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NANCY B. WHITE General Counsel - Florida

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BellSouth Telecommunications, Inc. c/o Nancy H. Sims Suite 400 150 South Monroe Street Tallahassee, Florida 32301 (305) 347-5558

RECORDS AND REPORTING

March 19, 1999

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

Re: Docket No. 971140-TP (Recombination Docket)

Dear Ms. Bayo:

Pursuant to the conference call of Tuesday, March 2, 1999, between and among the Florida Public Staff, BellSouth Telecommunications, Inc. ("BellSouth"), MCImetro Access Transmission Services, Inc. ("MCIm") and AT&T Communications of the Southern States, Inc. ("AT&T"), BellSouth has attempted ACK to negotiate amendments to the MCIm and AT&T Interconnection Agreements to comport with the Supreme Court's Order in AT&T Corp. v. Iowa Utilities Bd. (the AFA "Order") regarding network element combinations. It is the understanding of APP BellSouth that while the Florida Public Service Commission had made certain CAF decisions regarding the issues of the provision of combinations of network CMU2 elements to AT&T and MCI, the Staff felt that the Supreme Court opinion had effected those decisions. The Staff directed the parties to negotiate CTR amendments addressing combinations of elements in light of the Supreme Court EAG decision. All parties have proposed and discussed language in efforts to reach a LEG mutual agreement as to the amendments to the Interconnection Agreements LIN with respect to combinations of network elements. Unfortunately, the parties were unable to agree on the language for the amendments. OPC RCH

SEC \_\_\_\_\_\_ As you know, the Supreme Court order reversed the 8<sup>th</sup> Circuit's decision regarding 47 C.F.R. § 51.315(b). The other rules, 47 C.F.R. § 51.315(c)-(f) WAS \_\_\_\_\_\_ regarding the provision of combinations remain vacated as the 8<sup>th</sup> Circuit OTH \_\_\_\_\_\_ decision concerning these rules was not challenged at the Supreme Court level.

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Therefore, after rule 51.315(b) becomes effective, BellSouth's only obligation to provide combinations to AT&T and MCIm will be in regards to providing combinations that BellSouth currently combines.

Enclosed are BellSouth's proposed amendments to the AT&T and MCIm Interconnection Agreements. BellSouth believes that these amendments reflect the position set forth in the Order regarding network element combinations. With respect to combinations, the Order focused on 47 C.F.R. § 315(b), which states that an ILEC shall not separate network elements that are already combined except upon request of the CLEC. However, the Order does not specify which network elements the ILECs are required to make available as the Supreme Court determined that the FCC had not fulfilled its statutory obligations when it determined what network elements had to be unconditionally offered to CLECs. The Order states, "...our remand of Rule 319 may render the incumbents' concern [regarding the dilution of the resale provisions of the Act] on this score academic." Thus, while the Order provides that network elements already combined may not be separated except upon request, until the Federal Communications Commission ("FCC") addresses which network elements must be made available to CLECs based upon the "necessary and impair" standard, it is not reasonable for CLECs to demand that all network elements heretofore identified based on the vacated rule must be combined by BellSouth at a price equal to the sum of the individual element rates.

BellSouth has agreed with the FCC to continue to make available to CLECs network elements in accordance with existing interconnection agreements pending the FCC's reexamination of rule 319 in light of the "necessary and impair" standard. To amend those agreements as proposed by AT&T and MCIm while this key issue remains unresolved will result in BellSouth's provision of the entire, preassembled network to CLECs at costbased prices for the individual elements. It is clear that this is not the result intended by the Supreme Court. The amendments proposed by BellSouth take into account that important issues are yet to be resolved and reflect a commitment on BellSouth's part to abide by the rules that will be adopted to further address the definition of network elements and combinations thereof. The amendments further assure that any references in the MCIm and AT&T Interconnection Agreements to combinations of network elements will be construed in accordance with such rules.

The language proposed by BellSouth as appropriate for the AT&T agreement has been thoroughly discussed with AT&T. The parties were able to agree on all of the language except for the language proposed by BellSouth that reference the Supreme Court decision and the remand proceedings of the 8<sup>th</sup> Circuit and the FCC. AT&T stated that this language was repetitive of language contained within section 9.3 of the General Terms and Conditions and as such it was not necessary to include in section 1A. AT&T stated that it did not

necessarily disagree with the language itself. As stated above, the Supreme Court itself tied the issue of the ILEC's obligation regarding combinations to the 319 remand work required of the FCC. It is important that the Supreme Court's intent be adequately represented in the interconnection amendments intended to memorialize the effect of that decision.

Lastly, during the negotiations between BellSouth and AT&T, AT&T requested to adopt section 2.6 of Attachment 3 of the MCIm interconnection agreement which reads:

2.6 With respect to the Network Elements and services in existence as of the Effective Date of this Agreement, charges is Attachment 1 are in clusive and no other charges apply, including but not limited to any other consideration for connecting any Network Element(s) with other Network Element(s). BellSouth and MCIm agree to attempt in good faith to resolve any alleged errors or omissions in Attachment 1.

BellSouth, of course because of its statutory obligation to allow adoption of other terms and conditions and rates, is agreeable to this adoption. However, BellSouth and AT&T were not able to reach agreement on the adoption. Section 2.6 of Attachment 3 was negotiated with MCIm in conjunction with the description of the elements contained in Attachment 3 and the price list contained in Part IV of Attachment 1 of the MCIm agreement. In order for AT&T to adopt section 2.6, it must also adopt those sections germane to section 2.6. AT&T would not agree to the adoption of Attachment 3.

The Supreme Court in the Order reversed the 8<sup>th</sup> Circuit's decision concerning the statutory construction of section 252(i) of the Act and reinstated the FCC's rule and reasoning. The Supreme Court stated that "[t]he Commission has said that an incumbent LEC can require a requesting carrier to accept all terms that it can prove are 'legitimately related' to the desired term." The language of the desired section itself references Attachment 1 and the "Network Elements" within the MCIm agreement. Those Network Elements referenced in section 2.6 are as defined in Attachment 3 of the MCIm agreement. Further, section 2.6 is in Attachment 3 and Attachment 3 was negotiated by BellSouth and MCIm as a whole. Therefore it is reasonable that AT&T adopt Attachment 1 and Attachment 3 of the MCIm agreement. BellSouth's proposed Amendment incorporates these Attachments, which includes the requested section 2.6 language, into AT&T's Agreement.

Sincerely,

Nancy B. White

cc: Parties of Record

#### CERTIFICATE OF SERVICE DOCKET NO. 971140-TP

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

via Federal Express this 19th day of March, 1999 to the following:

Charles J. Pelligrini Staff Counsel Division of Legal Services Florida Public Service Comm. 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 (850) 413-6232

C. Everett Boyd, Jr. Ervin, Varn, Jacobs, Odom & Ervin 305 South Gadsden Street Post Office Drawer 1170 Tallahassee, FL 32302 (850) 224-9135

Richard Melson Hopping Green Sams & Smith 123 South Calhoun Street Post Office Box 6526 Tallahassee, FL 32314 (850) 222-7500

Mr. Thomas K. Bond MCI Metro Access Transmission Services, Inc. 780 Johnson Ferry Road Suite 700 Atlanta, GA 30342 Tracy Hatch, Esq. Michael W. Tye, Esq. 101 N. Monroe Street Suite 700 Tallahassee, Florida 32301 Attys. for AT&T Tel. (850) 425-6364

Mark A. Logan, Esq. Brian D. Ballard, Esq. Bryant, Miller & Olive, P.A. 201 S. Monroe Street Tallahassee, Florida 32301 Attys. for AT&T Tel. (850) 222-8611

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#### AMENDMENT TO INTERCONNECTION AGREEMENT BETWEEN BELLSOUTH TELECOMMUNICATIONS, INC. AND AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC. DATED JUNE 10, 1997

Pursuant to this Agreement (the "Amendment"), BellSouth Telecommunications, Inc. ("BellSouth") and AT&T Communications of the Southern States ("AT&T") hereinafter referred to collectively as the "Parties" hereby agree to amend that certain Interconnection Agreement between the Parties dated June 10, 1997 ("Interconnection Agreement").

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, BellSouth and AT&T hereby covenant and agree as follows:

1. Section 1A of the General Terms and Conditions section of the Agreement is hereby deleted in its entirety and replace with a new Section 1A as follows:

> 1A. The Services and Elements provided pursuant to this Agreement may be connected to other Services and Elements provided by BellSouth or to any Services and Elements provided by AT&T itself or by any other vendor.

2. A new Section 1B is hereby added to the General Terms and Conditions section of the Agreement as follows:

IB. AT&T may purchase unbundled Network Elements for the purpose of combining such Network Elements, whether those elements are its own or are purchased from BellSouth, in any manner that it chooses to provide service. In accordance with Section 9.3 of this Agreement, BellSouth, except upon request, BellSouth shall not separate network elements that BellSouth currently combines. Provided that, the operation of this subsection shall be construed in accordance with decisions of the FCC and any reviewing court in light of the US Supreme Court's decision in AT&T Corp. v. Iowa Utilities Bd., and provided further that this subsection shall apply only to Network Elements that BellSouth is compelled to unbundle by regulatory agencies with jurisdiction, and that any voluntary agreement by BellSouth to make network facilities available shall not expand its obligations to provide AT&T Network Elements that currently are combined in BellSouth's network. Any reference to combinations or obligation regarding combinations, within this Agreement shall be governed by this paragraph.

The rates, terms and conditions regarding the Network Elements provided by BellSouth, including but not limited to the rates for such elements, what combinations of Network Elements are to remain combined and what Network Elements BellSouth is unconditionally required to provide shall be governed by the decisions of the FCC and the 8<sup>th</sup> Circuit Court upon remand of the AT&T Corp. v. Iowa Utilities Bd. Proceeding ("96-98 Remand Proceeding"). The Parties agree to modify the Agreement to implement any 96-98 Remand Proceeding decision or rules upon receipt of a final and non-appealable decision or rule. Neither Party waives its right to participate in, seek reconsideration of or appeal or any such decision rendered as a result of the remand. Further, if, as a result of any reconsideration or appeal of any decision, said decisions or rules are modified, vacated or changed, the Parties shall modify the Agreement to comply with such final decisions within ninety (90) days of the effective date of such final and non-appealable decision or order.

3. A new Section 30.7 is hereby as added to the General Terms and Conditions section of the Agreement as follows:

30.7 In accordance with Section 1B of this Agreement, BellSouth shall charge AT&T the rates set forth in Exhibit A when directly interconnecting any Network Element or Combination to any other Network Element or Combination. If BellSouth provides such service to an affiliate of BellSouth, that affiliate shall pay the same charges.

4. Part IV of the General Terms and Conditions section of the Agreement is hereby deleted in its entircty and replaced with Attachment I and all amendments thereto, of the Florida BellSouth/MCIm Interconnection Agreement attached hereto as Exhibit A.

5. Attachment 2 of the Agreement is hereby deleted in its entirety and replaced with Attachment III of the Florida BellSouth/MCIm Interconnection Agreement attached hereto as Exhibit B.

6. The Parties agree that all of the other provisions of the Interconnection Agreement, dated June 10, 1997, shall remain in full force and effect.

7. The Parties further agree that either or both of the Parties are authorized to submit this Amendment to the Florida Public Service Commission or other regulatory body having jurisdiction over the subject matter of this Amendment, for approval subject to Section 252(e) of the federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

BELLSOUTH TELECOMMUNICATIONS, INC.	
$\square$	
By: my aling	
DATE: 3/19/99	

AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.

By:\_\_\_\_\_

DATE: \_\_\_\_\_

#### AMENDMENT TO MCIm/BELLSOUTH INTERCONNECTION AGREEMENT DATED JUNE 19, 1997

MCImetro Access Transmission Services, Inc. ("MCIm") and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend the MCIm/BellSouth Interconnection Agreement – Florida dated June 19, 1997 ("Interconnection Agreement") as set forth herein.

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, MCIm and BellSouth hereby convenant and agree as follows:

1. Attachment I, Section 8 of the Interconnection Agreement is hereby deleted in its entirety, and the following shall be inserted in lieu thereof:

8. Any BellSouth non-recurring and recurring charges shall not include duplicate charges or charges for functions or activities that MCIm does not need when two or more Network Elements are combined in a single order. BellSouth and MCIm shall work together to mutually agree upon the total non-recurring and recurring charge(s) to be paid by MCIm when ordering multiple Network Elements.

