J. PHILLIP CARVER General Attorney

BellSouth Telecommunications, Inc. 150 South Monroe Street Room 400 Tallahassee, Florida 32301 (404) 335-0710



October 28, 1999

Mrs. Blanca S. Bayó Director, Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

> Docket Nos. 981834-TP and 990321-TP Re:

Dear Ms. Bayó:

Enclosed please find the original and fifteen copies of BellSouth Telecommunications, Inc.'s Direct Testimony of Jerry Hendrix and Keith Milner, which we ask that you file in the above-referenced matter.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely

J. Millip Caww J. Phillip Carver (AM)

EAG LEG MAS

PAI SEC cc: All Parties of Record Marshall M. Criser III. R. Douglas Lackey Nancy B. White

PSC-ELLS SE PORTING

3255 OCT 28 S FRED HELPISM PARCORTIS

CERTIFICATE OF SERVICE Docket No. 981834-TP and 990321-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via

U. S. Mail this 28th day of October, 1999 to the following:

Beth Keating
Staff Counsel
Florida Public Service
Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Tel. No. (850) 413-6212
Fax. No. (850) 413-6250

Joseph A. McGlothlin
Vicki Gordon Kaufman
McWhirter, Reeves, McGlothlin,
Davidson, Decker, Kaufman, Arnold,
& Steen, P.A.
117 South Gadsden Street
Tallahassee, FL 32301
Tel. No. (850) 222-2525
Fax. No. (850) 222-5606
Attys. For FCCA

Andrew O. Isar
Telecommunications Resellers Assoc.
4312 92nd Avenue, N.W.
Gig Harbor, WA 98335
Tel. No. (253) 265-3910
Fax. No. (253) 265-3912

Marsha Rule
Tracy Hatch
101 North Monroe Street
Suite 700
Tallahassee, FL 32301
Tel. No. (850) 425-6364
Fax. No. (850) 425-6343
Attys. for AT&T

Richard D. Melson
Hopping Green Sams & Smith, P.A.
Post Office 6526
123 South Calhoun Street
Tallahassee, FL 32314
Tel. No. (850) 222-7500
Fax. No. (850) 224-8551
Atty. For MCI & ACI

Dulaney L. O'Roark
MCI Telecommunications Corporation
6 Concourse Parkway
Suite 600
Atlanta, GA 30328
Tel. No. (770) 284-5498
Fax. No. (770) 284-5488

Floyd Self Norman H. Horton, Jr. Messer, Caparello & Self Post Office Drawer 1876 215 South Monroe Street Suite 701 Tallahassee, FL 32302-1876 Tel. No. (850) 222-0720 Fax. No. (850) 224-4359 Attys. for WorldCom

Terry Monroe
Vice President, State Affairs
Competitive Telecomm. Assoc.
1900 M Street, N.W.
Suite 800
Washington, D.C. 20036
Tel. No. (202) 296-6650
Fax. No. (202) 296-7585

Susan Huther Rick Heapter MGC Communications, Inc. 3301 Worth Buffalo Drive Las Vegas, Nevada 89129 Tel. No. (702) 310-4272 Fax. No. (702) 310-5689

Charlie Pellegrini
Patrick K. Wiggins
Wiggins & Villacorta, P.A.
2145 Delta Boulevard
Suite 200
Tallahassee, FL 32303
Tel. No. (850) 385-6007
Fax. No. (850) 385-6008
Attys. for Intermedia

Norman H. Horton, Jr.
Messer, Caparello & Self
215 South Monroe Street
Suite 701
Tallahassee, FL 32301-1876
Tel. No. (850) 222-0720
Fax. No. (850) 224-4359
Attys. for e.spire

James C. Falvey, Esq.
e.spire Communications, Inc.
133 National Business Parkway
Suite 200
Annapolis Junction, Maryland 20701
Tel. No. (301) 361-4298
Fax. No. (301) 361-4277

Jeffrey Blumenfeld Elise Kiely Blumenfeld & Cohen 1625 Massachusetts Ave., N.W. Suite 300 Washington, D.C. 20036 Tel. No. (202) 955-6300 Fax. No. (202) 955-6460

Kimberly Caswell
GTE Service Corporation
One Tampa City Center
201 North Franklin Street (33602)
Post Office Box 110, FLTC0007
Tampa, Florida 33601-0110
Tel. No. (813) 483-2606
Fax. No. (813) 204-8870

Peter M. Dunbar, Esq.
Barbara D. Auger, Esq.
Pennington, Moore, Wilkinson & Dunbar, P.A.
Post Office Box 10095
Tallahassee, Florida 32302
Tel. No. (850) 222-3533
Fax. No. (850) 222-2126

Carolyn Marek
Vice President of Regulatory Affairs
Southeast Region
Time Warner Communications
233 Bramerton Court
Franklin, Tennessee 37069
Tel. No. (615) 376-6404
Fax. No. (615) 376-6405
Represented by Pennington Law Firm

David Dimlich, Legal Counsel Supra Telecommunications & Information Systems, Inc. 2620 S.W. 27th Avenue Miami, FL 33133 Tel. No. (305) 476-4236 Fax. No. (305) 443-6638

Donna Canzano McNulty, Esq. MCI WorldCom
325 John Knox Road
Suite 105
Tallahassee, FL 32303
Tel. No. (850) 422-1254
Fax. No. (850) 422-2586

Michael A. Gross
VP Reg. Affairs & Reg. Counsel
Florida Cable Telecomm. Assoc.
310 North Monroe Street
Tallahassee, FL 32301
Tel. No. (850) 681-1990
Fax. No. (850) 681-9676

ACI Corp. 7337 S. Revere Parkway Englewood, CO 80112 Tel. No. (303) 476-4200 Fax. No. (303) 476-4201

Florida Public Telecomm. Assoc. Angela Green, General Counsel 125 South Gadsden Street #200 Tallahassee, FL 32301-1525 Tel. No. (850) 222-5050 Fax. No. (850) 222-1355

Intermedia Communications, Inc. Scott Sapperstein 3625 Queen Palm Drive Tampa, FL 33619-1309 Tel. No. (813) 621-0011 Fax. No. (813) 829-4923 Represented by Wiggins Law Firm

TCG South Florida c/o Rutledge Law Firm Kenneth Hoffman P.O. Box 551 Tallahassee, FL 32302-0551 Tel. No. (850) 681-6788 Fax. No. (850) 681-6515

Time Warner AxS of FL, L.P. 2301 Lucien Way Suite 300 Maitland, FL 32751 Represented by Pennington Law Firm Laura L. Gallagher Laura L. Gallagher, P.A. 101 E. College Avenue Suite 302 Tallahassee, FL 32301 Tel. No. (850) 224-2211 Fax. No. (850) 561-3611 Represents MediaOne

James P. Campbell MediaOne 7800 Belfort Parkway Suite 250 Jacksonville, FL 32256 Tel. No. (904) 619-5686 Fax. No. (904) 619-3629

Charles J. Beck
Deputy Public Counsel
Office of the Public Counsel
111 West Madison Street
Room 812
Tallahassee, FL 32399-1400

Susan S. Masterton Charles J. Rehwinkel Sprint Comm. Co. LLP P.O. Box 2214 MC: FLTLHO0107 Tallahassee, FL 32316-2214

Accelerated Connections, Inc. 7337 South Revere Parkway Englewood, CO 33414
Tel: 303-476-4200

GTE Florida Incorporated
Ms. Beverly Y. Menard
% Ms. Margo B. Hammar
106 East College Avenue, Suite 810
Tallahassee, FL 32301-7704

Tel: 813-483-2526 Fax: 813-223-4888 Hopping Law Firm Gabriel E. Nieto P.O. Box 6526 Tallahasee, FL 32314 Tel: 850-222-7500

Fax: 850-224-8551 Represents ACI Corp.

Pennington Law Firm
Peter M. Dunbar/Marc W. Dunbar
P.O. Box 10095
Tallahassee, FL 32302
Tel: 850-222-3533

Tel: 850-222-3533
Fax: 850-222-2126
Represents Time Warner

Sprint-Florida, Incorporated

Mr. F. B. (Ben) Poag P.O. Box 2214 (MC FLTLHO0107) Tallahassee, FL 32316-2214

Tel: 850-599-1027 Fax: 407-814-5700

Beth Keating Staff Counsel Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 Tel. No. (850) 413-6199 Fax. No. (850) 413-6250

Jeffrey Blumenfeld Elise Kiely 1625 Massachusetts Avenue, N.W. Suite 300 Washington, D.C. 20036

Christopher V. Goodpastor, Esq. Covad Communications Company 9600 Great Hills Trail Suite 150 W Austin, Texas 78759 Tel. No. (512) 502-1713 Fax. No. (419) 818-5568

J. Phillip Carver (34)

ORIGINAL

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF JERRY D. HENDRIX
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NOs. 981834-TP and 990321-TP
5		OCTOBER 28, 1999
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8		TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR
9		BUSINESS ADDRESS.
10		
11	A.	My name is Jerry D. Hendrix. I am employed by BellSouth as Senior Director
12		- Interconnection Services Pricing. My business address is 675 West
13		Peachtree Street, Atlanta, Georgia 30375.
14		
15	Q.	PLEASE GIVE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND
16		EXPERIENCE.
17		
18	A.	I graduated from Morehouse College in Atlanta, Georgia, in 1975, with a
19		Bachelor of Arts Degree. I began employment with Southern Bell in 1979, and
20		have held various positions in the Network Distribution Department before
21		joining the BellSouth Headquarters Regulatory organization in 1985. On
22		January 1, 1996, my responsibilities moved to Interconnection Services Pricing
23		in the Interconnection Customer Business Unit. In my position as Senior
24		Director, I oversee the negotiations of interconnection agreements between
25		BellSouth and Alternative Local Exchange Companies ("ALECs").

-1- DOCUMENT MINISTR-DATE

13254 OCT 28 %

EASO-RUL DATE OF PORTING

1		
2	Q.	HAVE YOU TESTIFIED PREVIOUSLY BEFORE A STATE
3		COMMISSION?
4		
5	A.	Yes. I have testified in proceedings before the Alabama, Florida, Georgia,
6		Kentucky, Louisiana, Mississippi, and South Carolina Public Service
7		Commissions, the North Carolina Utilities Commission, and the Tennessee
8		Regulatory Authority.
9		
0	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
1		
2	A.	My testimony will address issues from the Florida Public Service
3		Commission's ("Commission") Staff resulting from the Competitive Carriers
14		and ACI Corporation's petitions for a generic collocation proceeding and
15		establishment of procedures and consolidation of Docket Nos. 981834-TP and
6		990321-TP. Specifically, I will address Issues 1, 2, 5 - 8, 13 - 15, 17 - 19, and
7		21.
18		
19	Q.	PLEASE GIVE A BRIEF REGULATORY HISTORY OF COLLOCATION
20		WITHIN BELLSOUTH CENTRAL OFFICES.
21		
22	A.	BellSouth entered into Interconnection Agreements with requesting
23		telecommunications carriers per the Federal Communications Commission's
24		("FCC's") Expanded Interconnection Order released in 1991 and 1992. The
25		FCC's First Report and Order (CC Docket 96-98 and 95-185) rendered shortl

1	after the Telecommunications Act of 1996, further clarified BellSouth's
2	interconnection and collocation obligations, and BellSouth thus adapted its
3	Interconnection and Collocation Agreements to meet these obligations. Most
4	recently, the FCC's 706 Order (CC Docket 98-147, FCC 99-48) outlined
5	additional collocation obligations for incumbent Local Exchange Carriers
6	(ILECs). As such, BellSouth is transitioning its current Collocation
7	Agreements ("pre-FCC 99-48 agreements") to the terms and conditions of its
8	new Collocation Agreement ("FCC 99-48 inclusive agreements"), which is
9	attached as JDH-1.
10	
11	Issue 1. When should an ILEC be required to respond to a complete and correct
12	application for collocation and what information should be included in that
13	response?
14	
15	Q. WHAT PROCESS MUST AN ALEC FOLLOW TO ORDER
16	COLLOCATION?
17	
18	The ordering process for collocation is a two-phase process consisting of the
19	Application Inquiry phase and the Bona Fide Firm Order phase. To initiate the
20	Application Inquiry phase, a collocator must submit a complete and accurate
21	BSTEI-1 Application Inquiry document (which I have attached, with
22	instructions, to my testimony as JDH-2) with the appropriate Application Fee,
23	for review and planning by BellSouth equipment engineers, space planners and
24	facility planners. A proposed equipment layout, an estimate of the square
25	

