under the Standard Code, while all other Regional Bells are predominantly BOCA or ICBO, neither of which has this requirement). In BOCA and ICBO jurisdictions, companies install heavy gauge wire partitions for security.

I understand that the provisions of 704.3 have historically addressed separation issues as they are interpreted, for example, in malls, strip shopping, storage facilities, and several multi-family residential applications.

It is my objective opinion that the requirements of 704.3 would not apply to telecommunications facilities where competitive companies install their equipment in incumbent's buildings, for the following reasons:

- The use and occupancy are identical and there is no fire threat between the equipment
- The CLEC equipment is virtually identical to the ILEC equipment
- The CLEC equipment, like the ILEC equipment, is NEBS compliant
- In BellSouth's case, CLEC personnel are escorted into and out of their space by BellSouth personnel and are not allowed to wander through the building
- Lease agreements and tariffs protect both companies from contingent liability issues
- There has been no fire incident (at least in the Regional Bell Operating Companies) between CLEC and ILEC spaces
- Wire partitions provide full vision between spaces which provides a higher level of safety from a fire protection standpoint

The telecommunications industry enjoys an exemplary fire safety record due primarily to their aggressive and pro-active stance on very early warning fire detection, selective compartmentation, assiduous firestopping practices, and remarkably safe equipment that is NEBS compliant.

Mark, I would appreciate your sharing this request with the staff and providing me with a full interpretation and intent of Section 704.3, as it applies to colocation of telecommunications equipment. Thanks again for your time and interest.

Very truly yours,



Ron Marts

cc	Steve Johnson	BellSouth
	Larry Langhorn	BellSouth
	Glen Neuburger	Bellcore



Setting the  
Standard for  
America's  
Model Codes

September 25, 1998

Mr. Ron Marta, AIA, CFM  
Building Standards and Codes, Firesafety  
Bellcore  
3C104  
8 Corporate Place  
Piscataway, NJ 08854

Dear Ron:

This is in response to your request for an interpretation of the tenant separation requirements of the 1997 *Standard Building Code* as they apply to co-location of competitive local exchange carriers (CLEC) in the network equipment buildings of incumbent local exchange carriers (ILEC) such as BellSouth. The tenant separation requirements are found in 704.3 of the code.

As you correctly note in your request, tenant separation requirements do not appear in the provisions of any of the other nationally-recognized model building codes. The *Standard Building Code* provisions for tenant separation date back to the first edition in 1946, and are intended to protect the property of one occupant from harms arising from the use or occupancy of another portion of the same building occupied by another tenant. Chief among these harms is the threat of fire. The requirement for 1-hour fire resistance rated separation seems to follow from the assumption that tenants will usually be separated by partitions, floor/ceiling assemblies, or by some equivalent construction as a matter of security or privacy or simply to control the amount of usable space let to a tenant under the terms of a given contract. Since these separations may obscure evidence of a hazardous situation and limit the degree of control which may be exercised over such hazards by other occupants or tenants, the code requires these separations to provide a minimum degree of fire resistance.

Of course, many contemporary co-location or cohabitation situations challenge the traditional notion that tenants will already be separated from one another. Many occupancies now let space within their buildings to other companies for purposes similar to or at least complementary to their own use of the premises. Examples abound: cosmetic counters, opticians offices, photo processors, and fast food franchise counters in retail stores are probably the most common examples. The situation you describe with regard to network equipment buildings does not seem altogether different from these new arrangements: The tenants share a common occupancy classification, perform complementary activities, and provide common access to their respective portions of the premises. Perhaps most importantly though, the arrangements you describe, particularly common equipment requirements, escorted access, largely open plan, and a high degree of visibility among adjacent tenants, suggest that continuous surveillance of the equipment and premises is provided. This seems to ensure that no tenant is unwittingly exposed to a threat introduced by another.

In small network equipment buildings (those less than 3,000 sq ft), the exception to 704.3 would require no separation between adjacent tenants. In larger buildings (those over

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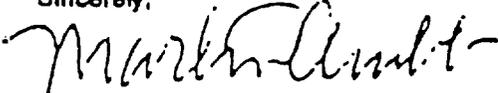
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Mr. Ron Marts, AIA, CPM  
September 25, 1998  
Page 2

3,000 sq ft), separation could only be required to subdivide the building into areas less than 3,000 sq ft. However, this does not appear necessary, since the arrangements you describe seem to fulfill the intent of the tenant separation provisions.

This information is provided to assist you in complying with the provisions of the Standard Building Code. This opinion has not been reviewed by the Interpretation Committee, and does not represent the official position of SBCCI or the Southeastern Association of Fire Chiefs, Inc. in this matter. Please remember, the code official remains the final authority for all decisions concerning the application and interpretation of these provisions.

Sincerely,



Mark Chubb, CEO, AIFireE  
SBCCI Fire Code Coordinator  
Executive Director, Southeastern Association of Fire Chiefs

/mdc