2. Attachment III, Section 2.4 of the Interconnection Agreement is hereby deleted in its entirety, and the following shall be inserted in lieu thereof:

2.4 The Network Elements provided pursuant to this Agreement may be connected to other Network Elements provided by BellSouth or to any Network Elements provided by MCIm itself or by any other vendor. MCIm may purchase unbundled Network Elements at the rates set forth in Attachment I of this Agreement for the purpose of MCIm combining such Network Elements, whether those elements are its own or are purchased from BellSouth, in any manner that it chooses to provide service.

3. Attachment III, Section 2.6 of the Interconnection Agreement is hereby deleted in its entirety, and the following shall be inserted in lieu thereof:

2.6 BellSouth shall provide the following combined Network Elements for purchase by MCIm. The rate of the following combined Network Elements is the sum of the individual element prices as set forth in Attachment I of this Agreement. Order Coordination is available for each of these combinations at an additional charge.

- SL2 loop and cross connect
- Port and cross connect
- Port and cross connect and common transport
- Port and vertical features
- SL2 loop and loop concentration
- Port and common transport
- SL2 loop and LNP

4. Attachment III, Section 2.8 of the Interconnection Agreement is hereby deleted in its entirety, and the following shall be inserted in lieu thereof:

2.8 BellSouth will abide by any effective final and non-appealable rule of the FCC or state commission that prohibits BellSouth, except upon request, from separating requested Network Elements that are currently combined; provided, however, that the operation of this subsection shall be construed in accordance with decisions of the FCC and any reviewing court in light of the U.S. Supreme Court's decision in AT&T Corp. v. lowa Utilities Bd., and provided further that this subsection shall apply only to Network Elements that BellSouth is compelled to unbundle by regulatory agencics with jurisdiction, and that any voluntary agreement by BellSouth to make network facilities available shall not expand its obligations to provide MCIm Network Elements that currently are combined in BellSouth's network. Any reference to combinations or obligation regarding combinations, within this Agreement shall be governed by this paragraph. The rates, terms and conditions regarding the Network Elements provided by BellSouth, including but not limited to the rates for such elements, what combinations of Network Elements are to remain combined and what Network Elements BellSouth is unconditionally required to provide shall be governed by the decisions of the FCC and the 8th Circuit Court of Appeals upon remand of the AT&T Corp. v. Iowa Utilities Bd. Proceeding ("96-98 Remand Proceeding"). The Parties agree to modify the Agreement to implement any 96-98 Remand Proceeding decision or rules upon receipt of a final and nonappealable decision or rule. Neither Party waives its right to participate in, seek reconsideration of or appeal any such decision rendered as a result of the remand. Further, if as a result of any reconsideration or appeal of any decision, said decisions or rules are modified, vacated or changed, the Parties shall modify the Agreement to comply with such final decision within ninety (90) days of the effective date of such decision or order.

5. All of the other provisions of the Interconnection Agreement, dated June 19, 1997, shall remain in full force and effect.

6. The Parties acknowledge that the terms and/or rates of this Amendment were established pursuant to the afore-referenced Order of the Florida Public Service Commission and other judicial decisions which may not be final as of the date hereof. Any or all of the terms or rates of this Amendment may be altered or abrogated by any final and non-appealable legislative, regulatory, judicial or other legal action which materially affects the terms of this Amendment and/or Order. By signing this Amendment, neither Party waives any right to pursue such an appeal or other action.

7. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission or other regulatory body having jurisdiction over the subject matter of this Amendment, for approval subject to Section 252(e) of the federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

MCImetro Access Transmission Services, Inc.

By: \_\_\_\_\_

Name: Marcel Henry Title: Vice President

Date:

BellSouth Telecommunications Inc. By:

Name: Jerry D. Hendrix Title: Director-Interconnection Services-Pricing

Date: 3/18/99

MCImetro-BellSouth Florida Interconnection Agreement

# ATTACHMENT I

## PRICE SCHEDULE

#### 1. General Principles

1.1 All rates provided under this Agreement are permanent unless otherwise indicated in Table I, subject to true-up, and shall remain in effect until the Commission determines otherwise or unless they are not in accordance with all applicable provisions of the Act, the Rules and Regulations of the FCC in effect, or the Commission's rules and regulations, in which case Part A, Section 2 shall apply.

1.2 Except as otherwise specified in this Agreement, the Act or any Commission order, each Party shall be responsible for all costs and expenses that it incurs to comply with its obligation under this Agreement.

2. Local Service Resale

The rates that MCIm shall pay to BellSouth for Resale shall be an amount equal to BellSouth's tariffed rates for each resold service as reduced by a percentage amount equal to the wholesale discount (set forth below in section 2.1, below). If BellSouth reduces such tariffed rates during the term of this Agreement, the wholesale discount shall be applied to the reduced tariffed rates.

2.1 The following wholesale discount will apply to all Telecommunications Services available for resale in Florida:

Residential Service: 21.83 %

Business Service: 16.81 %

3. Unbundled Network Elements

The charges that MCIm shall pay to BellSouth for Network Elements are set forth in Table 1 of this Attachment.

4. Ancillary Functions and Supporting Elements

The interim prices for collocation, AIN and other Ancillary Functions or Supporting Elements that MCIm shall pay to BellSouth are set forth in Table 1 of this Attachment.

#### MCImetro-BellSouth Florida Interconnection Agreement

#### 5. Recorded Usage Data

The prices for Recorded Usage data are set forth in Table 1 of this Attachment.

#### 6. Inside Wire

The price of the BellSouth Inside Wire Maintenance Plan purchased by MCIm for resale shall not be reduced by the wholesale discount.

#### 7. Interconnection and Reciprocal Compensation

7.1 Compensation for the exchange of local traffic is set forth in Table 1 of this Attachment and shall be billed based on per-minutes-of-use and shall be measured in accordance with Attachment IV.

7.2 MCIm may choose to establish trunking to any given end office when there is sufficient traffic to route calls directly to such end office. If MCIm leases one-way trunks from BellSouth, MCIm will pay the transport charges for dedicated or common transport. For two-way trunks the charges will be shared equally by both parties.

7.3 Compensation for the termination of toll traffic and the origination of 800/888 traffic between the interconnecting parties shall based on the applicable access charges in accordance with FCC Rules and Regulations in effect.

7.4 Where a toll call is completed through BellSouth Florida's INP arrangement (e.g., remote call forwarding, flexible DID, etc.) to MCIm's subscriber, MCIm shall be entitled to applicable access charges in accordance with FCC Rules and Regulations.

7.5 MCIm shall pay a transit rate as set forth in Table 1 of this Attachment when MCIm uses an BellSouth access tandem to terminate a call to a third party LEC or another local service provider. BellSouth shall pay MCIm a transit rate equal to the BellSouth rate referenced above when BellSouth uses an MCIm switch to terminate a call to a third party LEC or another local service provider.

8. The recurring and non-recurring prices for Unbundled Network Elements (UNEs) in Table 1 of this Attachment are appropriate for UNEs on an individual, stand-alone basis. When two or more UNEs are combined, these prices may lead to duplicate charges. BellSouth shall provide recurring and non-recurring charges that do not include duplicate charges for functions or activities that MCIm does not need when two or more network elements are combined in a

MCImetro-BellSouth Florida Interconnection Agreement

single order. MCIm and BellSouth shall work together to establish the recurring and non-recurring charges in situations where MCIm is ordering multiple network elements. Where the parties cannot agree to these charges, either party may petition the Florida Public Service Commission to settle the disputed charge or charges. BellSouth must notify the Commission when a rate is set that excludes duplicated charges by filing a report within 30 days of the rate being established. This report must specify the elements being combined and the charges for that particular combination.

MCImetro/BellSouth Florida Interconnection Agreement

Table 1 (all items/rates not included)

	COMMISSION
	RECURRING
	RATES FOR
	UNBUNDLED
	NETWORK
	ELEMENTS
NETWORK INTERFACE DEVICE	*\$0.76
I OOPS	
2 - WIRE ANALOG	\$17.00
4 - WIRE ANALOG	\$30.00
	\$40.00
	00.09
4 - WIRE DST	φου.υυ
LOOP DISTRIBUTION	*\$7.00
END OFFICE SWITCHING	
PORTS	
2 - WIRE ANALOG	\$2.00
4 - WIRE ANALOG	*\$10.00
2 - WIRE ISDN	\$13.00
4 - WIRE DS1	\$125.00
USAGE	
INITIAL MIN.	\$0.0175
ADD'L MIN.	\$0.005
SIGNALING	¢5.00
	\$5.00
	\$113.00
	£0.0004
- CALL SETUP MSG	\$0.00001
- ICAP MESSAGE	\$0.00004
	\$64.00
UNBUNDLED LOOP CHANNELIZATION SYSTEM (DS1)	
- PER SYSTEM	\$480.00
- CENTRAL OFFICE CHANNEL	\$1.50
INTERFACE - VOICE	

MCImetro/BellSouth Florida Interconnection Agreement

NETWORK ELEMENT	COMMISSION APPROVED
	RECURRING
	RATES FOR
	UNBUNDLED
	NETWORK
	ELEMENTS
COMMON TRANSPORT	
PER MILE	\$0.000012
FACILITIES TERMINATION PER MOU	\$0.0005
DEDICATED TRANSPORT (DS1)	
PER MILE	\$1.60
PER FAC TERM	\$59.75
	<b>\$00.10</b>
TANDEM SWITCHING	\$0,00029
	+0.000L0
CALL TRANSPORT AND TERMINATION	
(Compensation for Exchange of Local	
Traffic)	
END OFFICE INTERCONNECTION	\$0.002
INCLUDING TRANSPORT (PER MOU)	
TANDEM INTERCONNECTION	\$0.00125
INCLUDING TRANSPORT (PER	
A51MOU)	
ODEDATOD SYSTEMS	
OPERATOR STSTEMS	¢4.00
OPERATOR CALL HANDLING	\$1.00
AUTOMATED CALL HANDLING	\$0.10
	\$0.80
EMERGENCY INTER.	\$1.00
NUMBER SERVICE INTERCEPT	
- PER QUERY	\$0.01
DIRECTORY ASSISTANCE (DA)	\$0.25
DA DABABASE	
- PER LISTING	\$0.001
- MONTHLY	\$100.00
DIRECT ACCESS TO DA SERVICE	
- MONTHLY	\$5,000.00
- PER QUERY	\$0.01
DA CALL COMPLETION	\$0.03
DA TRANSPORT	
- SWITCHED LOCAL CHANNEL	*\$133.81
- SWITCHED DEDICATED	
TRANSPORT DS1 LEVEL	
- PER MILE	*\$16.75
- PER FACILITY TERM.	\$59.75

# MCImetro/BellSouth Florida Interconnection Agreement

- SW COMM. / DA CALL	\$0.0003
- SW COMM. / DA CALL/MILE	\$0.00001
- TANDEM SW/DA CALL	\$0.00055

\* Interim Rates

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MCImetro/BellSouth Florida Interconnection Agreement

	COMMISSION
	APPROVED
	NONRECURRING
	RATESFOR
	UNBUNDLED
	NETWORK
	ELEMENIS
NETWORK INTERFACE DEVICE	*\$0.00
UNBUNDLED LOOP	
2 - WIRE ANALOG	
FIRST	\$140.00
ADDITIONAL	\$42.00
4 - WIRE ANALOG	
FIRST	\$141.00
ADDITIONAL	\$43.00
2 - WIRE ISDN	
FIRST	\$306.00
ADDITIONAL	\$283.00
4 - WIRE DS1	
FIRST	\$540.00
ADDITIONAL	\$465.00
LOOP DISTRIBUTION	* Left Blank Intentionally
END OFFICE SWITCHING	
PORT	
2 - WIRE ANALOG	
FIRST	\$38.00
ADDITIONAL	\$15.00
4 - WIRE ANALOG	
FIRST	*\$38.00
ADDITIONAL	*\$15.00
2 - WIRE ISDN	
FIRST	\$88.00
ADDITIONAL	\$66.00
4 - WIRE DS1	
FIRST	\$112.00
ADDITIONAL	\$91.00
	\$400.00
	φ-+00.00