1		footage or bay space required and the application fee must accompany each
2		Application Inquiry as indication of a bona fide request.
3		
4	Q.	WHAT PROCESS DOES BELLSOUTH FOLLOW TO RESPOND TO AN
5		APPLICATION FOR COLLOCATION?
6		
7	A.	BellSouth will provide a comprehensive written response to an application for
8		collocation ("Application Response") in the following manner. A CLP first
9		submits an application for collocation to the Account Team Collocation
10		Coordinator ("ATCC") within its account team. When the application is
11		received by the ATCC, in addition to verifying that it is complete and accurate,
12		the ATCC must distribute the application to six different departments within
13		BellSouth and to one BellSouth Certified Vendor. Property and Services
14		Management ("P&SM") evaluates the impact of the applicant's equipment
15		placement on existing central office building support systems (e.g., Heating,
16		Ventilation and Air Conditioning or HVAC, building space). Common
17		Systems Capacity Management ("CSCM") and Circuit Capacity Management
18		("CCM") assess the central office infrastructure related to the application, such
19		as cable rack requirements, cable lengths and routes, fiber entrance
20		arrangements and routes, and point of demarcation terminations (CDF, DSX,
21		LGX). In the event the applicant wishes to place its own entrance facility,
22		Outside Plant Engineering ("OSPE") surveys the location and determines the
23		availability of spare ducts from the manhole into the central office and whether
24		construction or rearrangements will be required. Power Capacity Management
25		("PCM") and BellSouth's certified power vendor analyze the impact of the

ı		application on existing power capacity within the central office to determine
2		whether additional power capacity will be required to support the collocator's
3		equipment. Each of these organizations estimates the cost of provisioning the
4		supporting infrastructure required by the collocation request. The
5		Interconnection Network Access Coordinator ("INAC") then reviews the
6		application responses from each of the network organizations, verifies that the
7		response is complete and accurate, and coordinates the response back to the
8		applicant through the ATCC. Although developing an Application Response is
9		complex, the process is efficient; these departments prepare their estimates in
10		parallel to respond to the customer's request as soon as possible.
11		
12	Q.	WHEN SHOULD AN ILEC BE REQUIRED TO RESPOND TO A
13		COMPLETE AND CORRECT APPLICATION FOR COLLOCATION?
14		
15	A.	Pursuant to this Commission's recent order, BellSouth will inform an ALEC
16		within fifteen (15) calendar days of receipt of an application whether its
17		application for collocation is accepted or denied as a result of space
18		availability. BellSouth will also advise the applicant within that timeframe
19		whether the application is considered bona fide, or if it is not bona fide, the
20		items necessary to cause the application to be bona fide.
21		
22		For physical collocation requests in Florida, BellSouth will provide an
23		Application Response within thirty (30) calendar days of receipt of the
24		completed application and Application Fee. BellSouth works closely with
25		customers to establish priorities for their request when there is a need to

process multiple applications within the same time frame. When multiple applications are submitted within a fifteen business day window, BellSouth's policy has been to respond to the applications as soon as possible, but no later than the following: within thirty (30) business days for 1-5 applications; thirty six (36) business days for 6-10 applications; within forty two (42) days for 11-15 applications. Response intervals for applications in the same state in excess of 15 must be negotiated.

For virtual collocation requests, BellSouth's policy has been to provide an Application Response within twenty (20) business days of receipt of the complete application and Application Fee. When multiple applications are submitted within a fifteen business day window, BellSouth has responded to the applications as soon as possible, but no later than the following: within twenty (20) business days for 1-5 applications; within twenty six (26) business days for 6-10 applications; within thirty two (32) business days for 10-15 applications. Response intervals for applications in the same state in excess of 15 must be negotiated. All negotiations will consider the total volume of all requests from telecommunications companies for collocation.

20 Q. WHAT INFORMATION SHOULD BE INCLUDED IN AN APPLICATION21 RESPONSE FOR COLLOCATION?

A.

The Application Response will include estimates of the Space Preparation

Fees, the Cable Installation Fee (if applicable), and the estimated date the space
will be available. The Application Response will also detail whether the

1	amount of space requested is available or, if the amount of space requested is
2	not available, the amount of space that is available. The response will also
3	include the configuration of the space.
4	
5	Issue 2. If the information included in the initial response is not sufficient to
6	complete a firm order, when should the ILEC provide such information or
7	should an alternative procedure be implemented?
8	
9	Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?
10	
11	A. The information provided by BellSouth in the Application Response, as
12	described above, is sufficient for the ALEC to complete a firm order. An
13	ALEC submitting an application for collocation with BellSouth works with an
14	account team, and an Account Team Collocation Coordinator ("ATCC")
15	assigned to work with it through the application and provisioning process. To
16	my knowledge, BellSouth has never omitted information that was necessary
17	for a collocation applicant to move forward with a Firm Order. Should such a
18	omission occur, the ALEC can simply contact its ATCC for resolution. Any
19	missing information could then be provided from the ATCC directly to the
20	collocation applicant as soon as it is available. Working directly with the
21	applicant is an efficient process and makes any alternative procedure
22	unnecessary.
23	
24	Issue 5. What terms and conditions should apply to converting virtual
25	collocation to physical collocation?

WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

Α.

2 Q.

The terms and conditions that should apply for converting virtual to physical collocation should be consistent with the terms and conditions of the assessment and provisioning of physical collocation. These terms and conditions are negotiated between the carriers and are found in the collocation agreement between the carriers. An application for a conversion of virtual to physical collocation should be evaluated just as an application for physical collocation would. Requests for in-place conversions should be evaluated on an individual case basis, and a set of criteria used to ensure consistency in evaluation. These conversions will be evaluated as to whether there are extenuating circumstances or technical reasons that would cause the arrangement to become a safety hazard within the Premises or otherwise conflict with the terms and conditions of the collocator's collocation agreement. Additionally, there can be no change to or conversion of the virtual arrangement that could cause the arrangement to be located in the area of the Premises reserved for BellSouth's forecasted growth. The location of the virtual collocation arrangement must also be considered: the conversion of a virtual arrangement to a physical arrangement must not impact the ILEC's ability to secure its own facilities as granted by the recent FCC Order 99-48.

22

23

24

25

Q. WHY DOES BELLSOUTH TREAT A REQUEST FOR A CONVERSION IN
THE SAME MANNER IT TREATS A REQUEST FOR PHYSICAL
COLLOCATION?

2 A.

Virtual collocation and physical collocation are two different service offerings. While a collocating carrier has direct access to its physical collocation equipment on a twenty-four hour a day, seven-day a week basis, access to virtual collocation is restricted to limited inspection visits only. Since BellSouth leases virtual collocation equipment from the carrier and assumes the maintenance and repair responsibility at the direction of the carrier, virtual collocation arrangements are most commonly placed within the BellSouth line-up. The conversion of an existing virtual collocation arrangement to a physical collocation arrangement usually necessitates either the relocation of the virtual collocation equipment to the space designated for the new physical collocation arrangement or the placement of new equipment in the physical collocation space and the decommissioning of the old virtual collocation arrangement.

This conversion process gives BellSouth the ability to manage its space in the most efficient manner possible. BellSouth must separately review its ability to provide physical collocation and assess the support components necessary for the particular arrangement (e.g., space allocation based on engineering drawings, HVAC, power feeder and distribution, grounding, cable racking). In performing these activities, BellSouth incurs costs. BellSouth recovers these costs through the assessment of a physical collocation Application Fee. Furthermore, BellSouth is obligated by the Telecommunications Act to treat requesting collocators in a non-discriminatory manner. Each request for a physical collocation arrangement is handled in the same non-discriminatory manner, whether it is a physical collocation request or a request for a

conversion from virtual to physical collocation. Therefore, a collocator who
previously had virtual collocated equipment within an office follows the same
process to obtain physical collocation as a collocator that did not previously
have virtual collocation within that office.

6 Issue 6. What are the appropriate response and implementation intervals for 7 ALEC requests for changes to existing collocation space?

9 Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A.

To clarify, BellSouth understands the question to refer to ALEC requests for changes to the ALEC's own existing collocation space. Understanding such, the response interval for a request for change to an existing space should not exceed 30 days. This interval provides the ILEC the time needed to perform the steps detailed involved in assessing and responding to the request. The implementation interval for a request for changes to an ALEC's existing collocation space should not exceed 60 calendar days, under normal conditions. Normal conditions should be described as conditions in which none of the following exist: material equipment ordering required, HVAC or power upgrades or additions, addition to floor space, racks, or bays. Under conditions other than normal, the interval for a request for changes to an ALEC's own existing collocation space should be the same interval as a new request, 90 calendar days.

1	Issue	7. What are the responsibilities of the ILEC and collocators when:
2	a)	A collocator shares space with, or subleases space to, another collocator;
3	b)	A collocator cross-connects with another collocator.
4		
5	Q.	WHAT ARE THE APPROPRIATE TERMS AND CONDITIONS WITH
6		RESPECT TO SHARED OR SUBLEASED CAGED COLLOCATION?
7		
8	A.	The terms and conditions regarding Shared (Subleased) Caged Collocation ar
9		contained in Section 3.1 of the standard agreement I attached to my testimony
10		as Exhibit JDH-1. In general, an ALEC may allow other telecommunications
11		carriers to share its caged collocation arrangement pursuant to terms and
12		conditions agreed to by the ALEC (the "Host" in the arrangement) and other
13		telecommunications carriers (the "Guests"). The following exceptions apply:
14		(1) where local building code does not allow Shared (Subleased) Caged
15		Collocation and (2) where the BellSouth central office premises is located
16		within a leased space and BellSouth is prohibited by that lease from offering
17		such an option. The terms and conditions of the agreement between the Host
18		and its Guests must be written and a copy provided to BellSouth within ten
19		(10) business days of its execution and prior to the placement of any Firm
20		Order. Further, the agreement between the Host and its Guests shall
21		incorporate by reference the rates, terms, and conditions of the Agreement
22		between BellSouth and Host ALEC ("Collocation Agreement").
23		
24		The Host ALEC will be the sole interface and responsible party to BellSouth
25		for the purpose of submitting applications for initial and additional equipment

placements of its Guests; for the assessment of rates and charges contained within the Collocation Agreement; and for the purposes of ensuring that the safety and security requirements of the Collocation Agreement are fully complied with by the Guest(s), its employees and agents. The initial Guest application will require the assessment of an Application Fee, as set forth in Exhibit A of the Collocation Agreement. Subsequently, the Guests may arrange directly with BellSouth for the provision of the interconnecting facilities between itself and BellSouth and for the provisions of the services and access to unbundled network elements.

11 Q. WHAT ARE THE APPROPRIATE ILEC AND ALEC RESPONSIBILITIES
 12 WTH RESPECT TO CROSS-CONNECTS ESTABLISHED BETWEEN
 13 TWO COLLOCATING ALECS?

Α.