MCImetro/BellSouth Florida Interconnection Agreement

NETWORK ELEMENT	COMMISSION APPROVED NONRECURRING RATES FOR
	ELEMENTS
UNBUNDLED LOOP CHANNELIZATION SYSTEM	
- PER SYSTEM (DS1 - Voice Grade)	
FIRST	\$350.00
ADDITIONAL	\$90.00
- CENTRAL OFFICE CHANNEL	
FIRST	\$5.75
ADDITIONAL	\$5.50
	***400.40
	\$100.49
OPERATOR SYSTEMS	
DIRECT ACCESS TO DA SERVICE	
- SERVICE ESTABLISHMENT CHARGE	\$820.00
DA TRANSPORT	
SWITCHED LOCAL CHANNEL	
FIRST	*\$866.97
ADDITIONAL	*\$486.83
SWITCHED DEDICATED TRANSPORT	
- PER FACILITY TERMINATION	*\$100.49

\* Interim Rates

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## **EXHIBIT A** MCImetro/BellSouth Florida Interconnection Agreement

ITEI	N		PRICE
POLES, DUCTS, CONDUITS AND ROW	MAPS		Left Blank Intentionally
	POLE ATTACHMENT CONDUIT		*\$ 4.20 PER POLE *\$ 0.56 PER FOOT
	INNERDUCT		Left Blank Intentionally
	LABOR RATE		Left Blank Intentionally
VIRTUAL COLLOCATION	*The rates for virtual collocation are set forth in Section E20 of BellSouth's Access Service Tariff		
PHYSICAL COLLOCATION		Monthly Recurring	NONRECURRING
	Application Fee		*\$3,850.00
	Space Preparation Fee		ICB
	Space Construction Fee		*\$4,500,00
	Cable Installation - Per Entrance Cable		*\$2,750.00
	Floor Space Zone A, Per Square Foot	*\$ 7.50	
	Floor Space Zone B, Per Square Foot	*\$ 6.75	
	Power, per AMP	*\$5.00	
	Cable Support Structure, Per Entrance Cable	*\$13.35	
	POT Bay (Optional Point of Termination Bay)		
	2-Wire	*\$0.40	
	4-Wire	*\$1.20	
	DS1	*\$1.20	
	DS3	*\$8.00	
	Cross-Connects		
	2-Wire Analog	*\$0.30	*\$15.20 - First
			*\$15.20 - Add'l
	4-Wire Analog	*\$0.50	*\$15.20 - First
			*\$15.20 - Add'l
	DS1	*\$8.00	*\$155.00 - First
			*\$27.00 - Add'l
	DS3	*\$72.00	*\$155.00 - First
			*\$27.00 - Add1
	Security Escort		
	Basic - 1 <sup>st</sup> half hour		*\$41.00
	Overtime 1 <sup>st</sup> half hour		*\$48.00 *\$55.00
			÷00.00

#### MCImetro/BellSouth Florida Interconnection Agreement

ITEN	1	PRICE	
PHYSICAL COLLOCATION (cont)			
	Basic - additional		*\$25.00
	Overtime- additional		*\$30.00
	Premium - additional		*\$35.00
AIN Related Services	Left Blank Intentionally		
LOCAL NUMBER PORTABILITY (1)			
	Service Provider Number Portability - Remote	Left Blank Inte	ntionally
	Service Provider Number Number Portability - Direct Inward Dialed (DID)	Left Blank Intentionally	
Note(s):			

 MCI and BellSouth shall pay its own costs in the provision of interim number portability. MCI and BellSouth shall track their costs of providing interim number portability with sufficient detail to verify the costs, in order to facilitate the Florida PSC's consideration of recovery of these costs in Docket No. 950737-TP.

\* Interim prices

#### AMENDMENT ONE DATED MAY 28, 1998 TO MCIm BELLSOUTH INTERCONNECTION AGREEMENT DATED JUNE 19, 1997

MCImetro Access Transmission Services, Inc. ("MCIm") and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend the MCIm/BellSouth Interconnection Agreement dated June 19, 1997 ("Interconnection Agreement") pursuant to the Order of the Florida Public Service Commission issued on April 29, 1998 which establishes the recurring and non-recurring rates for certain unbundled network elements (UNEs).

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. MCIm and BellSouth hereby covenant and agree as follows:

Based on the Order issued by the Florida Public Service Commission on April 29, 1998 in Docket No. 960757, 960833, 960846, the final rates for certain rate elements which were previously ordered as interim, pending filing of cost studies, were ordered by the Florida Public Service Commission. The rates as ordered are set forth in the Rate Tables attached hereto and incorporated herein as Exhibit A consisting of three pages delineating the recurring and nonrecurring charges for:

- a) Network Interface Device (NID) :
- b) 2 wire and 4-wire loop distribution:
- c) 2-wire ADSL-compatible loop:
- d) 2-wire and 4-wire HDSL-compatible loop:

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- e) Physical collocation;
- f) Virtual collocation
- g) Directory Assistance
- h) Dedicated Transport;
- i) 4-wire analog port

2.

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Attachment I of the Florida Interconnection Agreement is here  $g_{ij}$  unterland to incorporate the final rates for those certain rate elements that  $g_{ij} = i\pi g_{ij} g_{ij} \pi^{ij} y_{ij}$  ordered as interim as set forth in Exhibit 4 of this Amendoletit

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All of the other provisions, including all other trace listed in Alle Canadi 1995 the Florida Interconnection Agreen ant, dated June 9 1996 and a feature in full force and effect.

- 4. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission on or before May 29, 1998 as ordered by the Florida Public Service Commission. However, the Parties acknowledge that the terms and/or rates of this Amendment were established pursuant to the aforereferenced Order of the Florida Public Service Commission. Any or all of the terms or rates of this Amendment may be altered or abrogated by a successful challenge to the Amendment and/or the Order requiring the Amendment and/or any order approving this Amendment as permitted by applicable law. By signing this Amendment, neither Party waives any right to pursue such a challenge.
- 5. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission or other regulatory body having jurisdiction over the subject matter of this Amendment, for approval subject to Section 252(e) of the federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

**MCImetro Access Transmission** Services. Inc

By:

Name: Marcel Henry Title: Regional Vice President

Date: May 28, 1998

BellSouth Telecommunications, Inc.

**By**:

Name: Jerry D. Hendrix Title: Director-Interconnection Services-Pricing

5-28-98 Date:

Exhibit A

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#### BELLSOUTH/MCI RATES - FLORIDA UNBUNDLED NETWORK ELEMENTS

NIDs	<del></del>
NID, per month	\$1.09
Installation of 2-Wire/4-Wire ALEC NID, NRC - 1st	\$70.32
Installation of 2-Wire/4-Wire ALEC NID, NRC - Add'l	\$54.35
NID to NID Cross Connect, 2-Wire or 4-Wire, NRC	\$6.15
LOOP, INCLUDING NID	
2-Wire Asymmetrical Dig Sub Line (ADSL)/Compatible Loop, per mo	\$15.81
NRC - 1 <sup>al</sup>	\$113.85
NRC - Add'l	599.61
2-Wire High Bit Rate Dig Sub Line (HDSL)/Compatible Loop, per mo	\$12.12
NRC - 1"	\$113.85
NRC - Add'l	\$99.61
4-Wire High Bit Rate Dig Sub Line (HDSL)/Compatible Loop, per mo	\$18.24
NRC - 1 <sup>R</sup>	\$116.91
NRC - Add'l	\$101.71
SUB-LOOPS	
Loop Distribution per 2-Wire Analog VG Loop (Incl NID), per month	\$8.57
NRC - 1"	\$78.29
NRC - Add'l	\$58.33
Loop Distribution per 4-Wire Analog VG Loop (Incl NID), per month	\$11.29
NRC - 1 <sup>11</sup>	\$112.07
NRC - Add'l	\$92.11
UNBUNDLED LOCAL EXCHANGE SWITCHING (PORTS)	
4-Wire Analog VG Port, per month	\$9.14
NRC - 1 <sup>a</sup>	\$5.86
NRC - Add'l	\$5.86
UNBUNDLED TRANSPORT	
Interoffice Transport - Dedicated - DS1	
Interoffice Transport - Dedicated DS1 Level Interoffice per mile per mo	\$0.6013
Interoffice Transport - Dedicated DS1 - facilities term per mo	\$101.61
NRC - 1 <sup>#</sup>	\$45.91
NRC - Add'l	\$44.18
Interoffice Transport - Local Channel DS1, per month	\$44.35
NRC - 1*	\$248.50
NRC - Add'i	\$230.49
DIRECTORY ASSISTANCE SERVICES	
Directory Transport	
Directory Transport - Local Channel DS1, per month	\$43.64
NRC - 1"	\$242.45
NRC - Add'l	\$228.44
Directory Transport - Dedicated DS1 Level Interoffice per mile per mo	50.6013
Directory Transport - Dedicated DS1 Level Interoffice per fac term per mo	\$99.79
NRC - 17	\$45.91
	544.18
Uirectory Transport-Installation NHC, per trunk or signaling connection	6332.42
	3332.42
	30.02

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Exhibit A

	Unit	Recurring Rate (RC)	Non-Recurring Rate (NRC)
Application Fee/Planning Fee	Per Request	\$15.53	\$3,248
Space Preparation Fee	Per Request	NA	ICB
Space Construction			
Wire Cage	Per first 100 sq. Ft.	\$41.99	NA
Gypsum Board Cage	Per first 100 sq. Ft.	\$84.10	NA
Fire Rated Cage	Per first 100 sq. Ft.	\$99.73	NA
Wire Cage	Per add'l 50 sq. Ft.	\$4.14	NA
-	Per add'l 50 sq. Ft.	\$9.35	NA
	Per add'l 50 sq. Ft.	\$11.30	NA
Floor Space/Land and Building	Per sq. Ft.	54.25	NA
Cable Installation	Per Cable	\$2.77	\$1.056
Cable Rack		\$22.94	NA
TA			
rower	rerAmp	20.23	NA
Cross Connects			
2-wire	Per 100 Circuits	\$5.24	\$1,157
4-wire	Per 100 Circuits	\$5.24	\$1,157
DS-1/DCS	Per 28 Circuits	\$226.39	\$1,950
DS-1/DSX	Per 28 Circuits	\$11.51	\$1,950
DS-3/DCS	Per Circuit	\$\$6.97	\$528
DS-3/DSX	Per Circuit	\$10.06	\$528
Optical Circuits	Per Connection	\$6.46	\$2,431
Security Escort			
Regular Time	Per ¼ hour	NA	\$10.89
Overtime	Per ¼ hour	NA	\$13.64
Premium Time	Per ¼ hour	NA	\$16.40

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## **Physical Collocation Rates**

#### NO.068 P006/013

Exhibit A

Rate Element Description	Unit	Recurring Rate (RC)	Non-Recurring Rate (NRC)
Application Fee Planning Fee	Instal Request	NA	54.122
	Add'I Cable Request	NA	\$1.249
Floor Space Land and Building	Per Sq. Ft.	\$4.25	NA
Cable Installation	Per Cable	\$12.45	\$965
Cable Rack	Per ¼ Rack	52.24	NA
Power	Per Amp	<u>\$6.95</u>	NA
Cross Connects			
2-Wire	Per 100 Circuits	\$5.02	\$1.157
4-Wire	Per 100 Circuits	\$5.02	\$1,157
DS-1-DCS	Per 28 Circuits	\$226.39	\$1,950
DS-1-DSX	Per 28 Circuits	\$1L5L	\$1,950
DS-J-DCS	Per Circuit	\$56.97	\$528
DS-3-DSX	Per Circuit	\$10.06	\$528
Optical Circuits	Per Connection	56.71	\$2.431
Virtual to Virtual Connection			
Fiber	Per Cable	S.19	\$526.17
DS-1/DS-3	Per Cable	<u>\$.1</u> 7	\$134.46
Equipment Maintenance and Security Escort			<u> </u>
Regular Time	Per ¼ hour	NA	\$10.89
Overtime	Per 1/4 hour	NA	\$13.64
Premium Time	Per ½ hour	NA	\$16.40

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# Virtual Collocation Rates

#### SECOND AMENDMENT TO MCImetro/BELLSOUTH INTERCONNECTION AGREEMENT DATED JUNE 19, 1997

Pursuant to this Amendment to MCImetro/BellSouth Interconnection Agreement (the "Amendment"), for the state of Florida, MCImetro Access Transmission Services, Inc. ("MCIm") and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend the MCImetro/BellSouth Interconnection Agreement dated June 19, 1997 ("Interconnection Agreement")

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, MCIm and BellSouth hereby covenant and agree as follows:

1. On April 29, 1998 the Florida Public Service Commission issued Order No. PSC-98-0604-FOF-TP, in Dockets Nos. 960757-TP, 960833-TP, and 980846-TP. This Order set final rates for certain rate elements which were previously ordered as interim, pending filing of cost studies. On October 23, 1998 the Commission issued an Amendatory Order to Order No. PSC-98-0604-FOF-TP to correct the final \$101.61 rate for DS-1 Facility Termination as set forth in Table 1, page 13 of the orginal Order, which was incorrect. The approved rate is \$99.79. The final rates as corrected are as set forth in the Rate Tables attached hereto and incorporated herein as Exhibit A consisting of three pages delineating the recurring and non-recurring charges for:

- a) Network Interface Device (NID);
- b) 2 wire and 4-wire loop distribution;
- c) 2-wire ADSL compatible loop;
- d) 2-wire and 4-wire HDSL compatible loop;
- e) Physical collocation;
- f) Virtual collocation;
- g) Directory Assistance;
- h) Dedicated Transport; and
- i) 4-wire analog port

2. Attachment I of the Florida Interconnection Agreement is hereby amended to incorporate the final rates for those certain rate elements as set forth in Exhibit A of this Amendment.

3. All of the other provisions, including all other rates listed in Attachment I of the Florida Interconnection Agreement, dated June 19, 1997, shall remain in full force and effect.

4. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission on or before November 23, 1998 as ordered by the Florida Public Service Commission. However, the Parties acknowledge that the terms and/or rates of this Amendment were established pursuant to the afore-referenced Order of the Florida Public Service Commission. Any or all of the terms or rates of this Amendment may be altered or abrogated by a successful challenge to the Amendment and/or the Order requiring the Amendment and/or any order approving this Amendment as permitted by applicable law. By signing this Amendment, neither Party waives any right to pursue such a challenge.

5. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission or other regulatory body having jurisdiction over the subject matter of this Amendment, for approval subject to Section 252(e) of the federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

**MCImetro Access Transmission** Services. Inc. By: Name: Marcel Henry

Title: Vice President

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19 Nov 1998 Date:

BellSouth Telecommunications, Ing.

By:

Name: Jerry D. Hendrix Title: Director-Interconnection Services-Pricing

Date:

# BELLSOUTH/MCI RATES - FLORIDA

Exhibit A

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NIDS	3
NID, per month	
Installation of 2-Wire/4-Wire ALEC NID NRC . 1et	\$1.08
Installation of 2-Wire/4-Wire ALEC NID, NRC - Addil	\$70.32
NID to NID Cross Connect, 2-Wire or 4-Wire NRC	334.35
LOOP, INCLUDING NID	1 20 12
2-Wire Asymmetrical Dia Sub Line (ADSL)/Compatible Loop	
NRC - 1"	\$15.81
NRC - Add'l	5113 85
2-Wire High Bit Rate Dig Sub Line (HDSL //Compatible Loop and	599.61
NRC - 18	1 512.12
NRC - Add'l	3113.85
4-Wire High Bit Rate Dig Sub Line (HDSL)/Compatible Loop and mo	333.01
NRC - 1"	310.24 6116.01
NRC - Add')	\$110.31 \$10.31
SUBJOOR	3101.71
Loop Distribution nos 2 Miles Analos VC Loop /Incl MICh and another	00.67
NOC 18	58 57
NRC - MAT	\$78.29
Loop Distribution per 4 Wire Apples VG Loop (incl MD) and month	308.33
NRC - 1 <sup>#</sup>	511.29
NRC - Add'I	8112.07 COD 11
INCINC EDLOCAL EVCHANCE PUTCHING (DODTO)	<b>\$</b> 92.11
A WIN A SIGN VC BAL EACHANGE SWITCHING (PURIS)	
NDC 18	\$9.14
	30.00
	39.00
UNDUNDLED INUNSPORT	
Interomice Transport - Dedicated - US1	
Interomce Transport - Dedicated US1 Level Interomce per mile per mo	\$0.6013
Interomice Transport - Dedicated UST - facilities term per mo	288.1A
	343.91
	244.10 844.35
kipe +#	344.30 2248 60
NPC - Add'I	\$220.30
	4694.74
Directory Iransport	843 84
Directory Transport - Local Granner UST, per month	343.04
	9242.40 5776 44
Directory Transport - Dedicated DS1 Level Interoffers per mile car me	\$0.6013
Directory Transport - Dedicated DS1 Level Interoffice per mo	599.79
NRC - 1ª	\$45.91
NRC - Add'i	S44 18
Directory Transport-Installation NRC per tounk or signaling connection	
NRC - 1*	\$206.06
NBC - Addit	\$4.71

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# **Physical Collocation Rates**

Exhibit A

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Rate Element Description	Unit	Recurring Rate (RC)	Non- Recurring Rate (NRC)
Application Fee/Planning Fee	Per Request	\$15.53	\$3.248
Space Preparation Fee	Per Réquest	NA	ICB
Space Construction			
Wire Cage	Per first 100 sq. Ft.	\$41.99	• NA
Gypsum Board Cage	Per first 100 sq. Ft.	\$84.10	NA
Fire Rated Cage	Per first 100 sq. Ft.	\$99.73	NA
Wire Cage	Per add'l 50 sq. Ft.	\$4.14	NA
-	Per add'l 50 sq. Ft.	\$9.35	NA
	Per add'l 50 sq. Ft.	\$11.30	NA
Floor Space/Land and Building	Per sg. Ft.	\$4.25	NA
Cable Installation	Per Cable	\$2.77	\$1,056
Cable Rack		\$22.94	NA
	<u>+</u>		
Power	Per Amp	\$6.95	NA
Cross Connects		· · · · · · · · · · · · · · · · · · ·	
2-wire	Per 100 Circuits	\$5.24	\$1,157
4-wire	Per 100 Circuits	\$5.24	\$1,157
DS-1/DCS	Per 28 Circuits	\$226.39	\$1,950
DS-1/DSX	Per 28 Circuits	\$11.51	\$1,950
DS-3/DCS	Per Circuit	\$56,97	\$528
DS-3/DSX	Per Circuit	\$10.06	\$528
Optical Circuits	Per Connection	\$6.48	\$2,431
Security Escort			
Regular Time	Per ½ hour	NA	\$10.89
Overtime	Per ¼ hour	NA	\$13.64
Premium Time	Per ¼ hour	NA	\$16.40
Security Access Cards	Per Request (5 Cards)	NA	\$85.12

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#### Exhibit A

Description	Unit	Recurring Rate (RC)	Non-Recurring Rate (NRC)
Application Fee/Planning Fee	Initial Request	NA	\$4,122
	Add'i Cable Request	NA	\$1,249
Floor Space/Land and Building	Per Sq. Ft.	\$4 25	NA
Cable Installation	Per Cable	\$12.45	\$965
Cable Rack	Per ¼ Rack	\$2.24	NA
Power	Per Amp	\$6 95	NA
Cross Connects			
2-Wire	Per 100 Circuits	\$5.02	\$1,157
4-Vųire	Per 100 Circuits	\$5.02	\$1,157
DS-1-DCS	Per 28 Circuits	\$226.39	\$1,950
DS-1-DSX	Per 28 Circuits	\$11.51	\$1,950
DS-3-DCS	Per Circuit	\$56.97	\$528
DS-3-DSX	Per Circuit	\$10.06	\$528
Optical Circuits	Per Connection	<b>\$</b> 6.71	\$2,431
Virtual to Virtual Connection			
Fiber	Per Cable	\$.19	\$526.17
DS-1/DS-3	Per Cable	\$.17	\$134.48
Equipment Maintenance and Security Escort			
Regular Time	Per ¼ hour	NA	\$10.89
Overtime	Per ¼ hour	NA	\$13.64
Premium Time	Per ¼ hour	NA	\$16.40

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# Virtual Collocation Rates

5/27/98

#### THIRD AMENDMENT TO MCImetro/BELLSOUTH INTERCONNECTION AGREEMENT DATED JUNE 19, 1997

Pursuant to this Amendment to MCImetro/BellSouth Interconnection Agreement (the "Amendment"), for the state of Florida, MCImetro Access Transmission Services, Inc. ("MCIm") and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend the MCImetro/BellSouth Interconnection Agreement dated June 19, 1997 ("Interconnection Agreement")

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, MCIm and BellSouth hereby covenant and agree as follows:

1. Table 1, of Attachment I is hereby amended to include the following:

	Recurring Rate	Non-Recurring Rate
Selective Routing	\$0.00	\$230.00, Per End Office.
for Line CLASS		Per Line CLASS code
Codes		

2. Either or both of the Parties shall submit this Amendment to the Florida Public Service Commission or other regulatory body having jurisdiction over the subject matter of this Amendment, for approval subject to Section 252(e) of the federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

Name: Marcel Henry Title: Vice President

Date: 9-1-99

BeliSouth Telesommunications, Inc.

Name: Jerry/D. Hendrix Title: Director-Interconnection Services-Pricing

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Attachment III - i

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MCImetro-BellSouth Florida Interconnection Agreement

## ATTACHMENT III

## NETWORK ELEMENTS

#### Section 1. Introduction

BellSouth shall provide unbundled Network Elements in accordance with this Agreement, FCC Rules and Regulations. The price for each Network Element is set forth in Attachment I of this Agreement. Except as otherwise set forth in this Attachment, MCIm may order Network Elements as of the Effective Date.

#### Section 2. Unbundled Network Elements

2.1 BellSouth shall offer Network Elements to MCIm on an unbundled basis on rates, terms and conditions that are just, reasonable, and non-discriminatory in accordance with the terms and conditions of this Agreement.

2.2 BellSouth shall permit MCIm to connect MCIm's facilities or facilities provided to MCIm by third parties with each of BellSouth's unbundled Network Elements at any point designated by MCIm that is Technically Feasible.

2.3 MCIm may use one or more Network Elements to provide any feature, function, capability, or service option that such Network Element(s) is capable of providing or any feature, function, capability, or service option that is described in the technical references identified herein.

2.3.1 MCIm may, at its option, designate any Technically Feasible method of access to unbundled elements, including access methods currently or previously in use.

2.4 BellSouth shall offer each Network Element individually and in combination with any other Network Element or Network Elements in order to permit MCIm to provide Telecommunications Services to its subscribers.

2.5 For each Network Element, BellSouth shall provide a demarcation point (e.g., at a Digital Signal Cross Connect, Light Guide Cross Connect panel or a Main Distribution Frame) and, if necessary, access to such

Attachment III - 1

MCImetro-BellSouth Florida Interconnection Agreement demarcation point, which MCIm agrees is suitable. However, where BellSouth provides combined Network Elements at MCIm's direction, no demarcation point shall exist between such contiguous Network Elements.

2.6 With respect to Network Elements and services in existence as of the Effective Date of this Agreement, charges in Attachment I are inclusive and no other charges apply, including but not limited to any other consideration for connecting any Network Element(s) with other Network Element(s). BellSouth and MCIm agree to attempt in good faith to resolve any alleged errors or omissions in Attachment I.

2.7 This Attachment describes the initial set of Network Elements which MCIm and BellSouth have identified as of the effective date of this agreement:

Loop Network Interface Device Distribution Local Switching

> Operator Systems Common Transport Dedicated Transport Signaling Link Transport Signaling Transfer Points Service Control Points/Databases; and AIN capabilities Tandem Switching 911 Directory Assistance Loop Concentrator/Multiplexer

2.8 MCIm and BellSouth agree that the Network Elements identified in this Attachment are not all possible Network Elements.

2.9 MCIm may identify additional or revised Network Elements as necessary to provide telecommunications services to its subscribers, to improve network or service efficiencies or to accommodate changing technologies, subscriber demand, or other requirements.

MCIm will request such Network Elements in accordance with the bona fide request process described in Section 24 of Part A. Additionally, if BellSouth provides any Network Element that is not identified in this Agreement, to itself, to its own subscribers, to a BellSouth Affiliate or to any other entity, BellSouth shall make available the same Network

MCImetro-BellSouth Florida Interconnection Agreement Element to MCIm on terms and conditions no less favorable to MCIm than those provided to itself or to any other party, at charges set forth in Attachment I.

#### Section 3. Standards for Network Elements

3.1 Each Network Element shall be furnished at a service level equal to or better than the requirements set forth in the technical references referenced in

the following, as well as any performance or other requirements, identified herein. In the event Bell Communications Research, Inc. ("Bellcore"), or industry standard (e.g., American National Standards Institute ("ANSI")) technical reference or a more recent version of such reference sets forth a different requirement, MCIm may elect, where Technically Feasible, that such standard shall apply.