Cross-connections made between collocating ALECs within the same central office are referred to as Co-Carrier Cross-Connects, the terms and conditions of which are located in Section 5.6 of the standard collocation agreement, Exhibit JDH-1. Generally, an ALEC may directly connect to other collocating ALECs within the designated BellSouth Central Office, given that this cross connection is made in addition to, and not in lieu of, obtaining interconnection with, or access to, BellSouth telecommunications services, unbundled network elements, and facilities. An ALEC may also utilize these cross connects to its other virtual or physical collocated arrangements located with the same central office. These Cross-connects may be established either through facilities owned by the ALEC or through BellSouth facilities designated by the ALEC,

1	at the ALEC's option.
2	
3	Such connections to other carriers may be made using either optical or
4	electrical facilities. ALECs may deploy such optical or electrical connections
5	directly between its own facilities and the facilities of other Interconnector(s)
6	without being routed through BellSouth equipment.
7	
8	If an ALEC requests a co-carrier cross-connect after the initial installation, it
9	must submit an application with a Subsequent Application Fee. The ALEC
10	must use a BellSouth Certified Vendor to place the co-carrier cross connect,
11	except in cases where the ALEC equipment and the equipment of the other
12	collocators are located within contiguous collocation spaces. In cases where
13	the ALEC's equipment and the equipment of the other collocator are located in
14	contiguous collocation spaces, the ALEC will have the option to deploy the co
15	carrier cross- connects between the sets of equipment.
16	
17	Issue 8. What is the appropriate provisioning interval for cageless physical
18	collocation?
19	
20	Q. IS THERE ANY DIFFERENCE IN THE PROVISIONING INTERVALS OF
21	CAGED VERSUS CAGELESS COLLOCATION?
22	
23	A. No. BellSouth's has found that its provisioning interval is not controlled by
24	the time required to construct an arrangement enclosure. When BellSouth has
25	performed the construction of an arrangement enclosure, the activities required

to design and construct the enclosure were a relatively minor portion, and 1 certainly not the controlling factor, in the provisioning interval for collocation. 2 3 The controlling factors in the overall provisioning interval actually include the 4 time required to complete the space conditioning, add to or upgrade the 5 heating, ventilation, and air conditioning system for that area, add to or 6 upgrade the power plant capacity and power distribution mechanism, and build 7 out network infrastructure components such as the number of cross-connects 8 9 requested. When the construction of an arrangement enclosure is not required or is not performed by BellSouth, all other collocation area and network 10 11 infrastructure work must still take place. 12 13 BellSouth commits to complete its construction and provisioning activities as 14 soon as possible but, at a maximum, within the intervals specified in the 15 standard agreement, attached as Exhibit JDH-1. Because space preparation and 16 network infrastructure work must be completed regardless of the type of 17 arrangement selected, in states other than Florida, BellSouth proposes 18 provisioning intervals of 90 business days under normal conditions or 130 19 business days under extraordinary conditions. These intervals are 20 appropriately applied to either enclosed (caged) or unenclosed (cageless) 21 physical collocation. In Florida, BellSouth strives to meet the guidelines 22 adopted by the Commission: 90 calendar days for physical collocation. 23 Issue 13. If space is available, should the ILEC be required to provide price 24

quotes to an ALEC prior to receiving a firm order for space in a central office

1	(CO)?	
2	A)	If an ILEC should provide price quotes to an ALEC prior to receiving a
3		firm order from that ALEC, when should the quote be provided?
4	B)	If an ILEC should provide price quotes to an ALEC prior to receiving a
5		firm order from that ALEC, should the quote provide detailed costs?
6		
7	Q.	WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?
8		
9	A.	BellSouth provides price estimates to an ALEC prior to receiving a firm order
10		for space in a central office. This price estimate is provided within thirty (30)
11		business days from the time a complete and accurate application and
12		application fee is received from the ALEC. The estimate includes a breakout
13		of the following elements: Space Preparation (e.g., space construction, cable
14		and cable support structure, power buildout), and Cable Installation (if the
15		ALEC opts to pull its own entrance facility to its collocation arrangement).
16		This price estimate is subject to true up at the time actual costs are available.
17		
18	Issue 1	4. Should an ALEC have the option to participate in the development of
19	the IL	EC's price quote, and if so, what time frames should apply?
20		
21	Q.	WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?
22		
23	A.	The ILEC's price estimate is an estimate of the cost of the work that will be
24		done by the ILEC. As such, it is not reasonable for the ALEC to participate in
25		this estimate other than by providing detailed and accurate information

regarding the collocation arrangement it is requesting. This information 1 includes racking information, bay information, power and cable requirements, 2 equipment layout and other specifics. In turn, the ILEC should have the 3 necessary procedures in place to provide a timely and accurate cost estimate to 4 the requesting ALEC. Given the procedure by which BellSouth processes 5 6 collocation applications as described earlier in my testimony, and the fact that the estimate represents the cost of work to be completed by the ILEC and its 7 8 certified vendors, it would be inefficient to have the ALEC participate in the 9 price estimate. 10 Issue 15. Should an ALEC be permitted to hire an ILEC certified contractor to 11 12 perform space preparation, racking and cabling, and power work? 13 14 Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE? 15 16 A. An ALEC should be allowed to use a certified contractor to perform work on 17 the ALEC's dedicated collocation space. Indeed, BellSouth's policy on the 18 provisioning of collocation space allows an ALEC to utilize a certified 19 contractor to install the space enclosure and other elements that are inside the 20 space leased by the ALEC that are dedicated to that ALEC and do not affect 21 BellSouth or another ALEC's equipment. 22 BellSouth's position is based on national property management industry-wide 23

practices for building owners with multi-tenant occupancies. Owners of multi-

tenant premises typically limit tenants to work only in their space and on their

24

specific systems in multi-tenant leased situations. For example, when a tenant leases space in a multi-tenant building, the tenant is allowed to build walls inside their space, add lighting and receptacles and install equipment but they are not allowed to do major mechanical or electrical work that serves or runs through other tenant space. This is based on safety and service reliability concerns for all occupants of the building. Likewise in BellSouth's collocation arrangements, the tenant/ALEC may install the welded wire cage that surrounds its equipment, frame and aisle lighting and electrical receptacles on its equipment. It may ground the wire cage and its equipment and perform the asbestos abatement inside its space, if required. These elements are dedicated to that particular tenant/ALEC. The landlord/BellSouth, however, performs all site readiness work that is outside of the tenant's/ALEC's space and that could potentially affect the landlord/ILEC's and other tenants'/ALECs' working equipment. Such work includes, but is not limited to, space preparation (e.g., system mechanical equipment changes and ductwork, ground bar additions, security access installations, handicapped upgrades required by the Americans with Disabilities Act), power work, cable and racking, and other code required common improvements. These items are common to all tenants/ALECs and the landlord/ILEC.

22 23

24

25

1

2

3

4

5

6

7

9

10

11

12

13

14

15

16

17

18

19

20

21

There are significant policy reasons why an ALEC cannot be permitted to perform all site readiness work for collocation. First, planning, and execution

of the plans, in the central office must be performed by the ILEC. If an ALEC is allowed to perform all site readiness work, either one ALEC must be allowed to perform all work common to all collocators or multiple ALECs would have to be allowed to attempt piece-meal work on common pieces of equipment in common areas. Either scenario is obviously not workable. If one ALEC is allowed to do the common work for the entire central office, how should that ALEC be selected? Even if all ALECs could agree on one ALEC to perform this work, who would be responsible for planning future growth, or be held accountable for failures in the equipment. Allowing a single entity other that the ILEC should perform such work would be illogical and inefficient.

Moreover, allowing multiple carriers to perform the common area work would not only significantly increase costs, e.g., duplication of effort in planning, design and construction; it would create chaos in the central office. Multiple engineers, whether working concomitantly or sequentially, preparing designs for multiple occupants with multiple contractors trying to work on one piece of machinery or one piece of duct is at best disconcerting and potentially dangerous. Whose work would take precedence? How would system and plant requirements be determined if no one has the overall responsibilities? In the event of equipment failure, how would responsibility be assigned? Indeed,

BellSouth contends that under such conditions collocation would come to a grinding halt.

Second, protection against network outages requires that BellSouth perform common work especially power plant construction of common elements. Such common elements include any portion of a power plant system that is shared or may be shared by multiple users. Examples include rectifiers, batteries, power boards, and common BDFBs. Reasons for this position include the requirement to not impede the entry of any ALEC into the marketplace and maintenance of reliability and safety standards. BellSouth routinely receives concurrent physical collocation inquiries from multiple ALECs for the same central office. Any one or combination of inquiries may trigger power capacity exhaust.

Finally, it is essential for safety reasons that one carrier perform work on power plant common elements. Multiple carriers working these elements greatly increase the possibility for improper wiring. Improperly wired systems can present serious electrical hazards. Because ILECs are the most experienced with their own power plant elements, they should be responsible for work on all common elements within the central office.

1	Issue	17. How should the costs of security arrangements, site preparation,
2	colloc	ation space reports, and other costs necessary to the provisioning of
3	colloc	ation space, be allocated between multiple carriers?
4		
5	Q.	PLEASE ADDRESS THE MANNER IN WHICH BELLSOUTH RECOVERS
6		EACH OF THE COSTS MENTIONED IN THIS ISSUE.
7		
8	A.	The recovery of volume insensitive costs associated with security
9		arrangements, site preparation, and collocation reports, i.e. those costs that do
10		not vary with the demand, will be made in an equitable manner. The method
11		will not penalize the first collocator, nor benefit subsequent collocators.
12		Additionally, the costs will be allocated among all parties that benefit.
13		
14		In order for BellSouth to meet the requirements of the FCC's recent Advanced
15		Services Order (FCC 99-48, released March 31, 1999) as it relates to the
16		provision of collocation, BellSouth will file with this Commission a cost study
17		for security access systems and collocation space reports. BellSouth, in an
18		effort to limit the number of elements priced on an Individual Case Basis
19		("ICB"), will also include several new space preparation rate elements.
20		Brief descriptions of the rate elements associated with Security Access are as
21		follows:
22		
23		(1). The Security System rate element is a monthly charge that will be
24		assessed per central office. It recovers the costs associated with the card reader
25		system installed to monitor and secure the central office. Since the card reader

1 benefits both ALECs and BellSouth, this volume insensitive cost will be 2 recovered over the anticipated number of collocators (BellSouth being included 3 as part of that number) per central office. 4 (2). The New Access Card Activation rate element contains a nonrecurring 5 charge, which reflects the costs associated with providing and programming 6 the card, and a monthly recurring charge associated with system software cost. 7 8 The programming is done a per card basis and thus, is volume sensitive and no 9 allocation is required. The system software has a certain card limitation. Thus, 10 the costs are developed based utilizing that capacity constraint. This rate element applies per new card issued. 11 12 (3). The Administrative Change, Existing Card, per Card rate element is a 13 nonrecurring charge assessed per card, per request, to reflect the administrative 14 cost of changing information associated with an existing card. The work 15 activities are conducted on a per card basis. This rate element could apply 16 under several circumstances, including but not limited to, personnel change for 17 a card or adding access to additional central offices to a card. 18 19 (4). The Replace Lost or Stolen Card rate element is a nonrecurring charge, 20 assessed to recover the cost of replacing a lost or stolen card and deactivating 21 22 the existing card. The work activities are conducted on a per card basis. 23 24 Currently, BellSouth recovers space preparation costs on an individual case

basis ("ICB"). BellSouth pro-rates the cost for space preparation on a per

1 square foot basis and then charges the ALEC based on the number of square 2 feet utilized by the ALEC. Since the cost of preparing the collocation space varies by central office, the pro-rated rate per square foot varies. However, as I 3 mentioned previously, BellSouth will file costs for some space preparation 4 elements to give ALECs a clearer picture of their charges. At this time, 5 BellSouth has not completed the final methods and procedures associated with 6 7 the new site preparation and collocation space report rate elements. Thus, a 8 definitive discussion of the rate elements and the cost methodology would be 9 premature. However, BellSouth will recover volume insensitive costs in a manner that is equitable to all parties involved. 10 11 Issue 18. If insufficient space is available to satisfy the collocation request, should 12 the ILEC be required to advise the ALEC as to what space is available? 14 15 Q. DOES BELLSOUTH PROVIDE INFORMATION REGARDING WHAT SPACE IS AVAILABLE WHERE THERE IS INSUFFICIENT SPACE 16 AVAILABLE TO SATISFY A COLLOCATION REQUEST? 17

18

19 A.

20

21

22

23

24

25

Yes. In the event an ALEC applies for physical collocation in a BellSouth central office where space for such collocation is exhausted or limited,

BellSouth will notify the applicant of that situation and inform them of what space is available. The ALEC can then choose to either accept the space that is available; accept the space available and place the remaining amount of space it requested on the waiting list BellSouth maintains for that central office; choose not to accept the space and place its entire request on the waiting list; or

simply choose not to accept the space offered.

2

1

- 3 Issue 19. If an ILEC has been granted a waiver from the physical collocation
- 4 requirements for a particular CO, and the ILEC later makes modifications that
- 5 create space that would be appropriate for collocation, when should the ILEC be
- 6 required to inform the Commission and any requesting ALECs of the availability
- 7 of space in that office?

8

9 Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

10

11 A. When BellSouth has received an application for physical collocation in a 12 central office that does not have space available for such collocation, BellSouth will maintain a waiting list of all ALECs that have submitted an application 13 14 requesting physical collocation within that central office. When space 15 becomes available for physical collocation in a previously exhausted central 16 office, BellSouth will notify the ALECs that can be accommodated in the 17 newly available, space based on the square footage each customer has 18 requested. BellSouth will notify these ALECs a maximum of 60 days prior to 19 the space availability date. BellSouth will inform the Commission on the 20 space availability date that space for physical collocation has been made 21 available. On the space availability date, BellSouth will also file with the

23

22

24 Issue 21. Applying the FCC's "first-come, first-served" rule, if space becomes

Commission to remove the waiver from that central office.

25 available in a central office because a waiver is denied or a modification is made,

1	wno si	nould be given priority?
2	Q.	WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?
4		
5	A.	For central offices in which space for physical collocation has been exhausted,
6		BellSouth maintains a waiting list that contains the ALECs and the amount of
7		space each requested, in the order of BellSouth's receipt of each collocation
8		application. When space for physical collocation becomes available in a
9		central office which was previously exhausted, space is offered in a "first-
10		come, first-right of refusal" manner. ALECs on the waiting list that can be
11		accommodated in the newly available space based on square footage
12		previously requested are notified of the availability of space and are requested
13		to notify BellSouth whether the ALEC still wants the space it had initially
14		requested. The space is then distributed in a first-come, first-served manner,
15		based on the order in which each appears on the waiting list.
16		
17	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
18		
19	A.	Yes.
20		
21		
22		
23		
24		
25		

BellSouth Reference No.

Inquiry Receipt Date Inquiry Issue No.

BellSouth Telecommunications, Inc. FPSC Docket Nos. 981834-TP & 990321-TP Exhibit JDH-2

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT



BSTEI-1P-A Page 1 of 13 9/16/99

Important! Instructions for completion of this physical collocation application are provided in a separate document, the BSTEI-1P-A Ins. Please comply with the criteria contained in the instructions for completion of each item in this application document. For inquiry revisions, please post an asterisk * or the letter "C" in the margin by the item number and by the item that is being changed.

1.	CUSTOMER INFORM	AATION								
1.				A 0114						
	Company Name				ACNA					
	Company Address _		City/State/Zip							
	COLLOCATION PRO	JECT C	OORDII	NATOR						
	Name	., .		E-mail/Internet Address						
	Mailing Address			City/St	ate/Zip					
	Telephone #		Pa	ager #	Facsimile #					
2.	REQUESTED LOCAT	TION								
	Wire Center Name			CLLI C	ode	*****				
	Street Address		City/State/Zip							
3.	TYPE OF INTERCONNECTION ACTIVITY									
4.	Initial arrangement installation Existing arrangement augmentation, equipment change, wiring, entrance, riser changes Existing arrangement augmentation, partial equipment disconnect and removal Existing arrangement, complete equipment disconnect and removal Conversion of existing virtual arrangement to a physical arrangement. Direct connection between collocation arrangements within this location 4. SPACE REQUIREMENTS – Chose option A or B. C is not available as an option except under ce circumstances. Please read the instructions carefully to determine when C may be selected. See page for description of each type of space. Important! BellSouth will evaluate, reserve space and respond to only one option per application.									
4,	A. Equipment Cage	No	Yes	New / Add'l Sq Ft	+ Existing Sq Ft	= Total Sq Ft				
4	3. Cageless – Conventional	No	Yes	Co	omplete Section 6.					
40	C. Cageless - Non-conventional	No	Yes	New /Add'l Sq Ft	+ Existing Sq Ft	= Total Sq Ft				

BellSouth Reference No.

Inquiry Receipt Date Inquiry Issue No.

PHYSICAL EXPANDED INTERCONNECTION **APPLICATION DOCUMENT**

(2) BELLSOUTH

BSTEI-1P-A Page 2 of 13 9/16/99

Equipment Cage 4A.

Provide via attachment a proposed equipment floor plan layout, which will aid BellSouth's

inclusive contracts, the collocator is responsible for cage construction and securing all applicable construction permits. BellSouth will provide cage specifications. For pre FCC 99-48 inclusive contracts, BellSouth may construct the cage.
Cageless - Conventional - Conventional lineup rack space requirements. Complete Section 5.
When this option is selected, BellSouth assigns floor space in conventional equipment rack lineups. If available, contiguous space will be assigned for racks of equal depth. When racks of various depths are collocated, BellSouth may assign space in multiple lineups to accommodate rack depth. Any technical requirements for adjacent placement of racks must be described below or in an attachment. Provide rack numbers and explanation of technical requirements.
Cageless - Non-conventional - Non-conventional floor space requirements
4C is not available as an option except under certain circumstances. Please read the BSTEI-1P-A Instructions carefully to determine when 4C may be selected. The instructions provide a detailed description for cageless – non-conventional lineup space. If the equipment to be collocated cannot be placed in conventional rack lineups as described in 4B above, and cageless space is desired, this option may be requested. It is the responsibility of the collocator to determine and explain, via an attachment, the total floor space requirements (square feet) for the equipment arrangement. Floor space requirements should include equipment and aisles. The collocator is responsible for all cable rack, frame and aisle lighting and other support structure within the perimeter of the cageless floor space assigned for such an arrangement.
Provide via attachment a proposed equipment floor plan layout, which will aid BellSouth's understanding of the space requirements for the equipment. An explanation must be provided which describes the necessity for requiring a cageless non-conventional arrangement.

BellSouth	Reference	No.

Inquiry Receipt Date Inquiry Issue No.

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

@ BELLSOUTH

BSTEI-1P-A Page 3 of 12 9/16/99

5. CAGELESS - CONVENTIONAL LINEUP REQUIREMENTS

The following sub-sections must be completed to summarize the requirements for a cageless-conventional lineup collocation arrangement:

- 5A. Complete this table when requesting space for new equipment or when reserving space for future equipment.
- 5B. Complete this table to reflect changes in the use of floor space previously assigned to a collocator. Complete 5B when installing equipment in space previously reserved, when replacing existing equipment, or when removing equipment from space that is to be reserved by the collocator for future use.
- 5C. Complete this table when space is being released either by removal of existing equipment, or by releasing space previously reserved for future use.

Standard Rack height for cageless arrangements is 7'0". BellSouth may assign space in equipment areas configured for 9'0" or 11'6" relay racks. If space is assigned in such areas the collocator must install matching height racks or rack extenders for use with 7'0" racks. To avoid requirements for ladder access, the maximum working equipment height in these areas is 7'0".

5A. New cageless (conventional lineup) space requirements: Complete this table when requesting space for new equipment or when reserving space for future equipment. Please group racks by depth. Duplicate this page as required to reflect all new space requirements.

1 2 Complete Col. 1 or 2		3	4	5	6	7		
		Rack	Rack	Spacer	Rack + Spacer Width	Lineup Space		
Rack # (from Sec. 6)	Future Space	Depth	Width	Width	(Col. 4 + Col. 5)	Subtotal Col. 6 for all racks of equal depth		
Sec. 6)	(√)	Inches	Inches	Inches	Inches	1 11		
		<u> </u>						
		<u> </u>						
	·							
			<u> </u>	<u> </u>				

BellS	outh	Refe	rence	No.

Inquiry Receipt Date Inquiry Issue No.

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT



BSTEI-1P-A Page 4 of 12 9/16/99

- CAGELESS REQUIREMENTS continued from page 3.
- 5B. Changes in use of existing space: Complete this table to reflect changes in the use of space previously assigned. Please group racks by depth. Use this table to reflect the installation of equipment in space previously reserved, replacement of existing equipment, or removal of equipment from space that is to be reserved for future use. Duplicate this table as required.

1	2	3	4	5	6A	6A 6B 6		7
Rack #	Rack Depth	Rack Width	<u> </u>		Check (√) Column 6A,	6B, or 6C	Relay Rack Location
Sec. 6)	Inches	Inches	Inches	Col. 3 + Col. 4	Add rack to reserved space	Replace existing equipment	Remove rack & retain space	
		<u> </u>						
					<u>-</u>			<u> </u>

5C. **Space to be vacated**: Use this table to reflect all cageless space to be released either by removal of existing equipment, or by releasing space previously reserved for future use. Duplicate this table as required.

1	2	3	4			
	ise of Space () Col. 1 or 2	Rack # (from Sec. 6 if	Relay Rack Location			
Equipped with Rack Reserved for future use (√)		currently equipped with rack)	Provide relay rack location of space to t			

Section 5 Notes:

- A maximum of two year's growth space may be reserved.
- No part of any apparatus attached to the rack shall extend horizontally beyond the front or rear edges of the front and rear base or guardrail of the rack. Guardrail extenders should be provided if required. Rack depth is measured between the leading edges of the front and rear base or guardrails. In table 5A, please subtotal rack and spacer lineup requirements for groups of equal depth racks.
- Specify actual width of rack, not the mounting plate width.

Reference	

Inquiry Receipt Date Inquiry Issue No.

@ BELLSOUTH

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT BSTEI-1P-A

BSTEI-1P-A Page 5 of 13 9/16/99

6. EQUIPMENT TO BE INSTALLED OR REMOVED

Complete columns 1 though 11 for all equipment to be installed or removed. Duplicate this table as required.

1	2	3	4	5	6	7	8		Ç		1	0	11
Rack No. (A)	Vendor/Manufacturer & Contact Number	Model Heat No. Description Existing Add + Total Dissipation		pation	-48V DC Power Reqmts (Amps)				NEBS				
		ì		Quantity	Remove -	Quantity	(Wa	itts)	List 1 (N	lominai)	List 2 (Worse Case)		Yes/No (B)
							Unit	Total	Unit	Total	Unit	Total	(3)
			,	!							-		
}		-		<u> </u>	<u> </u>		ļ <u>—</u> —	: :		<u> </u>	 		
	· · · · · · · · · · · · · · · · · · ·						ļ			<u> </u>	ļ		ļ
										<u> </u>			
													
		<u> </u>	· . _				 		 	 			
		1	· · · · · · · · · · · · · · · · · · ·			 		-		 	-		
ļ	· · · · · · · · · · · · · · · · · · ·						ļ.—_		-		 		<u> </u>
												_	<u> </u>
Page Sul	b-total												
Total Inst	talled Eqpt (all pages)												

- A: Show rack number on the attached floor plan layout. To reserve rack space list rack number(s) and write "Reserved" in the Description column.
- B: Does this equipment meet the following Bell Communications Research Network Equipment-Building Systems (NEBS) requirements?
 - Criteria Level 1 requirements as outlined in the Bellcore (Telcordia) Special Report SR-3580, Issue 1.
 Equipment design spatial requirements per GR-63-CORE, Section 2.
 - Thermal heat dissipation per GR-063-CORE, Section 4, Criteria 77-79.
 - Acoustic noise per GR-063-CORE, Section 4, Criterion 128.
 - Applicable National Electric Code requirements.

Enter a YES or NO. If NO, attach a separate document listing specific explanations for each equipment type and reasons for NEBS and/or National Electric Code noncompliance.

BellSouth Reference No.	
Inquiry Receipt Date Inquiry Issue No.	