3.2 If one or more of the requirements set forth in this Agreement with respect to BellSouth's obligations to MCI are in conflict, MCIm shall elect which requirement shall apply.

3.3 Each Network Element provided by BellSouth to MCIm shall be at least equal in the quality of design, performance, features, functions, capabilities and other characteristics, including but not limited to levels and types of redundant equipment and facilities for power, diversity and security, that BellSouth provides to itself, BellSouth's own subscribers, to a BellSouth Affiliate or to any other entity.

3.3.1 BellSouth shall provide to MCIm, upon request, engineering, design, performance and other network data sufficient for MCIm to determine that the requirements of this Section 3 are being met. In the event that such data indicates that the requirements of this Section 3 are not being met, BellSouth shall, within ten (10) days, cure any design, performance or other deficiency, or, if the failure is not susceptible to cure within ten (10) days shall commence and continue its best efforts to correct such failure as soon as possible, and provide new data sufficient for MCIm to determine that such deficiencies have been cured.

3.3.2 BellSouth agrees to work cooperatively with MCIm to provide Network Elements that will meet MCIm's needs in providing services to its subscribers.
MCImetro-BellSouth Florida Interconnection Agreement 3.4 Unless otherwise requested by MCIm, each Network Element and the connections between Network Elements provided by BellSouth to MCIm shall be made available to MCIm on a priority basis, at any Technically Feasible point, that is equal to or better than the priorities that BellSouth provides to itself, BellSouth's own subscribers, to a BellSouth Affiliate or to any other entity.

#### Section 4. Loop:

4.1 Definition

4.1.1 A loop is a transmission facility between a distribution frame [cross-connect], or its equivalent, in a BellSouth central office or wire center, and the network interface device at a subscriber's premises, to which MCIm's granted exclusive use. This includes, but is not limited to two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS1-level signals. A loop may be composed of the following components:

Loop Concentrator / Multiplexer Loop Feeder Network Interface Device (NID) Distribution

4.1.2 If BellSouth uses Integrated Digital Loop Carrier (IDLCs) systems to provide the local loop, BellSouth will make alternate arrangements, equal in quality, to permit MCIm to order a contiguous unbundled local loop at no additional cost to MCIm except where the absence of existing facilities necessitates special construction.

4.2. Technical Requirements

Subdivided to each component as detailed below.

4.3 Interface Requirements

Subdivided to each component as detailed below.

- 4.4 Loop Components
  - 4.4.1 Loop Concentrator/Multiplexer

MCImetro-BellSouth Florida Interconnection Agreement

4.4.1.1 Definition:

4.4.1.1.1 The Loop Concentrator/Multiplexer is the Network Element that:

 aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (2) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing);
aggregates a specified number of signals or channels to fewer channels (concentrating); (4) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (5) in some instances performs electrical to optical (E/O) conversion.

4.4.1.1.2 The Loop Concentrator/Multiplexer function may be provided through a Digital Loop Carrier (DLC) system, channel bank, multiplexer or other equipment at which traffic is encoded and decoded, multiplexed and demultiplexed, or concentrated.

4.4.1.2 Technical Requirements

4.4.1.2.1 The Loop Concentrator/Multiplexer shall be capable of performing its functions on the signals for the following services, including but not limited to, (as needed by MCIm to provide end-to-end service capability to its subscriber):

4.4.1.2.1.1 two-wire & four-wire analog voice grade loops;

4.4.1.2.1.2 two-wire & four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.

4.4.1.2.1.3 4-wire digital data (2.4Kbps through 64Kbps and n times 64Kbps (where n  $\leq$  24);

4.4.1.2.1.4 DS3 rate private lines;

MCImetro-BellSouth Florida Interconnection Agreement

4.4.1.2.1.5 Optical SONET rate private lines;

4.4.1.2.2 The Loop Concentrator/Multiplexer shall perform the following functions as appropriate:

4.4.1.2.2.1 Analog to digital signal conversion of both incoming and outgoing (upstream and downstream) analog signals;

4.4.1.2.2.2 Multiplexing of the individual digital signals up to higher transmission bit rate signals (e.g., DS0, DS1, DS3, or optical SONET rates) for transport to the BellSouth central office through the Loop Feeder; and

4.4.1.2.2.3 Concentration of end-user subscriber signals onto fewer channels of a Loop Feeder (The concentration ratio shall be as specified by MCIm).

4.4.1.2.3 BellSouth shall provide power for the Loop Concentrator /Multiplexer, through a non-interruptible source if the function is performed in a central office, or from a commercial AC power source with battery backup if the equipment is located outside a central office. Such power shall also adhere to the requirements stated herein.

4.4.1.2.4 The Loop Concentrator/Multiplexer shall be provided to MCIm in accordance with the following Technical References:

4.4.1.2.4.1 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993.

4.4.1.2.4.2 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

4.4.1.2.4.3 ANSI T1.106 - 1988, American National Standard for Telecommunications -

MCImetro-BellSouth Florida Interconnection Agreement Digital Hierarchy - Optical Interface Specifications (Single Mode).

> 4.4.1.2.4.4 ANSI T1.105-1995, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.

4.4.1.2.4.5 ANSI T1.102-1993, American National Standard for Telecommunications -Digital Hierarchy - Electrical Interfaces.

4.4.1.2.4.6 ANSI T1.403-1989, American National Standard for Telecommunications -Carrier to Subscriber Installation, DS1 Metallic Interface Specification.

4.4.1.2.4.7 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria..

4.4.1.2.4.8 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987.

4.4.1.2.4.9 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev. 1, December 1993; Supplement 1, December 1993.

4.4.1.2.4.10 Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System, (LSSGR) FSD 20-02-2100, Issue 1, September 1989.

4.4.1.2.4.11 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

MCImetro-BellSouth Florida Interconnection Agreement 4.4.1.3 Requirements for an Intelligent Loop Concentrator/ Multiplexer

> 4.4.1.3.1 In addition to the basic functions described above for the Loop Concentrator/Multiplexer, the Intelligent Loop Concentrator/Multiplexer (IC/M) shall provide facility grooming, facility test functions, format conversion and signaling conversion as appropriate.

4.4.1.3.2 The underlying equipment that provides such IC/M function shall continuously monitor protected circuit packs and redundant common equipment.

4.4.1.3.3 The underlying equipment that provides such IC/M function shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.

4.4.1.3.4 The underlying equipment that provides such IC/M function shall be equipped with a redundant power supply or a battery back-up.

4.4.1.3.5 At MCIm's option, BellSouth shall provide MCIm with real time performance monitoring and alarm data on IC/M elements that may affect MCIm's traffic. This includes IC/M hardware alarm data and facility alarm data on the underlying device that provides such IC/M function.

4.4.1.3.6 At MCIm's option, BellSouth shall provide MCIm with real time ability to initiate tests on the underlying device that provides such IC/M function integrated test equipment as well as other integrated functionality for routine testing and fault isolation.

#### 4.4.1.4 Interface Requirements

4.4.1.4.1 The Loop Concentrator/Multiplexer shall meet the following interface requirements, as appropriate for the configuration that MCIm designates:

MCImetro-BellSouth Florida Interconnection Agreement 4.4.1.4.2 The Loop Concentrator/Multiplexer shall provide an analog voice frequency copper twisted pair interface at the serving wire center, as described in the references in Section 4.4.1.2.4.

4.4.1.4.3 The Loop Concentrator/Multiplexer shall provide digital 4-wire electrical interfaces at the serving wire center, as described in the references in Section 4.4.1.2.4.

4.4.1.4.4 The Loop Concentrator/Multiplexer shall provide optical SONET interfaces at rates of OC-3, OC-12, OC-48, and OC-N, N as described in the references in Section 4.4.1.2.4.

4.4.1.4.5 The Loop Concentrator/Multiplexer shall provide the Bellcore TR-303 DS1 level interface at the serving wire center. Loop Concentrator/ Multiplexer shall provide Bellcore TR-08 modes 1&2 DS1 interfaces when designated by MCIm. Such interface requirements are specified in the references in Section 4.4.1.2.4.

4.4.1.5 The Intelligent Loop Concentrator/Multiplexer shall be provided to MCIm in accordance with the Technical References set forth in Sections 4.4.1.2.4.8 through 4.4.1.2.4.11 above.

#### 4.4.2 Loop Feeder

#### 4.4.2.1 Definition:

4.4.2.1.1 The Loop Feeder provides connectivity between (1) a Feeder Distribution Interface (FDI) associated with Loop Distribution and a termination point appropriate for the media in a central office, or (2) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office. BellSouth shall provide MCIm physical access to the FDI, and the right to connect, the Loop Feeder to the FDI.

MCImetro-BellSouth Florida Interconnection Agreement 4.4.2.1.2 The physical medium of the Loop Feeder may be copper twisted pair, or single or multi-mode fiber or other technologies as designated by MCIm. In certain cases, MCIm will require a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that BellSouth offers is other than a copper facility.

#### 4.4.2.2 Requirements for Loop Feeder

4.4.2.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data, or analog radio frequency signals as appropriate.

4.4.2.2.2 BellSouth shall provide appropriate power for all active elements in the Loop Feeder. BellSouth will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant Remote Terminal (RT).

4.4.2.3 Additional Requirements for Special Copper Loop Feeder Medium

In addition to requirements set forth in Section 4.2 (above), MCIm may require BellSouth to provide copper twisted pair Loop Feeder which is unfettered by any intervening equipment (e.g. filters, load coils, and range extenders), so that MCIm can use these Loop Feeders for a variety of services by attaching appropriate terminal equipment at the ends.

4.4.2.4 Additional Technical Requirements for DS1 Conditioned Loop Feeder

In addition to the requirements set forth in Section 4.4.2.2 above, MCIm may designate that the Loop Feeder be conditioned to transport a DS1 signal. The requirements for such transport are defined in the references below in Section 4.4.2.6.

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4.4.2.5 Additional Technical Requirements for Optical Loop Feeder

In addition to the requirements set forth in Section 4.4.2.2 above, MCIm may designate that Loop Feeder will transport DS3 and OCn (where n is defined in the technical reference in Section 4.4.1.2.4.4. The requirements for such transport are defined in the references below in Section 4.4.2.6.

4.4.2.6 BellSouth shall offer Loop Feeder in accordance with the requirements set forth in the following Technical References:

4.4.2.6.1 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS1 interfaces; and,

4.4.2.6.2 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993.

4.4.2.6.3 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

4.4.2.6.4 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy -Optical Interface Specifications (Single Mode).

4.4.2.6.5 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.

4.4.2.6.6 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy -Electrical Interfaces.

4.4.2.6.7 ANSI T1.403-1989, American National Standard for Telecommunications - Carrier to Subscriber Installation, DS1 Metallic Interface Specification

MCImetro-BellSouth Florida Interconnection Agreement 4.4.2.6.8 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.

#### 4.4.2.7 Interface Requirements

4.4.2.7.1 The Loop Feeder point of termination (POT) within a BellSouth central office will be as follows:

4.4.2.7.1.1 Copper twisted pairs shall terminate on the MDF;

4.4.2.7.1.2 DS1 Loop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and

4.4.2.7.1.3 Fiber Optic cable shall terminate on a LGX.

4.4.2.7.2 Loop Feeder shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:

4.4.2.7.2.1 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2. August 1987.

4.4.2.7.2.2 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 19921- Rev. 1, December 1993-1 Supplement 1, December 1993.

4.4.2.7.2.3 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

#### 4.5 Network Interface Device

4.5.1 Definition:

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4.5.1.1 The Network Interface Device (NID) is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit. The function of the NID is to establish the network demarcation point between a carrier and its subscriber. The NID features two independent chambers or divisions which separate the service provider's network from the subscriber's inside wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider, and the subscriber each make their connections.

4.5.1.2 With respect to multiple-line termination devices, MCIm shall specify the quantity of NIDs it requires within such device.

4.5.1.3 Figure 1 shows a schematic of a NID.



Figure 1 - Network Interface Device

#### 4.5.2 Technical Requirements

4.5.2.1 The BellSouth Network Interface Device shall provide a clean, accessible point of connection for the inside wiring for MCIm's Distribution Media via MCIm's NID and shall maintain a connection to ground that meets the requirements set forth below.

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4.5.2.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring for MCIm's Distribution Media via MCIm's NID.