@ BELLSOUTH

PHYSICAL EXPANDED INTERCONNECTION **APPLICATION DOCUMENT**

BSTEI-1P-A Page 6 of 13

7.	-48V POWE	R AND GROUND	DING	9/16/99
	Indicate whi	ch of the following	apply:	
		Power requirer Additional pow Arrangement	er requirement	l installation. ts for an existing arrangement augmentation. no additional power required.
btor	pletion of the rided by BST and respo	. Refer to BSTEI	uired if -48V t -1P-A Instructi	elecommunications equipment power is to be ons for a complete description of available power
7A.	grounding as	s described in Be	llcore (Telcordi	ted ground plane and associated power supply ia) Technical Reference TR-NWT-000295 (a.k.a. TR-tion Standards for Central Office Equipment TR-
		No	If yes, co	omplete section 7B.
		nis equipment be ot part of an isola		grounded) as part of the building integrated ground ne)?
	7A2. Yes_	No	If yes, co	mplete section 7C.
7B.	-48V DC Po	wer for Equipme	ent Installed a	s Part of an <u>Isolated</u> Ground Plane
	redundant "A		r pairs. Order	d ground –48V DC breakers. BST will always provide in multiples of two, i.e., for each "A" and "B" breaker ted at 225 amps.
	Existing	Additional	Total	Terminating BDFB/PDF Rack No. per collocator provided equipment layout
Ĺ				
٥.	-48V DC Po	wer for Equipme	ent installed a	s Part of the Building <u>Integrated</u> Ground Plane
	Collocator ma	av provide or reci	lest RST to on	ovide Battery Distribution Fuse Bay, Power Distribution

70

Collocator may provide or request BST to provide Battery Distribution Fuse Bay, Power Distribution Frame, or similar power distribution equipment for distributing power to integrated ground equipment.

ſ	BellSouth Reference No.
1	
1	Inquiry Receipt Date
	Inquiry Issue No

(4) BELLSOUTH

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

BSTEI-1P-A Page 7 of 13 9/16/99

7. -48V POWER AND GROUNDING continued from page 6.

7C1. Collocator Provided BDFB/PDF

If collocator will provide BDFB/PDF, specify the quantity of the BST provided integrated ground – 48V DC breakers. BST will always provide redundant "A" and "B" breaker pairs. Order in multiples of two, i.e., for each "A" and "B" breaker pair order two breakers. All breakers are rated at 225 amps.

Existing	Additional	Total	Terminating BDFB/PDF Rack No. per collocator provided equipment layout		

7C2. BellSouth Provided BDFB or Miscellaneous Power Board Fuse Positions

Complete the following table for all fuse positions to be provided by BST.

Note: Fuses must be engineered, reserved and provided by the Collocator's certified vendor.

	BST Provi	Protection Device				
Existing		Additional		Total		Rating (amperes)
A Load	B Load	A Load	B Load	A Load	B Load	
						(Max 60 amps)

7D. Framework Ground

BST will provide an interconnection point (ground bar or ground cable extension) for connecting the Collocator provided equipment framework ground to the building principal ground. Refer to BSTEI-1P-A for details. The Collocator will be responsible for extending a single framework ground connection from the Caged or Non-conventional cageless arrangement to the BellSouth provided bar. In cageless arrangements the Collocator will be responsible for connecting framework ground conductors to the lineup grounding conductor. Specific grounding arrangements should be clarified during the BellSouth-Collocator coordination meetings.

BellSouth Reference No.	
Inquiry Receipt Date	



PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

BSTEI-1P-A Page 8 of 13

8.

 sue No.	API	PLICATION DOCUME	ENT	Page 8 of 1 9/16/99				
DIRECT CONNECTION - CO-CARRIER CROSS CONNECTS								
If covered in the collocation agreement, collocation arrangements may be directly interwithout using BST cross connect facilities.								
Do you request a direct location? Yes	t connection b		ous collocation arrange	ement(s) in this				
 Identity of owner Equipment rack Type of service Copper or fiber 	If yes, for each direct connection provide the following information: Identity of ownership of the equipment at each end of the connection Equipment rack locations at each end of the connection Type of service (DS0, DS1, DS3, Fiber) Copper or fiber cable and number of conductors If fiber, specify fiber building cable or patchcord.							
	Direct Conne	ection – Co-Carrier (Cross Connects					
Ownership	Collocato	r A – Name, ACNA	Collocator B – Name, ACNA					
Equipment Rack Location								
Type of Service	DS0	D\$1	DS3	Fiber				
Check all that apply								
Type of Cable	Building o Patchcord		Number of Pairs/Fibers	Weight				
Fiber								
Copper								
CABLE FACILITIES Indicate the quantity for	each type of	cable to be installed.						
Type of Cable		Number of Cables	Note					
Type of Cable Fiber Entrance		Number of Cables	Complete 10A					
Type of Cable Fiber Entrance Fiber Riser		Number of Cables	Complete 10A Complete 10B					
Type of Cable Fiber Entrance		Number of Cables	Complete 10A					

Private/Proprietary: Not for use or disclosure outside BellSouth except by written agreement. Copyright 1999 BELLSOUTH. All rights reserved.

Other (Check "Other" if your microwave antenna will not be located on BellSouth

Crown Antenna Mount Program

Microwave Collocation

property.)

BellSouth Reference No.
Inquiry Receipt Date
Inquiry Issue No.

BELLSOUTH

DANDED INTERCONNECTION

RSTEL-1P-A

nquiry Receipt Date nquiry Issue No.		APPLICATI	Page 9 of 13 9/16/99			
10. CABLE INF	ORMATION - F	BER				
	rovided & owned y points request		facilities	Yes Yes	No Number _	No
	Add fiber entr	ance cable(s) for	or initial instal o existing arra uired for this a	lation. ingement.		
Cable Description	Outside Diameter (in.)	Number of Fibers	Weight (lb/kft)		ath Type c/Dielectric	Cable Tensile Load (lb/f)
Note 1: Outside 000020. Note 2: If multip Multiple entry ava 10B. Complete th	le entry is reque ailability will be p e table below for Add fiber rise	sted, please sho rovided in respo	ow each cable onse to an ap r cable to be i itial installatio	e on the fil plication. nstalled or	ber entrance ca	

Cable Description	Outside Diameter (in.)	Number of Fibers	Weight (lb/kft)	Sheath Type	Cable Tensile Load (lb/f)
				Dielectric	
				Dielectric	
				Dielectric	

Note 1: Dielectric, fire retardant riser rated cable should be provided. Riser cable must meet the requirements in Bellcore (Telcordia) GR-409-CORE.

Fiber riser cable not required for this application.

Fiber riser cable to be removed.

- Note 2: If multiple entry is requested, please show each cable on the riser cable table. Multiple entry availability will be provided in response to an application.
- Note 3: Abandoned/disconnected fiber riser cable must be removed by the collocator's certified vendor at the time the associated equipment is removed.
- Note 4: If this application is for a subsequent collocation arrangement in a central office, additional riser cables may be required if the placement of the equipment for the subsequent order is not contiguous with the existing arrangements. BellSouth will notify the collocator on the inquiry response if additional riser cables are required.

Ве	ellSouth Reference No.	
in:	quiry Receipt Date	



STEI-1P-A age 10 of 13 /16/99

iquiry Re iquiry Iss	eceipt Date sue No.		XPANDED IN	TERCONNECTION	ON B F 9		
10.	CABLE INFORMATION - MICROWAVE RADIO						
	Collocator provided and owned microwave entrance facilities Yes No						
10C.	Complete the table !	below for microwa	ave coax cable	to be installed o	r removed.		
v	Add coax cable(s) for initial installation. Add coax cable(s) to existing arrangement. Coax cable not required for this application. Coax cable to be removed.						
	Cable Description	Outside Diameter (in.)	Weight (lb/kft)	Sheath Type	Cable Tensile Load (lb/f)		
				Metallic			
10 D .	Complete the table below for microwave waveguide cable to be installed or removed. Add waveguide cable(s) for initial installation. Add waveguide cable(s) to existing arrangement. Waveguide cable not required for this application. Waveguide cable to be removed.						
	Waveguide Description	Dimensions	Shape	Weight (lb/kft)	Waveguide Tensile Load		

BellSouth Reference No.	
Inquiry Receipt Date	

Inquiry Issue No.

@ BELLSOUTH

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

BSTEI-1P-A Page 11 of 13 9/16/99

11.	SHARED SPACE – Caged physical collocation contracts only.	only. This is available via FCC 99-48 inclusive
	Provide the name and ACNA for any telecommun	ications provider to be sharing the enclosure.
	Guest Company Name	ACNA
	Guest Company Name	ACNA
12.	EQUIPMENT WIRING REQUIREMENTS	
	Initial installation for Collocator (Host) Equipment addition for Collocator (Host) Equipment addition for Collocator Guest Wiring Change for Collocator (Host) Wiring Change for Collocator Guest Complete the table below for additions and remove	Guest ACNA
12A	Additions: Enter the number of DS0 2 wire, DS1	, DS3, and/or fiber lowspeed equipment ports that

12B. **Removals**: Indicate the type and quantity of the circuits to be disconnected. For all removals, attach a cable and pair and/or T1TIE/T3TIE/fiber inventory identifying the specific connections to be disconnected.

will be wired to a POT bay or directly to the BST DSX, LGX or frame.

*	* POT Connections			DSX, LGX and/or Frame Connection		
A. Additions	Collocator Guest		A. Additions	Collocator	Guest	
	Quantity of:	Quantity of:		Quantity of:	Quantity of:	
DS0 2 wire			DS0 2 wire			
DS1			DS1			
DS3		V-1-10	DS3			
Fiber			Fiber			
B. Removals	Collocator	Guest	B. Removals	Collocator	Guest	
	Quantity of:	Quantity of:		Quantity of:	Quantity of:	
DS0 2 wire		·	DS0 2 wire			
DS1			DS1	-		
DS3			DS3			
Fiber			Fiber			

^{*} POT refers to the BellSouth or Collocator provided Point of Termination, which were provisioned prior to 6/1/99. Future POT bay installations by BellSouth will be governed by the Collocation Agreement. When POT bays are not provided BellSouth will allow direct cabling of collocated equipment to the BellSouth DSX, LGX and DF.

BellSouth Reference No.

Inquiry Receipt Date Inquiry Issue No.

PHYSICAL EXPANDED INTERCONNECTION **APPLICATION DOCUMENT**

Pager

@ BELLSOUTH

BSTEI-1P-A Page 12 of 13 9/16/99

Email/Internet

CONTACT INFORMATION 13.

		Name	Telephone Number	Facsimile Number	Pager Number	Email/Internet Address
Equipr Wiring						
Techn						
Local Coord	inator					
Buildir Acces	ng					
14.		G INFORMATION				
		illing Account Num	nber - Provided by	BellSouth)		
<u> </u>						
	Billing I	Vame (Indicate the le	gal business name as it s	should appear on the mor	thly billing statement.)	
	Bill Dep	partment/Title			 _	
	Bill Add	Iress		City/Sta	ite/Zip	
	Billing (Contact Name				
Address						
	Telepho	one Number		Facsimile Nu	ımber	
	List Billing Account Number(s) for other BellSouth communication service(s)					
15.	15. ATTACHMENTS List attachments and the number of pages for each attachment. For (4A) equipment cage, a floor plan indicating rack layout within the cage should be provided. For (4B cageless-conventional and (4C) cageless non-conventional arrangements, collocator must prov preferred rack equipment drawings for the floor plan layout.					
	Attachment 1:					
	Attachr	nent 2:				
	Attachn	nent 3:				
	Attachn	nent 4:				
	Remark	(s:	·			

BellSouth Reference No.

Inquiry Receipt Date Inquiry Issue No.