4.5.2.3 All NID posts or connecting points shall be in place, secure, usable and free of any rust or corrosion. The protective ground connection shall exist and be properly installed. The ground wire shall be free of rust or corrosion and have continuity relative to ground.

4.5.2.4 The NID shall be capable of withstanding all normal local environmental variations.

4.5.2.5 Where the NID is not located in a larger, secure cabinet or closet, the NID shall be protected from physical vandalism. The NID shall be physically accessible to MCIm designated personnel. In cases where entrance to the subscriber premises is required to give access to the NID, MCIm shall obtain entrance permission directly from the subscriber.

4.5.2.6 BellSouth shall offer the NID together with, and separately from the Distribution Media component of Loop Distribution.

#### 4.5.3 Interface Requirements

4.5.3.1 The NID shall be the interface to subscribers' premises wiring for all loop technologies.

4.5.3.2 The NID shall be equal to or better than all of the industry standards for NIDs set forth in the following technical references:

4.5.3.2.1 Bellcore Technical Advisory TA-TSY-000120 "Subscriber Premises or Network Ground Wire";

4.5.3.2.2 Bellcore Generic Requirement GR-49-CORE "Generic Requirements for Outdoor Telephone Network Interface Devices";

MCImetro-BellSouth Florida Interconnection Agreement 4.5.3.2.3 Bellcore Technical Requirement TR-NWT-00239 "Indoor Telephone Network Interfaces";

> 4.5.3.2.4 Bellcore Technical Requirement TR-NWT-000937 "Generic Requirements for Outdoor and Indoor Building Entrance"; and,

> 4.5.3.2.5 Bellcore Technical Requirement TR-NWT-0001 3 "Generic Requirements for Network Inside Wiring."

4.5.4 Responsibilities of The Parties for Conditions of Access And Attachment To NIDs. BellSouth shall allow MCIm to directly connect MCIm's Distribution Media to a BellSouth NID by using excess capacity on the NID. Where no excess capacity exists, MCIm shall adhere to the FCC rules regarding a NID-to-NID arrangement until such time as the appropriate guidelines are developed and incorporated within the National Electric Safety Code.

4.6. Distribution -

4.6.1 Definition:

4.6.1.1 Distribution is a Network Element which provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of a Feeder Distribution Interface (FDI). The FDI is a device that terminates the Distribution Media and the Loop Feeder, and cross-connects them in order to provide a continuous transmission path between the NID and a telephone company central office. There are three basic types of feeder-distribution connection: (i) multiple (splicing of multiple distribution pairs onto one feeder pair); (ii) dedicated ("home run"); and (iii) interfaced ("cross-connected"). While older plant uses multiple and dedicated approaches, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced approach. The feeder-distribution interface (FDI) in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

MCImetro-BellSouth Florida Interconnection Agreement 4.6.1.2 The Distribution may be copper twisted pair, coax cable, single or multi-mode fiber optic cable or other technologies. A combination that includes two or more of these media is also possible. In certain cases, MCIm shall require a copper twisted pair Distribution even in instances where the Distribution for services that BellSouth offers is other than a copper facility.

4.6.2 Requirements for All Distribution

4.6.2.1 Distribution shall be capable of transmitting signals for the following services (as requested by MCIm):

4.6.2.1.1 Two-wire & four-wire analog voice grade loops;

4.6.2.1.2 Two-wire & four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.

4.6.2.2 Distribution shall transmit all signaling messages or tones. Where the Distribution includes any active elements that terminate any of the signaling messages or tones, these messages or tones shall be reproduced by the Distribution at the interfaces to an adjacent Network Element in a format that maintains the integrity of the signaling messages or tones.

4.6.2.3 Distribution shall support functions associated with provisioning, maintenance and testing of the Distribution itself, as well as provide necessary access to provisioning, maintenance and testing functions for Network Elements to which it is associated.

4.6.2.4 Where possible, Distribution shall provide performance monitoring of the Distribution itself, as well as provide necessary access for performance monitoring for Network Elements to which it is associated.

4.6.2.5 Distribution shall be equal to or better than all of the applicable requirements set forth in the following technical references:

MCImetro-BellSouth Florida Interconnection Agreement 4.6.2.5.1 Bellcore TR-TSY-000057, "Functional Criteria for Digital Loop Carrier Systems", and,

> 4.6.2.5.2 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines."

4.6.2.6 BellSouth shall provide MCIm with physical access to, and the right to connect to, the FDI.

4.6.2.7 BellSouth shall offer Distribution together with, and separately from the NID component of Loop Distribution.

4.6.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements in Section 6.2. (above), MCIm may designate Distribution to be copper twisted pair which are unfettered by any intervening equipment (e.g., filters, load coils, range extenders) so that MCIm can use these loops for a variety of services by attaching appropriate terminal equipment at the ends.

4.6.4 Additional Requirements for Fiber Distribution

Fiber optic cable Distribution shall be capable of transmitting signals for the following services in addition to the ones under Section 6.2.1 above:

4.6.4.1 DS3 rate private line service;

4.6.4.2 Optical SONET OCn rate private lines (where n is defined in the technical reference in Section 4.4.1.2.4.4; and

4.6.4.3 Analog Radio Frequency based services (e.g., Cable Television (CATV)).

4.6.5 Additional Requirements for Coaxial Cable Distribution

Coaxial Cable (coax) Distribution shall be capable of transmitting signals for the following services in addition to the ones under Section 6.2.1 above:

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MCImetro-BellSouth Florida Interconnection Agreement 4.6.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mb/s and 45 Mb/s; and

4.6.5.2 Analog Radio Frequency based services (e.g., CATV).

4.6.6 Interface Requirements

4.6.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the performance requirements set forth in Section 15.2 of this Attachment III.

4.6.6.2 Distribution shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:

4.6.6.2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices," Issued December 1,1994;

4.6.6.2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems," Issued January 2, 1993;

4.6.6.2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines";

4.6.6.2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991;

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#### Section 7. Local Switching

7.1 Definition:

MCImetro-BellSouth Florida Interconnection Agreement 7.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the Main Distributing Frame (MDF) or Digital Cross Connect (DSX) panel to a desired line or trunk. The desired connection path for each call type will vary by subscriber and will be specified by MCIm as a routing scenario that will be implemented in advance as part of or after the purchases of the unbundled local switching. Such functionality shall include all of the features, functions, and capabilities that the underlying BellSouth switch that is providing such Local Switching function is capable of providing, including but not limited to: line signaling and signaling software, digit reception, dialed number translations, call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, announcements, calling features and capabilities (including call processing), Centrex, or Centrex-like services, Automatic Call Distributor (ACD), Carrier pre-subscription (e.g., long distance carrier, intraLATA toll), Carrier Identification Code (CIC) portability capabilities, testing and other operational features inherent to the switch and switch software. It also provides access to transport, signaling (ISDN User Part (ISUP) and Transaction Capabilities Application Part (TCAP), and platforms such as adjuncts, Public Safety Systems (911), operator services, directory services and Advanced Intelligent Network (AIN). Remote Switching Module functionality is included in the Local Switching function. Local Switching shall also be capable of routing local, intraLATA, interLATA, calls to international subscriber's preferred carrier, call features (e.g., call forwarding) and Centrex capabilities.

7.1.2 Local Switching, including the ability to route to MCIm's transport facilities, dedicated facilities and systems, shall be unbundled from all other unbundled Network Elements, i.e., Operator Systems, Common Transport, and Dedicated Transport. BellSouth shall provide MCIm with selective routing via Line Class Codes on a first-come, first-served basis. Further, MCIm and BellSouth shall continue to work with the appropriate industry groups to develop a long term solution for selective routing. BellSouth may reserve for itself a reasonable number of line class codes.

#### 7.2. Technical Requirements

7.2.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in Bellcore's Local Switching Systems General Requirements (FR-NWT-000064).

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7.2.1.1 BellSouth shall route calls to the appropriate trunk or lines for call origination or termination.

7.2.1.2 Subject to section 7.1.2, above, BellSouth shall route calls on a per line or per screening class basis to (1) BellSouth platforms providing Network Elements or additional requirements, (2) MCIm designated platforms, or (3) third party platforms.

7.2.1.3 Subject to section 7.1.2, above, BellSouth shall provide recorded announcements as designated by MCIm and call progress tones to alert callers of call progress and disposition. If BellSouth cannot provide branded messages upon MCIm's request, BellSouth will remove it's own branding from all such announcements.

7.2.1.4 BellSouth shall change a subscriber from BellSouth's services to MCIm's services without loss of feature functionality, unless expressly agreed otherwise by MCIm.

7.2.1.5 BellSouth shall perform routine testing (e.g., Mechanized Loop Tests (MLT) and test calls such as 105, 107 and 108 type calls) and fault isolation on a schedule designated by MCIm.

7.2.1.6 BellSouth shall repair and restore any equipment or any other maintainable component that may adversely impact MCIm's use of unbundled Local Switching.

7.2.1.7 BellSouth shall control congestion points such as mass calling events, and network routing abnormalities, using capabilities such as Automatic Call Gapping, Automatic Congestion Control (e.g. choke trunk groups), and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or BellSouth.

7.2.1.8 BellSouth shall perform manual call trace as designated by MCIm and permit subscriber originated call trace.

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7.2.1.9 BellSouth shall record all billable events, involving usage of the element, and send the appropriate recording data to MCIm as outlined in Attachment VIII.

7.2.1.10 For Local Switching used as 911 Tandems, BellSouth shall allow interconnection from MCIm local switching elements and BellSouth shall route the calls to the appropriate Public Safety Access Point (PSAP).

7.2.1.11 Where BellSouth provides the following special services, it shall provide to MCIm:

7.2.1.11.1 Essential Service Lines;

7.2.1.11.2 Telephone Service Prioritization;

7.2.1.11.3 Related services for handicapped;

7.2.1.11.4 Soft dial tone where required by law. Where BellSouth provides soft dial tone, it shall do so on a competitively-neutral basis.

7.2.1.11.5 Any other service required by law or regulation.

7.2.1.12 BellSouth shall provide Switching Service Point (SSP) capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch (STPs). In the event that Local Switching is provided out of a switch without SS7 capability, the Tandem shall provide this capability as discussed in the section on Tandem Switching. These capabilities shall adhere to Bellcore specifications TCAP (GR-1432-CORE), ISUP (GR-905-CORE), Call Management (GR-1429-CORE), Switched Fractional DS1 (GR-1357-CORE), Toll Free Service (GR-1428-CORE), Calling Name (GR-1597-CORE), Line Information Database (GR-954-CORE), and Advanced Intelligent Network (GR-2863-CORE).

7.2.1.13 BellSouth shall provide interfaces to adjuncts through industry standard and Bellcore interfaces. These adjuncts can include, but are not limited to, Service Node, Service Circuit Node, Voice Mail and Automatic Call

MCImetro-BellSouth Florida Interconnection Agreement Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.

7.2.1.14 BellSouth shall provide performance data regarding a subscriber line, traffic characteristics or other measurable elements to MCIm, upon MCIm's request.