@ **BELL**SOUTH

PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

BSTEI-1P-A Page 13 of 13 9/16/99

16. TECHNICAL COMPLIANCE

Applicant certifies that equipment is in compliance with the following industry standards:

- Criteria Level 1 requirements as outlined in the Bellcore (Telcordía) Special Report SR-3580 Issue 1.
- Equipment design spatial requirements per GR-63-CORE, Section 2.
- Thermal heat dissipation per GR-63-CORE, Section 4, Criteria 77 79.
- Acoustic noise per GR-63-CORE, Section 4, Criterion 128.
- Applicable National Electric Code requirements.

I hereby certify that the equipment listed on page 5 in this document meet the industry standards for safety and compatibility. For equipment which is noncompliant, attached is documentation describing the equipment, including exceptions or deviations from the above standards.

S	signature	Date
P	rint Name Title	
C	company	

Use of Space in Central Offices

From time to time BellSouth may require access to space occupied by collocator. BellSouth retains the right to access such space for the purpose of making equipment and building modifications, e.g., running, altering or removing racking; ducts; electrical wiring; HVAC; and cables. BellSouth will give reasonable notice to collocator when access to collocation space is required and collocator may elect to be present whenever BellSouth performs work in the collocation space. It is agreed that collocator will not bear any of the expense associated with this work.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 1 of 18 9/16/99

Please comply with the criteria contained in the instructions for completion of each item in the application document.

For inquiry revisions, please post an asterisk * or the letter "C" in the margin by the item number and by item that is being changed.

The Application Document (BSTEI-1P-A), appropriate fee(s), and required technical documentation should be mailed to:

BellSouth Telecommunications, Inc. Collocation Coordinator

(Contact your BellSouth Account Executive for the name and address for your company's Collocation Coordinator.)

Make checks payable to:

BellSouth

BellSouth Reference Number - This reference number is provided by BellSouth to the collocator on the inquiry response, and must be included in future references to this Physical Expanded Interconnection arrangement project.

Inquiry Receipt Date - BellSouth enters the date when the application fee, and a bona fide BSTEI-1P-A are received.

Inquiry Issue Number - The initial inquiry will be numbered issue 1. The first revision will be numbered issue 2. Subsequent revisions will be sequentially numbered. All changes to Issue 1 of a collocation inquiry must be documented on a revised BSTEI-1P-A and re-submitted to BellSouth. The inquiry response interval will apply to each revision submitted. (See Section 6.2 of the Physical Collocation contract for interval information.) All changes submitted must be clearly marked on the application document either by indicating an asterisk $^{\bullet}$ or the letter "C" in the margin by the item number and by item that is being changed.

1. CUSTOMER INFORMATION

Enter the legal business name and address of your company. Enter the Bellcore-assigned Access Customer Name Abbreviation (ACNA). (Contact your BellSouth Account Team for assistance.) COLLOCATION PROJECT COORDINATOR: Enter the name, e-mail/Internet address, mailing address, telephone number, pager number and facsimile number of the person who will be the primary coordinator for this collocation arrangement project.

2. REQUESTED LOCATION

Enter the requested location by wire center name, the first eight characters of the Common Language Location Identification Code (CLLI), street address, city, state, and zip code. (Refer to NECA Tariff FCC No. 4.)



BSTEI-1P-A

ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 2 of 18 9/16/99

3. TYPE OF INTERCONNECTION ACTIVITY

Indicate the type of interconnection activity being ordered on this application.

Initial arrangement installation: This is the initial arrangement installation at this location. A fee must be submitted.

Existing arrangement augmentation, equipment change, wiring, entrance, riser changes: Your company has an existing EIS arrangement in this location and desires to add, replace or remove equipment, and/or modify wiring and or add, replace or remove entrance or riser cable. A fee must be submitted.

Existing arrangement augmentation, partial equipment disconnect and removal: Your company has an existing EtS arrangement in this location and desires to disconnect and remove some equipment and/or cable (owned by your company.)

Existing arrangement, complete equipment disconnect and removal: Your company has an existing EIS arrangement in this location and desires to disconnect and remove all equipment and cable (owned by your company.)

Conversion of existing virtual arrangement to a physical arrangement: Your company has an existing virtual collocation arrangement in this location that you want to convert to a physical collocation arrangement. Note: Relocation of virtually collocated equipment will be evaluated on a case by case basis. A fee must be submitted.

Direct connection of collocation arrangements within this location: This applies to the interconnection of two collocation arrangements occupying non-contiguous space. If covered in the collocation agreement, collocation arrangements may be directly interconnected without using BST cross connect facilities. Complete item 8. A fee must be submitted.

4. SPACE REQUIREMENTS

Chose option A or B. C is not available as an option except under certain circumstances. Please read the instructions carefully to determine when C may be selected. See below for a description of each type of space.

Important! BellSouth will evaluate, reserve space and respond to only one option per application.

4A. Equipment Cage

Complete the table. Indicate "Yes" if you have an existing cage or enclosure, or if you request construction of a new cage. Provide the "New Square Feet" if you plan construction of a new cage. Provide the additional square footage if you would like to add to an existing cage or establish another caged arrangement at this location. Provide the existing square footage if you have an existing cage. Cage expansions will be limited to locations where space adjacent to the existing cage is available. Add the new/additional square feet plus the existing square feet to determine the "Total Square feet" for the contiguous cage space requested.

4A. **Equipment Cage** continued from page 2.

Per FCC 99-48 inclusive contracts, the collocator is responsible for cage construction and securing all applicable permits for construction. In response to an Inquiry, BellSouth will provide cage specifications and a list of BellSouth certified contractors for cage construction. For pre FCC 99-48 inclusive contracts, BellSouth may construct the cage. Provide via attachment a proposed equipment floor plan



BSTEI-1P-A

Ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 3 of 18 9/16/99

layout, which will aid BellSouth's understanding of the space requirements for the equipment to be placed in the cage. The collocator is responsible for all cable support structure and equipment lighting within the cage.

4B. Cageless - Conventional - Conventional lineup rack space requirements.

Complete the table. Indicate "Yes" if you have an existing cageless arrangement, or if you are requesting a new cageless arrangement. Complete Section 5.

When this option is selected BellSouth will assign floor space in conventional equipment rack lineups. If available, contiguous space will be assigned for racks of equal depth. When racks of various depths are collocated BellSouth may assign space in multiple lineups to accommodate rack depth. BellSouth will precondition such space with bar or ladder type lineup cable rack, via or feeder cable rack as required, equipment lighting and overhead framework ground conductors. This space will be configured to support equipment racks that can be grounded through the building integrated ground plane.

The collocator is responsible for the installation of the collocated equipment and all associated transmission and power cabling.

Technical requirements for adjacent placement of racks must be described. Provide rack numbers and explanation of technical requirements for adjacent placement.

4C. Cageless - Non-conventional – Non-conventional floor space requirements.

4C is not available as an option except under certain circumstances. If the equipment to be collocated **cannot** be placed in Cageless - Conventional rack lineups as described in 4B above, and cageless space is desired, this option may be requested. Requirements that may prevent the placement of equipment in Cageless- Conventional lineups may include special cable racking or isolated grounding, as required with many switching systems.

Complete the table. Indicate "Yes" if you have an existing non-conventional arrangement, or if you are requesting a new non-conventional arrangement. Provide the "New Square Feet" if this is the initial request for non-conventional space in this central office. Provide the additional square footage if you would like to add to an existing non-conventional arrangement or establish another non-conventional arrangement at this location. Provide the existing square feet if you have an existing non-conventional arrangement in this central office. Expansion of existing non-conventional space will be limited to locations where space adjacent to the existing arrangement is available. Add the new/additional square feet plus the existing

square feet to determine the "Total Square feet" for the non-conventional space requested. Provide an explanation of special support structure requirements.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 4 of 18 9/16/99

4C. Cageless - Non-conventional - continued from page 3.

It is the responsibility of the Collocator to determine and explain the total floor space requirements (square feet) for the equipment arrangement (including equipment and aisles). The Collocator is responsible for all cable rack, frame and aisle lighting and other support structure within the perimeter of the floor space assigned for such arrangements. Provide via attachment a proposed equipment floor plan layout, which will aid BellSouth's understanding of the space requirements for the equipment. An explanation must be included which describes the necessity for this option.

5. CAGELESS – CONVENTIONAL LINEUP REQUIREMENTS

Standard Rack height for cageless arrangements is 7'0". BellSouth may assign space in equipment areas configured for 9'0" or 11'6" relay racks. If space is assigned in such areas the collocator must install matching height racks or rack extenders for use with 7'0" racks. To avoid requirements for ladder access, the maximum working equipment height in these areas is 7'0".

The following sub-sections must be completed to summarize the requirements for a cageless – conventional lineup collocation arrangement.

5A. Complete this section when requesting space for new equipment or when reserving space for future equipment. Space requested in this table will be used to establish billable floor space assigned for collocation use.

1	2	3	4	5	6	7
Complet or		Rack Depth	Rack Width	Spacer Width	Rack + Spacer Width (Col. 4 + Col. 5)	Lineup Space Subtotal Col. 6 for
Rack # (from Sec. 6)	Future Space (√)	Inches	Inches	Inches	Inches	all racks of equal depth ft./ in

Rack # – Provide the Rack Number from the Section 6 Equipment Table for all racks being installed or removed. Future Space - Check this column when reserving rack space for future growth. Space for a maximum of two year's growth may be reserved

Rack Depth - No part of any apparatus attached to the rack shall extend horizontally beyond the front or rear edges of the front and rear base or guardrail of the rack. Guardrail extenders should be provided if required. Rack depth is measured between the leading edges of the front and rear guardrails. Please subtotal rack and spacer lineup requirements for groups of equal depth racks.

Rack Width - Specify actual width of rack, not the mounting plate width.

Spacer Width - Specify width of any spacers to be installed.

Rack + Spacer width - Sum requirements for each rack.

Lineup Space - Subtotal rack and spacer widths for all racks of equal depth.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 5 of 18 9/16/99

- 5. CAGELESS CONVENTIONAL LINEUP REQUIREMENTS continued from page 4.
- 5B. Complete this table to reflect changes in the use of floor space previously assigned to a collocator.

 Complete 5B when installing equipment in space previously reserved, when replacing existing equipment, or when removing equipment from space that is to be reserved by the collocator for future use. Equipment additions reflected in this section will not affect billable floor space.

1	2	3	4	5	6A	6B	6C	7
Rack #	Rack Depth	Rack Width	Space r	Rack + Spacer	Check (√) Column 6A,	6B, or 6C	Relay Rack Location
Sec. 6)	Inches	Inches	Width	Width Col. 3 + Col. 4 Inches	Add rack to reserved space	Replace existing equipment	Remove rack & retain space	

Rack # – Provide the Rack Number from the Section 6 Equipment Table for all racks being installed or removed. Rack Depth - No part of any apparatus attached to the rack shall extend horizontally beyond the front or rear edges of the front and rear base or guardrail of the rack. Guardrail extenders should be provided if required. Rack depth is measured between the leading edges of the front and rear guardrails. Please subtotal rack and spacer lineup requirements for groups of equal depth racks.

Rack Width - Specify actual width of rack, not the mounting plate width.

Spacer Width - Specify width of any spacers to be installed.

Rack + Spacer width - Sum requirements for each rack.

Relay Rack Location - Provide relay rack location.

5C. Complete this section when space is being released either by removal of existing equipment, or by releasing space previously reserved for future use. The amount of billable floor space assigned for collocation use will be reduced based upon information provided in this section. Complete this table for either total or partial space release.

1	1 2		1 2		4
	Current use of Space check (√) Col. 1 or 2		Relay Rack Location		
Equipped with Rack (√)	ipped with Reserved for future		Provide relay rack location of space to be vacated		

Rack # – Provide the Rack Number from the Section 6 Equipment Table for all racks being installed or removed. **Relay Rack Location** - Provide relay rack location.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 6 of 18 9/16/99

6. EQUIPMENT TO BE INSTALLED OR REMOVED

Complete columns 1 though 11. Include all equipment to be installed or removed. Duplicate this table as required. Include all equipment that is required to support multiple fiber cable entrances, as applicable. The equipment listed must be shown on an attached rack layout.

- 1. Rack No. Enter the rack number as shown on an attached proposed floor plan layout.
- 2. **Vendor/Manufacturer & Contact Number** Enter the vendor's name and telephone number.
- Model Number Enter the model number of the equipment.
- 4. **Description** Enter the functional description of the equipment.
- 5. **Existing Quantity** Enter the quantity of the equipment currently installed.
- 6. Add (+) Enter the quantity to be installed. Remove (-) Enter the quantity to be removed.
- 7. Total Quantity Enter the total quantity remaining after the addition/removal.
- 8. **Heat Dissipation (Watts)** Enter the heat dissipation in watts per unit and for the total quantity of units. The sum of the "Total" column should reflect the total heat release for all collocated equipment.
- List 1 (Nominal) -48 V DC Power Requirements (AMPS) Enter in AMPs the -48V List 1 power requirements per unit and for the total quantity of units. The sum of the "Total" column should reflect the total List 1 power requirements of all collocated equipment.
- 10. **List 2 (Worst Case) -48 V DC Power Requirements (AMPS) -** Enter in AMPs the -48V List 2 power requirements per unit and for the total quantity of units. The sum of the "Total" column should reflect the total List 2 power requirements of all collocated equipment.
- 11. **NEBS Yes/No** Does this equipment meet the following Bell Communications Research Network Equipment-Building Systems (NEBS) requirements?
 - Criteria Level 1 requirements as outlined in the Bellcore (Telcordia) Special Report SR-3580, Issue 1.
 - Equipment design spatial requirements per GR-63-CORE, Section 2.
 - Thermal heat dissipation per GR-063-CORE, Section 4, Criteria 77-79.
 - Acoustic noise per GR-063-CORE, Section 4, Criterion 128.
 - Applicable National Electric Code requirements.

Enter a YES or NO. <u>If NO, attach a separate document</u> listing specific explanations for each equipment type and reasons for NEBS and/or National Electric Code noncompliance.

Page Sub-total - Provide the page total heat dissipation, List 1 and List 2 –48V DC power requirements.

Total Installed Eqpt - Provide the total heat dissipation, List 1 and List 2 –48V DC power requirements for all collocated equipment. This total may be listed on the last page of a multipage equipment list.



BSTFI-1P-A

Ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 7 of 18 9/16/99

7. -48V POWER AND GROUNDING

Indicate by a √ which of the following apply:

Power requirements for initial installation.

Additional power requirements for an existing arrangement augmentation.

Arrangement augmentation, no additional power required.

Completion of this section is required if -48V telecommunications equipment power is to be provided by BST. Power plant construction requirements and costs will be based upon the information provided. BellSouth can provide -48V DC power configured to serve equipment installed as part an isolated single point ground or as part of the building integrated ground plane. Isolated ground power options are addressed in section 7B. Integrated ground power options are addressed in section 7C.

It is recommended that all collocated equipment arrangements be configured with a power disconnect capability, either internal to the equipment frame or via a collocator provided fuse panel. If no power disconnect is provided, a request will have to be submitted to BellSouth to disconnect power at the BellSouth provided fuse or circuit breaker whenever power must be removed from the equipment.

BellSouth and Collocator responsibilities are outlined in the following sub-sections.

7A. Completion of this section is required to identify whether the collocated equipment will require an isolated ground plane and associated power supply grounding as described in Bellcore (Telcordia) Technical Reference TR-NWT-000295 (a.k.a. TR-295) and BellSouth Engineering and Installation Standards for Central Office Equipment TR-73503. The answer to both 7A1 and 7A2 cannot be "No". Any equipment not part of an isolated ground plane is by default part of the integrated ground plane.

7B. -48V DC Power for Equipment Installed as Part of an Isolated Ground Plane

If equipment requires a TR-00295 compliant isolated ground plane, the collocator must provide Battery Distribution Fuse Bay, Power Distribution Frame, or similar power distribution equipment for distributing power to the equipment to be installed on the isolated ground plane. This BDFB/PDF must be dedicated to the isolated ground equipment only. If integrated ground equipment is also installed it must utilize one of the power options described in section 7C.

Specify the quantity of BST provided isolated ground ~48V DC circuit breakers. BST will always provide redundant "A" and "B" circuit breaker pairs. Order in multiples of two, i.e., for each "A" and "B" breaker pair order two circuit breakers. All circuit breakers are rated at 225 amps.

BellSouth responsibilities:

- ground window
- power feeder cable support structure between the BellSouth power board and the collocated equipment or equipment cage (i.e. cable rack that will be shared by multiple parties).
- circuit breaker protection device(s)
- -48V POWER AND GROUNDING continued from page 7. 7.

7B. Collocator responsibilities:

- Power cable support structure within a collocation equipment cage or collocator requested nonconventional cageless collocation area (refer to Sections 4 for a description of non-conventional collocation space.)
- Terminating power feeder cables at collocator provided BDFB/PDF



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 8 of 18 9/16/99

BellSouth or Collocator Responsibilities as determined by current Collocation Agreement or local negotiation:

Furnish, engineer and install power cable feeders

Note: A certified power vendor must be used to engineer and install power feeder cable from a BST power board to a collocator provided BDFB/PDF. Specific Installation activities restricted to a certified power vendor includes placement of the cable in the cable support structure and termination of the cable at the BST power board. The certified power vendor must follow all applicable BST engineering and installation standards, including use of detail MOPs for power work and fuse / circuit breaker assignments. Connections to the ground window must follow TR-295.

7C. -48V DC Power for Equipment installed as Part of the Building Integrated Ground Plane

Collocator may provide or request BellSouth to provide Battery Distribution Fuse Bay, Power Distribution Frame, or similar power distribution equipment for distributing power to integrated ground equipment.

7C1. Collocator Provided BDFB/PDF

If collocator will provide BDFB/PDF, specify the quantity of the BST provided integrated ground –48V DC circuit breakers. BST will always provide redundant "A" and "B" breaker pairs. Order in multiples of two, i.e., for each "A" and "B" circuit breaker pair order two circuit breakers. All circuit breakers are rated at 225 amps.

BellSouth responsibilities:

- power feeder cable support structure between the BST power board and the collocated equipment or equipment cage (i.e. cable rack that will be shared by multiple parties).
- circuit breaker protection device(s)

Collocator responsibilities:

- power cable support structure within a collocation equipment cage or collocator requested nonconventional collocation area (refer to Sections 5 and 6 for a description of non-conventional collocation space).
- terminating power feeder cables at collocator provided BDFB/PDF



Ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 9 of 18 9/16/99

BSTEI-1P-A

7C1. Collocator Provided BDFB/PDF continued from page 8.

BellSouth or Collocator Responsibilities as determined by current Collocation Agreement or local negotiation:

Furnish, engineer and install power cable feeders

Note: A certified power vendor must be used to engineer and install power feeder cable from a BST power board to a collocator provided BDFB/PDF. Specific Installation activities restricted to a certified power vendor include placement of the cable in the cable support structure and termination of the cable at the BST power board. The certified power vendor must follow all applicable BST engineering and installation standards, including use of detail MOPs for power work and fuse / circuit breaker assignments. Connections to the ground window must follow TR-295.

7C2. BellSouth Provided BDFB or Miscellaneous Power Board Fuse Positions

BellSouth will provide fuse positions as requested.

BellSouth responsibilities:

- BDFB or miscellaneous Power Board fuse positions
- Power distribution cable support structure between the BellSouth BDFB/power board and the collocated equipment or equipment cage (i.e. cable rack that will be shared by multiple parties).

Collocator responsibilities: (to be engineered and installed by BellSouth certified vendor)

- Power cable support structure within a collocation equipment cage or collocator requested nonconventional collocation area (refer to Sections 4 and 5 for a description of non-conventional collocation space).
- Appropriately sized and rated protection devices (fuses) per TR-73503
- Appropriately sized power distribution cables per TR-73503
- Terminating the distribution cable at both ends (the collocated equipment and the BellSouth BDFB). Note: Any certified vendor may be used to terminate distribution cable on a BellSouth BDFB. The certified vendor must follow all applicable BellSouth engineering and installation standards, including use of detail MOPs (Method of Procedures) for power work and fuse assignments.

The maximum rating for a protection device to be placed in a BellSouth provided BDFB or power board miscellaneous fuse position is 60 amps. Typical sizes are 10, 15, 30, 45 and 60 amps. Protection devices should be sized at 1.5 times the maximum load. Quantities should be specified in multiples of 2 for 1 "A" and 1 "B" fuse position. Whenever possible, TPS type fuses should be provided.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 10 of 18 9/16/99

7D. Framework Ground

BellSouth will provide an interconnection point (ground bar or ground cable extension) for connecting the collocator provided equipment framework ground to the building principal ground. The collocator will be responsible for extending a single framework ground connection from the Caged or Non-conventional cageless arrangement to the BellSouth provided bar or cable extension. In cageless arrangements the collocator will be responsible for connecting framework ground conductors to the lineup grounding conductor.

If a collocator requests an isolated ground plane, the collocator's certified vendor will be responsible for engineering and installing framework grounds from the equipment to the BellSouth provided ground window. The isolated ground plane must be established and all connections to the ground window must be compliant with TR-295.

Specific grounding arrangements should be clarified during the BellSouth-collocator coordination meetings.

8. DIRECT CONNECTION - CO-CARRIER CROSS CONNECTS

If covered in the collocation agreement, collocation arrangements may be directly interconnected without using BST cross connect facilities. Indicate if you plan to directly connect between non-contiguous collocation arrangement(s) in this location

If yes, for each direct connection provide the following information on the table:

- Identify the ownership of the equipment at each end of the connection
- Equipment rack locations at each end of the connection
- Type of service (DS0, DS1, DS3, Fiber)
- Copper or fiber cable and number of conductors
- If fiber, specify fiber building cable or patchcord.

Direct Connection – Co-Carrier Cross Connects						
Ownership	Collocator A	– Name, ACNA	Collocator B - Name, ACNA			
Equipment Rack Location						
Type of Service	DS0	DS1	DS3	Fiber		
Check all that apply				·		
Type of Cable	Building or Patchcord?	Outside Diameter	Number of Pairs/Fibers	Weight		
Fiber						
Copper						

BellSouth will provide cable support structure, if feasible, for the interconnection of two collocation arrangements occupying non-contiguous space. Direct connections and the required support structure between collocation arrangements occupying contiguous space are the responsibility of the Collocators occupying the space,

9. CABLE FACILITIES

Indicate the quantity for each type of cable to be installed.



BSTEI-1P-A

Ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 11 of 18 9/16/99

Type of Cable	Number of Cables	Note
Fiber Entrance		Complete 10A
Fiber Riser		Complete 10B
Microwave Radio - Coax		Complete 10C
Microwave Radio - Waveguide		Complete 10D

For Microwave Radio entrance facilities, indicate the type of contract applicable for your microwave antenna:

Crown Antenna Mount Program or Microwave Collocation. A Microwave collocation application must accompany your request for physical collocation if Microwave Collocation is your choice for provisioning of outside microwave facilities.

Check "Other" if your microwave antenna will not be located on BellSouth property.

CABLE INFORMATION - FIBER

Indicate if you plan to provide and own fiber entrance facilities or if you plan to use BellSouth's fiber entrance facilities. **Expanded interconnection** allows for private fiber entrance facilities and equipment that are owned by third parties to be placed in the location and interconnected to BellSouth's tariffed services via cross-connects. **Service Interconnection** allows equipment owned by third parties to be placed in the location and interconnected to BellSouth tariff services without the use of private fiber entrance facilities. Indicate if you are interested in multiple entry points. If yes, indicate the number of entry points being requested.



ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 12 of 18 9/16/99

CABLE INFORMATION – FIBER continued from page 11.

10A. Complete the table for each fiber entrance cable to be installed or removed. An example is provided.