7.2.1.15 BellSouth shall offer all Local Switching features that are Technically Feasible and provide feature offerings at parity to those provided by BellSouth to itself or any other party. Such feature offerings shall include but are not limited to:

7.2.1.15.1 Basic and primary rate ISDN;

7.2.1.15.2 Residential features;

7.2.1.15.3 Custom Local Area Signaling Services (CLASS/LASS);

7.2.1.15.4 Custom Calling Features

7.2.1.15.5 Centrex (including equivalent administrative capabilities, such as subscriber accessible reconfiguration and detailed message recording); and

7.2.1.15.6 Advanced intelligent network triggers supporting MCIm, and BellSouth service applications, in BellSouth's SCPs. BellSouth shall offer to MCIm all AIN triggers currently available to BellSouth for offering AIN-based services in accordance with applicable Bellcore technical references:

7.2.1.15.6.1 Off-Hook Immediate;

7.2.1.15.6.2 Off-Hook Delay;

7.2.1.15.6.3 Termination Attempt;

7.2.1.15.6.4 3/6/10;

7.2.1.15.6.5 Feature Code Dialing;

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MCImetro-BellSouth Florida Interconnection Agreement 7.2.1.15.6.6 Custom Dialing Plan(s) including 555 services; and

7.2.1.15.7 When the following triggers are supported by BellSouth, BellSouth shall make said triggers available to MCIm:

7.2.1.15.7.1 Private EAMF Trunk;

7.2.1.15.7.2 Shared Interoffice Trunk (EAMF, SS7);

7.2.1.15.7.3 N11;

7.2.1.15.7.4 Automatic Route Selection.

7.2.1.16 Subject to section 7.1.2, above, BellSouth shall assign each MCIm subscriber line the class of service designated by MCIm using line class codes, and shall route directory assistance calls from MCIm subscribers as directed by MCIm at MCIm's option. This includes each of the following call types:

7.2.1.16.1 O+/O- calls

7.2.1.16.2 911 calls

7.2.1.16.3 411/DA calls

7.2.1.16.4 InterLATA calls specific to PIC or regardless of PIC

7.2.1.16.5 IntraLATA calls specific to PIC or regardless of PIC

7.2.1.16.6 800/888 calls, prior to database query

7.1.2.16.7 Call forwarding of any type supported on the switch, to a line or a trunk

7.1.2.16.8 Any other customized routing that may be supported by the BellSouth switch

MCImetro-BellSouth Florida Interconnection Agreement 7.2.1.17 Subject to section 7.1.2, above, BellSouth shall assign each MCIm subscriber line the class of services designated by MCIm using line class codes and shall route operator calls from MCIm subscribers as directed by MCIm at MCIm's option. For example, BellSouth may translate 0and 0+ intraLATA traffic, and route the call through appropriate trunks to an MCIm Operator Services Position System (OSPS). Calls from Local Switching must pass the ANI-II digits unchanged.

> 7.2.1.18 If an MCIm subscriber subscribes to MCIm provided voice mail and messaging services, BellSouth shall redirect incoming calls to the MCIm system based upon presubscribed service arrangements (e.g., busy, don't answer, number of rings). In addition, BellSouth shall provide a Standard Message Desk Interface-Enhanced (SMDI-E) interface to the MCIm system. BellSouth shall support the Inter-switch Voice Messaging Service (IVMS) capability.

> 7.2.1.19 Local Switching shall be offered in accordance with the requirements of the following technical references and their future releases:

7.2.1.19.1 GR-1298-CORE, AIN Switching System Generic Requirements;

7.2.1.19.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements;

7.2.1.19.3 TR-NWT-001284, AIN 0.1 Switching System Generic Requirements;

7.2.1.19.4 SR-NWT-002247, AIN Release 1 Update.

7.2.2 Interface Requirements:

7.2.2.1 BellSouth shall provide the following interfaces to loops:

7.2.2.1.1 Standard Tip/Ring interface including loopstart or groundstart, on-hook signaling (e.g., for

MCImetro-BellSouth Florida Interconnection Agreement calling number, calling name and message waiting lamp);

7.2.2.1.2 Coin phone signaling;

7.2.2.1.3 Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;

7.2.2.1.4 Two-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;

7.2.2.1.5 Four-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;

7.2.2.1.6 Four-wire DS1 interface to PBX or subscriber provided equipment (e.g., computers and voice response systems);

7.2.2.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;

7.2.2.1.8 Switched Fractional DS1 with capabilities to configure Nx64 channels (where N = 1 to 24); and

7.2.2.1.9 Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.

7.2.2.2 BellSouth shall provide access to the following but not limited to:

7.2.2.2.1 SS7 Signaling Network or Multi-Frequency trunking if requested by MCIm;

7.2.2.2.2 Subject to section 7.1.2, above, interface to MCIm operator services systems or Operator Services through appropriate trunk interconnections for the system; and

7.2.2.2.3 Subject to section 7.1.2, above, interface to MCIm directory assistance services through the MCIm switched network or to Directory Services

MCImetro-BellSouth Florida Interconnection Agreement through the appropriate trunk interconnections for the system; and 950 access or other MCIm required access to interexchange carriers as requested through appropriate trunk interfaces.

7.3 Integrated Services Digital Network (ISDN)

7.3.1 Integrated Services Digital Network (ISDN) is defined in two variations. The first variation is Basic Rate ISDN (BRI). BRI consists of 2 Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN (PRI). PRI consists of 23 B Channels and one D Channel. Both BRI and PRI B Channels may be used for voice, Circuit Switched Data (CSD) or Packet Switched Data (PSD). The BRI D Channel may be used for call related signaling, non-call related signaling or packet switched data. The PRI D Channel may be used for call related signaling.

7.3.2 Technical Requirements - ISDN

7.3.2.1 BellSouth shall offer Data Switching providing ISDN that, at a minimum:

7.3.2.2 Provide integrated Packet handling capabilities;

7.3.2.3 Allow for full 2B+D Channel functionality for BRI; and

7.3.2.4 Allow for full 23B+D Channel functionality for PRI.

7.3.2.5 Each B Channel shall allow for voice, 64 Kbps CSD, and PSD of 128 logical channels at minimum speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B Channel.

7.3.2.6 Each B Channel shall provide capabilities for alternate voice and data on a per call basis.

7.3.2.7 The BRI D Channel shall allow for call associated signaling, non-call associated signaling and PSD of 16 logical channels at minimum speeds of 9.6 Kbps throughput of each logical channel up to the total capacity of the D channel.

MCImetro-BellSouth Florida Interconnection Agreement 7.3.2.8 The PRI D Channel shall allow for call associated signaling.

7.3.3 Interface Requirements - ISDN

7.3.3.1 BellSouth shall provide the BRI U interface using 2wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

7.3.3.2 BellSouth shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 specifications to interconnect Digital Loop Carriers.

7.3.3.3 BellSouth shall offer PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore requirements.

7.3.3.4 BellSouth shall offer PSD trunk interfaces operating at 56 Kbps.

#### Section 8. Operator Systems

See Attachment VIII, Section 6.1.2 Directory Assistance Service and 6.1.3 Operator Service.

#### Section 9. Common Transport

9.1 Definition:

Common Transport is an interoffice transmission path between BellSouth Network Elements (illustrated in Figure 2) shared by carriers. Where BellSouth Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common Transport. BellSouth shall offer Common Transport as of the effective date of the agreement, at DS0, DS1, DS3, STS-1 or higher transmission bit rate circuits. Common Transport consists of BellSouth inter-office transport facilities and is distinct and separate from local switching.



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Figure 2

#### 9.2 Technical Requirements

9.2.1 BellSouth shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Common Transport.

9.2.2 At a minimum, Common Transport shall meet all of the requirements set forth in the following technical references (as applicable for the transport technology being used):

9.2.3. ANSI T1.101-1994, American National Standard for Telecommunications - Synchronization Interface Standard Performance and Availability;

9.2.3.1 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;

9.2.3.2 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;

9.2.3.3 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;

9.2.3.4 ANSI T1.105.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Automatic Protection Switching;

9.2.3.5 ANSI T1.105.02-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Payload Mappings;

9.2.3.6 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;

9.2.3.7 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical

MCImetro-BellSouth Florida Interconnection Agreement Network (SONET)-Jitter at Network Interfaces - DS1 Supplement;

> 9.2.3.8 ANSI T1.105.05-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Tandem Connection;

> 9.2.3.9 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;

9.2.3.10 ANSI T1.105.07-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Sub STS-1 Interface Rates and Formats;

9.2.3.11 ANSI T1.105.09-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Network Element Timing and Synchronization;

9.2.3.12 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);

9.2.3.13 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;

9.2.3.14 ANSI T1.107a-1990 - American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications);

9.2.3.15 ANSI T1.107b-1991 -American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;

9.2.3.16 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);

9.2.3.17 ANSI T1.403-1989, Carrier to Subscriber Installation, DS1 Metallic Interface Specification;

MCImetro-BellSouth Florida Interconnection Agreement 9.2.3.18 ANSI T1.404-1994, Network-to-Subscriber Installation - DS3 Metallic Interface Specification;

9.2.3.19 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);

9.2.3.20 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;

9.2.3.21 Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;

9.2.3.22 Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;

9.2.3.23 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria;

9.2.3.24 Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.);

9.2.3.25 Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access;

9.2.3.26 Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1 February 1991;

9.2.3.27 Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue I May 1989;

9.2.3.28 Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition. Issue 1 August 1987;

#### Section 10. Dedicated Transport

10.1 Definition

MCImetro-BellSouth Florida Interconnection Agreement 10.1.1 Dedicated Transport is an interoffice transmission path between MCIm designated locations to which MCIm is granted exclusive use. Such locations may include BellSouth central offices or other locations, MCIm network components, other carrier network components, or subscriber premises. Dedicated Transport is depicted below in Figure 3.



Figure 3

10.1.2 BellSouth shall offer Dedicated Transport in each of the following manners:

10.1.2.1 As capacity on a shared facility.

10.1.2.2 As a circuit (e.g., DS1, DS3, STS-1) dedicated to MCIm.

10.1.2.3 As a system (i.e., the equipment and facilities used to provide Dedicated Transport such as SONET ring) dedicated to MCIm.

10.1.3 When Dedicated Transport is provided as a circuit or as capacity on a shared facility, it shall include (as appropriate):

10.1.3.1 Multiplexing functionality;

10.1.3.2 Grooming functionality; and,

10.1.3.3 Redundant equipment and facilities necessary to support protection and restoration.

10.1.4 When Dedicated Transport is provided as a system it shall include:

10.1.4.1 Transmission equipment such as multiplexers, line terminating equipment, amplifiers, and regenerators;

MCImetro-BellSouth Florida Interconnection Agreement 10.1.4.2 Inter-office transmission facilities such as optical fiber, copper twisted pair, and coaxial cable;

10.1.4.3 Redundant equipment and facilities necessary to support protection and restoration; and,

10.1.4.4 Dedicated Transport includes the Digital Cross-Connect System (DCS) functionality as an option. DCS is described below in Section 10.5.

10.2 Technical Requirements -

This Section sets forth technical requirements for all Dedicated Transport.

10.2.1 When BellSouth provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS1, DS3, STS-1) shall be dedicated to MCIm designated traffic.

10.2.2 BellSouth shall offer Dedicated Transport using currently available technologies including, but not limited to, DS1 and DS3 transport systems, SONET (or SDH) Bi-directional Line Switched Rings, SONET (or SDH) Unidirectional Path Switched Rings, and SONET (or SDH) point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.

10.2.3 When requested by MCIm, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.

10.2.4 When physical diversity is requested by MCIm, BellSouth shall provide the maximum feasible physical separation between transmission paths for all facilities and equipment (unless otherwise agreed by MCIm).

10.2.5 Upon MCIm's request, BellSouth shall provide real time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, MCIm's traffic.

10.2.6 BellSouth shall offer the following interface transmission rates for Dedicated Transport:

MCImetro-BellSouth Florida Interconnection Agreement 10.2.6.1 DS1 (Extended SuperFrame - ESF/B8ZS, D4, and unframed applications shall be provided);

10.2.6.2 DS3 (C-bit Parity, M13, and unframed applications shall be provided);

10.2.6.3 SONET standard interface rates in accordance with ANSI T1.105 and ANSI T1.105.07 and physical interfaces per ANSI T1.106.06 (including referenced interfaces). In particular, VT1.5 based STS-1s will be the interface at an MCIm service node.

10.2.6.4 SDH Standard interface rates in accordance with International Telecommunications Union (ITU) Recommendation G.707 and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.

10.2.7 BellSouth shall provide cross-office wiring up to a suitable Point of Termination (POT) between Dedicated Transport and MCIm designated equipment. BellSouth shall provide the following equipment for the physical POT:

10.2.7.1 DSX1 for DS1s or VT1.5s;

10.2.7.2 DSX3 for DS3s or STS-1s; and

10.2.7.3 LGX for optical signals (e.g., OC-3 and OC-12).

10.2.9 For Dedicated Transport provided as a system, BellSouth shall design the system (including but not limited to facility routing and termination points) according to MCIm specifications where the MCIm specifications are available. Those MCIm specifications not available shall be addressed via the bona fide request process.

10.2.10 Upon MCIm's request, BellSouth shall provide MCIm with electronic provisioning control of an MCIm specified Dedicated Transport on SONET rings. As system development allows, either initiated by BellSouth or via the bona fide request process, BellSouth shall provide electronic provisioning control of linear transport systems.

10.2.11 BellSouth shall offer Dedicated Transport together with and separately from DCS.

MCImetro-BellSouth Florida Interconnection Agreement 10.3 Technical Requirements for Dedicated Transport Using SONET Technology.

This Section sets forth additional technical requirements for Dedicated Transport using SONET technology including rings, point-to-point systems, and linear add-drop systems.