Check "Fiber entrance cable(s) for initial installation" if this is the initial application for this location. Check "Add fiber entrance cable(s) to existing arrangement" if you have an existing EIS arrangement in this location and you are adding additional fiber entrance cable(s) on this application. For "Add fiber entrance cable", show only the new fiber entrance cable(s) to be added on the table below. Check "Fiber entrance cable(s) not required for this application" if fiber entrance cable(s) are not required. Check "Fiber entrance cable to be removed" if the cable is being abandoned or disconnected.

Cable description - Enter the alphanumeric description.

Outside diameter - Enter the outside diameter of the cable measured in inches.

Number of fibers - Enter the number of fibers contained in the cable.

Weight (lb/kft) - Enter the weight in pounds per kilofeet of the cable.

Sheath Type - Enter the sheath type for each cable.

Cable Tensile Load - Enter the Cable Tensile Load.

Cable Description	Outside diameter (in.)	Number of Fibers	Weight (lb/kft)	Sheath Type Metallic/Dielectric	Cable Tensile Load (lb/f)
AT34Q2MT-024	0.7	24 pair	400	Dielectric	600
				-	

Note 1: Outside plant cable must meet the requirements in Bellcore (Telcordia) GR-20-CORE or TR-NWT-000020.

Note 2: If multiple entry is requested, please show each cable on the fiber entrance cable table. Multiple entry availability will be provided in response to an application.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 13 of 18 9/16/99

- 10. CABLE INFORMATION FIBER continued from page 12.
- 10B. Complete the table for each fiber riser cable to be installed or removed. An example is provided.

Check "Fiber riser cable(s) for initial installation" if this is the initial application for this location. Check "Add fiber riser cable(s) to existing arrangement" if you have an existing EIS arrangement in this location and you are adding additional fiber riser cable(s) on this application. (See note 3 below.) For "Add fiber riser cable", show only the new fiber riser cable(s) to be added on the table below. Check "Fiber riser cable not required for this application" if fiber riser cable(s) are not required. Check "Fiber riser cable to be removed" if the riser cable is being abandoned or disconnected.

Cable description - Enter the alphanumeric description.

Outside diameter - Enter the outside diameter of the cable measured in inches.

Number of fibers - Enter the number of fibers contained in the cable.

Weight (lb/kft) - Enter the weight in pounds per kilofeet of the cable.

Sheath Type - Riser cable must be dielectric.

Cable Tensile Load - Enter the Cable Tensile Load.

Cable Description	Outside diameter (in.)	Number of Fibers	Weight (ib/kft)	Sheath Type	Cable Tensile Load (lb/f)
AT34Q2MT-024	0.7	24 pair	400	Dielectric	600

BellSouth will provide the cable rack and/or duct to support the riser cable between the entrance vault or facility and the collocated equipment. Collocator shall provide the riser cable.

Either BellSouth or the collocator, as determined by the current Collocation Agreement or local negotiation, shall contract with a BellSouth certified vendor to install the riser cable.

Note 1: Dielectric, fire retardant riser rated cable must be used. Riser cable must meet the requirements in Bellcore (Telcordia) GR-409-CORE.

Note 2: If multiple entry is requested, please show each cable on the riser cable table. Multiple entry availability will be provided in response to an application.

Note 3: Abandoned/disconnected fiber riser cable must be removed by the collocator's certified vendor at the time the associated equipment is removed.

Note 4: If this application is for a subsequent collocation arrangement in a central office, additional riser cables may be required if the placement of the equipment for the subsequent order is not contiguous with the existing arrangements. BellSouth will notify the collocator on the inquiry response if additional riser cables are required.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 14 of 18 9/16/99

10. CABLE INFORMATION - MICROWAVE RADIO

10C. Complete the table for microwave coax cable to be installed or removed.

Check "Add coax cable for initial installation" if this is the initial application for this location. Check "coax cable to existing arrangement" if you have an existing EIS arrangement in this location and you are adding a coax cable on this application. Check "Coax entrance cable not required for this application" if coax is not required. Check "Coax cable to be removed" if the coax is being abandoned or disconnected. An example is provided.

Cable Description - Enter a brief description of the coax

Outside diameter - Enter the outside diameter of the coax measured in inches.

Weight (lb/kft) - Enter the weight in pounds per kilofeet of the cable.

Sheath Type - Enter the sheath type for each cable.

Cable Tensile Load - Enter the Cable Tensile Load.

Cable Description	Outside Diameter (in.)	Weight (lb/kft)	Sheath Type	Cable Tensile Load (lb/f)
Andrew	3/8"	.09	Metallic	175
EFX2-50				

10D. Complete the table below for microwave waveguide cable to be installed or removed.

Check "Add waveguide for initial installation" if this is the initial application for this location. Check "Add waveguide(s) to existing arrangement" if you have an existing EIS arrangement in this location and you are adding additional waveguide on this application. Check "Waveguide not required" if waveguide is not required. Check "Waveguide to be removed" if the waveguide is being abandoned or disconnected. An example is provided.

Waveguide Description - Enter a brief description of the waveguide.

Dimensions - Enter the waveguide dimensions measured in inches.

Shape - Enter the cross sectional shape of the waveguide.

Weight (lb/kft) - Enter the weight in pounds per kilofeet of the cable.

Waveguide Tensile Load - Enter the Cable Tensile Load for flexible waveguide.

Waveguide Description	Dimensions	Shape	Weight (lb/kft)	WaveguideT ensile Load
Andrew EW20	5.02 X 2.83'	Elliptical	1.85	N/A



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 15 of 18 9/16/99

11. SHARED SPACE - Caged physical collocation only .

Shared space is available via FCC -99-48 inclusive contracts only.

Provide the Guest Company name and ACNA for the telecommunications provider(s) to be sharing the enclosure.

A collocator may allow other telecommunications carriers to share the collocator's caged collocation arrangement pursuant to terms and conditions agreed to by the collocator ("Host") and other telecommunications carrier(s) ("Guests") and pursuant to the terms and conditions provided in the BellSouth Collocation Handbook.

The Host will be the sole interface and responsible party to BellSouth for the purpose of submitting applications for initial and additional equipment placements of Guest; for payment of rates and charges contained within its Agreement with BellSouth; and for purposes of ensuring that the safety and security requirements of its Agreement with BellSouth are fully complied with by the Guest, its employees and agents. All applications and augmentations require a fee submitted by the Host. In addition, Guest(s) may arrange directly with BellSouth for the provision of the interconnecting facilities between BellSouth and the Guest and for the provisions of the services and access to unbundled network elements



FOR COMPLETION OF

THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Ins.

BSTEI-1P-A

Page 16 of 18 9/16/99

12. EQUIPMENT WIRING REQUIREMENTS

Indicate if this is the initial installation, an equipment addition to an existing arrangement, or if this request is for wiring changes only. Indicate if the additions or changes are for the Host or Guest collocator. Duplicate the table if necessary.

Section A – Additions - Indicate the quantity of DS0 2 wire, DS1, DS3 and/or fiber lowspeed equipment ports that will be wired to a POT (Point of Termination) bay. Indicate the quantity of DS0 2 wire, DS1, DS3 and/or fiber lowspeed equipment ports that will be wired to the BellSouth DSX, LGX or frame. It is recommended that all lowspeed ports not used for connection to other equipment be wired to the POT, DSX, LGX or frame.

Section B – Removals - Indicate the type and quantity of the circuits to be disconnected from the POT, DSX, LGX or frame. For all removals, attach a cable and pair and/or T1TIE/T3TIE/fiber inventory identifying the specific connections to be disconnected. The collocator's certified vendor must remove all abandoned/unused cable connections to the POT, DSX, LGX or frame when the associated equipment is removed.

	* POT Connection	าร	DSX, LGX and/or Frame Connections			
A. Additions	Collocator	Guest	A. Additions	Collocator	Guest	
	Quantity of:	Quantity of:		Quantity of:	Quantity of:	
DS0 2 wire			DS0 2 wire			
DS1			DS1			
DS3			DS3			
Fiber			Fiber			
B. Removals	Collocator	Guest	B. Removals	Collocator	Guest	
	Quantity of:	Quantity of:		Quantity of:	Quantity of:	
DS0 2 wire			DS0 2 wire	 		
DS1			DS1			
DS3			DS3			
Fiber			Fiber			

POT refers to the BellSouth or Collocator provided Point of Termination which were provisioned prior to 6/1/99. Future POT bay installations by BellSouth will be governed by the Collocation Agreement. When POT bays are not provided BellSouth will allow direct cabling of collocated equipment to the BellSouth DSX, LGX and DF.

With the direct cabling arrangement the Collocator will be responsible for providing all cabling from the collocated equipment to the BellSouth designated DF, DSX or LGX. The Collocator will also be responsible for providing the BST specified connector/connecting blocks required for termination of the DS0 circuits on the BellSouth DF. BellSouth will provide the cable support structure from the collocated equipment to the DF, DSX and LGX. BellSouth will also provide the termination equipment panels at the BellSouth DSX and LGX.



Ins.

BSTEI-1P-A

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 17 of 18 9/16/99

13. CONTACT INFORMATION

EQUIPMENT WIRING: Enter the name, telephone number, facsimile number, pager number and e-mail/Internet address of the person BellSouth can contact regarding information entered in item 12.

TECHNICAL: Enter the name, telephone number, facsimile number, pager number and e-mail/Internet address of the person BellSouth can contact regarding information entered in items 4 through 11.

LOCAL COORDINATOR: Enter the name, telephone number, facsimile number, pager number and e-mail/Internet address of your company's local coordinator at the selected location for the collocation arrangement.

BUILDING ACCESS: Enter the name, telephone number, facsimile number, pager number and e-mail/Internet address of your company's contact for the collocation arrangement location access security.

BILLING INFORMATION

Indicate the legal business company name and address, as it should appear on the monthly billing statement to be submitted by BellSouth to your company for this EIS arrangement. Provide a contact name, telephone number and facsimile number to be contacted regarding bill payment, discrepancies, etc. List billing account numbers established for other communication service(s) provided by BellSouth.

15. ATTACHMENTS

Provide via attachment additional information, which will aid BellSouth's understanding of the space requirements for the racks and equipment to be placed in the location. For (4A) equipment cage, a floor plan indicating rack layout within the cage should be provided. For (4B) cageless-conventional and (4C) cageless non-conventional arrangements, collocator must provide preferred rack equipment drawings for the floor plan layout. An explanation must be provided which describes the necessity for requiring (4C) non-conventional arrangement, if this option has been selected. The floor plan layout should include all racks identified in Item 6.

For non-enclosed arrangements additional information would include special needs, such as front and back access to equipment, doors on the storage units, aisle space requirements, AC outlets, etc. Provide drawings of the rack(s) and equipment showing all perspectives - top, side, front, back. Drawings should include all equipment shown in Item 6. For enclosed arrangements provide a proposed rack floor plan layout. List all attachments and the number of pages of each attachment.



BSTEI-1P-A

ins.

FOR COMPLETION OF THE PHYSICAL EXPANDED INTERCONNECTION APPLICATION DOCUMENT

Page 18 of 18 9/16/99

16. TECHNICAL COMPLIANCE

Signature, title and date are required at end of the document. Each subsequent issue of the BSTEI-1P-A must also be signed.

Applicant certifies that equipment is in compliance with the following industry standards:

- Criteria Level 1 requirements as outlined in the Bellcore (Telcordia) Special Report SR-3580 Issue 1.
- Equipment design spatial requirements per GR-63-CORE, Section 2.
- Thermal heat dissipation per GR-63-CORE, Section 4, Criteria 77 79.
- Acoustic noise per GR-63-CORE, Section 4, Criterion 128.
- Applicable National Electric Code requirements.

Use of Space in Central Offices

From time to time BellSouth may require access to space occupied by collocator. BellSouth retains the right to access such space for the purpose of making equipment and building modifications, e.g., running, altering or removing racking; ducts; electrical wiring; HVAC; and cables. BellSouth will give reasonable notice to collocator when access to collocation space is required and collocator may elect to be present whenever BellSouth performs work in the collocation space. It is agreed that collocator will not bear any of the expense associated with this work.