10.3.1 All SONET Dedicated Transport provided as a system shall:

10.3.1.1 Be synchronized from both a primary and secondary Stratum 1 level timing source.

10.3.1.2 Provide SONET standard interfaces which properly interwork with SONET standard equipment from other vendors. This includes, but is not limited to, SONET standard Section, Line and Path performance monitoring, maintenance signals, alarms, and data channels.

10.3.1.3 Provide Data Communications Channel (DCC) or equivalent connectivity through the SONET transport system. Dedicated Transport provided over a SONET transport system shall be capable of routing DCC messages between MCIm and SONET network components connected to the Dedicated Transport. For example, if MCIm leases a SONET ring from BellSouth, that ring shall support DCC message routing between MCIm and SONET network components connected to the ring.

10.3.1.4 Support the following performance requirements for each circuit (STS-1, DS1, DS3, etc.):

10.3.1.4.1 No more than 10 Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 10.4.5); and

10.3.1.4.2 No more than 1 Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 10.4.5).

10.3.2 SONET rings shall:

10.3.2.1 Be provisioned on physically diverse fiber optic cables (including separate building entrances where available and diversely routed intraoffice wiring). "Diversely

MCImetro-BellSouth Florida Interconnection Agreement routed" shall be interpreted as the maximum feasible physical separation between transmission paths, unless otherwise agreed by MCIm.

10.3.2.2 Support dual ring interworking per SONET Standards.

10.3.2.3 Where Technically Feasible, provide the necessary redundancy in optics, electronics, and transmission paths (including intra-office wiring) such that no single failure will cause a service interruption.

10.3.2.4 Provide the ability to disable ring protection switching at MCIm's direction (selective protection lock-out). This requirement applies to line switched rings only. The only exceptions to this requirement shall be BellSouth SONET equipment in use as of the Effective Date which lacks that functionality.

10.3.2.5 Provide the ability to use the protection channels to carry traffic (extra traffic). This requirement applies to line switched rings only. The only exceptions to this requirement shall be BellSouth SONET equipment in use as of the Effective Date which lacks that functionality.

10.3.2.6 Provide 50 millisecond restoration unless a ring protection delay is set to accommodate dual ring interworking schemes.

10.3.2.7 Have settable ring protection switching thresholds that shall be set in accordance with MCIm's specifications.

10.3.2.8 Provide revertive protection switching with a settable wait to restore delay with a default setting of 5 minutes. This requirement applies to line switched rings only.

10.3.2.9 Provide non-revertive protection switching. This requirement applies to path switched rings only.

10.3.2.10 Adhere to the following availability requirements, where availability is defined in the technical reference set forth in Section 10.4.5.

MCImetro-BellSouth Florida Interconnection Agreement 10.3.2.10.1 No more than 0.25 minutes of unavailability month; and

10.3.2.10.2 No more than 0.5 minutes of unavailability per year.

10.4 At a minimum, Dedicated Transport shall meet each of the requirements set forth in Section 9.2.3 and in the following technical references.

10.4.1 ANSI T1.105.04-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Data Communication Channel Protocols and Architectures;

10.4.2 ANSI T1.119-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications;

10.4.3 ANSI T1.119.01-1995, American National Standard for Telecornmunications - Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment;

10.4.4 ANSI T1.119.02-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment;

10.4.5 ANSI T1.231-1993 -American National Standard for Telecommunications - Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring.

10.5 Digital Cross-Connect System (DCS)

10.5.1 Definition:

10.5.1.1 DCS provides automated cross connection of Digital Signal level 0 (DS0) or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include but are not limited to DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS1 rate or greater with crossconnection typically at the DS0 rate. This same

MCImetro-BellSouth Florida Interconnection Agreement nomenclature, at the appropriate rate suBellSouthitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1 s) or other Synchronous Optical Network (SONET) signals (e.g., STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (e.g., DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.

> 10.5.1.2 In locations where automated cross connection capability does not exist, DCS will be defined as the combination of the functionality provided by a Digital Signal Cross-Connect (DSX) or Light Guide Cross-Connect (LGX) patch panels and D4 channel banks or other DS0 and above multiplexing equipment used to provide the function of a manual cross connection.

10.5.1.3 Interconnection between a DSX or LGX, to a switch, another cross-connect, or other service platform device, is included as part of DCS.

10.6 DCS Technical Requirements

10.6.1 DCS shall provide completed end-to-end cross connection of the channels designated by MCIm.

10.6.2 Where Technically Feasible, DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast, and facility test functions.

10.6.3 DCS shall provide multiplexing, format conversion, signaling conversion, or other functions.

10.6.4 The end-to-end cross connection assignment shall be input to the underlying device used to provide DCS from an operator at a terminal or via an intermediate system. The cross connection assignment shall remain in effect whether or not the circuit is in use.

MCImetro-BellSouth Florida Interconnection Agreement 10.6.5 BellSouth shall continue to administer and maintain DCS, including updates to the control software to current available releases.

10.6.6 BellSouth shall provide various types of Digital Cross-Connect Systems including:

10.6.6.1 DS0 cross-connects (typically termed DCS 1/0);

10.6.6.2 DS1/VT1.5 (Virtual Tributaries at the 1.5Mbps rate) cross-connects (typically termed DCS 3/1);

10.6.6.3 DS3 cross-connects (typically termed DCS 3/3);

10.6.6.4 STS-1 cross-connects; and

10.6.6.5 Other Technically Feasible cross-connects designated by MCIm.

10.6.7 BellSouth shall provide an automated interface which allows real time configuration and reconfiguration of the channels between the physical interfaces.

10.6.8 Left Blank Intentionally.

10.6.9 DCS shall continuously monitor protected circuit packs and redundant common equipment.

10.6.10 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.

10.6.11 The underlying equipment used to provide DCS shall be equipped with a redundant power supply or a battery back-up.

10.6.12 BellSouth shall make available to MCIm spare facilities and equipment necessary for provisioning repairs, and to meet MCIm's maintenance standards as specified in the Provisioning and Maintenance sections.

10.6.13 At MCIm's option, BellSouth shall provide MCIm with real time performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact MCIm's services.

MCImetro-BellSouth Florida Interconnection Agreement 10.6.14 Where Technically Feasible, at MCIm's option, BellSouth shall provide MCIm with real time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation.

10.6.15 Where Technically Feasible, DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS1 or STS-1 to DS3).

10.6.16 Where Technically Feasible, DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (e.g., Optical Carrier level 3, i.e., OC-3, interfaces on a DCS 3/1).

10.6.17 Where Technically Feasible, DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring.

10.6.18 Where Technically Feasible, DCS shall provide multipoint bridging of multiple channels to other DCSs. MCIm may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries.

10.6.19 Where Technically Feasible, DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by MCIm.

#### 10.7 DCS Interface Requirements

10.7.1 BellSouth shall provide physical interfaces on DS0, DS1, and VT1.5 channel cross-connect devices at the DS1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and MCIm standards.

10.7.2 BellSouth shall provide physical interfaces on DS3 channel cross-connect devices at the DS3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and MCIm standards.

10.7.3 BellSouth shall provide physical interfaces on STS-1 crossconnect devices at the OC-3 rate or higher. In all such cases,

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MCImetro-BellSouth Florida Interconnection Agreement these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and MCIm standards.

10.7.4 Interfaces on all other cross-connect devices shall be in compliance with applicable Bellcore, ANSI, ITU, and MCIm standards.

10.8 DCS shall, at a minimum, meet all the requirements set forth in the following technical references:

10.8.1 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;

10.8.2 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;

10.8.3 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Basic Description including Multiplex Structure, Rates and Formats;

10.8.4 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Jitter at Network Interfaces;

10.8.5 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS1 Supplement;

10.8.6 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Physical Layer Specifications;

10.8.7 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);

10.8.8 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;

10.8.9 ANSI T1.107a-1990, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications);

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MCImetro-BellSouth Florida Interconnection Agreement 10.8.10 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;

10.8.11 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);

10.8.12 ANSI T1.403-1989, Carrier to Subscriber Installation, DS1 Metallic Interface Specification:

10.8.13 ANSI T1.404-1994, Network-to-Subscriber Installation - DS3 Metallic Interface Specification;

10.8.14 FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;

10.8.15 GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;

10.8.16 GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria; and

10.8.17 TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

#### Section 11. Signaling Link Transport -

11.1 Definition:

Signaling Link Transport is a set of two or four dedicated 56 Kbps transmission paths between MCIm-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity and a cross connect at a BellSouth STP site.

11.2 Technical Requirements

11.2.1 Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.

11.2.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:

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11.2.2.1 As an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch (STPs) pair; and

11.2.2.2 As a "D-link" which is a connection between two STPs pairs in different company networks (e.g., between two STPs pairs for two Competitive Local Exchange Carriers (CLECs)).

11.2.3 Signaling Link Transport shall consist of two or more signaling link layers as follows:

11.2.3.1 An A-link layer shall consist of two links.

11.2.3.2 A D-link layer shall consist of four links.

11.2.4 A signaling link layer shall satisfy a performance objective such that:

11.2.4.1 There shall be no more than two minutes down time per year for an A-link layer, and

11.2.4.2 There shall be negligible (less than 2 seconds) down time per year for a D-link layer.

11.2.5 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

11.2.5.1 No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two separate physical paths end-to-end); and

11.2.5.2 No two concurrent failures of facilities or equipment shall cause the failure of all four links in a D-link layer (i.e., the links should be provided on a minimum of three separate physical paths end-to-end).

11.3 Interface Requirements

11.3.1 There shall be a DS1 (1.544 Mbps) interface at the MCImdesignated SPOIs. Each 56 Kbps transmission path shall appear as a DS0 channel within the DS1 interface.

#### MCImetro-BellSouth Florida Interconnection Agreement Section 12. Signaling Transfer Points (STPs) -

12.1 Definition:

Signaling Transfer Points (STPs) provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer points. Figure 4 depicts Signaling Transfer Points.





#### 12.2 Technical Requirements

12.2.1 STPs shall provide access to all other Network Elements connected to the BellSouth SS7 network. These include:

- 12.2.1.1 BellSouth Local Switching or Tandem Switching;
- 12.2.1.2 BellSouth Service Control Points/DataBases;
- 12.2.1.3 Third-party local or tandem switching systems; and

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12.2.1.4 Third-party-provided STPs.

12.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to BellSouth's SS7 network. This explicitly includes the use of BellSouth's SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the BellSouth SS7 network (i.e., transit messages). When the BellSouth SS7 network is used to convey transit messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.

12.2.3 If a BellSouth tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an MCIm local switch and third party local switch, BellSouth's SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the MCIm local STPs and the STPs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to BellSouth's STPs.

12.2.4 STPs shall provide all functions of the MTP as specified in ANSI T1.111 (Reference 12.5.2). This includes:

12.2.4.1 Signaling Data Link functions, as specified in ANSI T1.111.2;

12.2.4.2 Signaling Link functions, as specified in ANSI T1.111.3; and

12.2.4.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

12.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112 (Reference 12.5.4). In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4.

12.2.6 In cases where the destination signaling point is a BellSouth local or tandem switching system or data base, or is an

MCImetro-BellSouth Florida Interconnection Agreement MCIm or third party local or tandem switching system directly connected to BellSouth's SS7 network, BellSouth STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the BellSouth SS7 network, and shall not perform SCCP Subsystem Management of the destination.

12.2.7 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118 (Reference 12.5.7), when this capability becomes available on BellSouth STPs.

12.2.8 STPs shall provide all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 12.5.6. Upon MCIm request, BellSouth will identify the switches in which OMAP functionality is available. This includes:

12.2.8.1 MTP Routing Verification Test (MRVT); and,

12.2.8.2 SCCP Routing Verification Test (SRVT).

12.2.9 In cases where the destination signaling point is a BellSouth local or tandem switching system or DB, or is an MCIm or third party local or tandem switching system directly connected to the BellSouth SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the BellSouth SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of BellSouth STPs, and when mutually agreed upon by MCIm and BellSouth.

12.2.10 STPs shall be equal to or better than the following performance requirements:

12.2.10.1 MTP Performance, as specified in ANSI T1.111.6; and

12.2.10.2 SCCP Performance, as specified in ANSI T1.112.5.

12.3 Interface Requirements

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12.3.1 BellSouth shall provide the following STPs options to connect MCIm or MCIm-designated local switching systems or STPs to the BellSouth SS7 network:

12.3.1.1 An A-link interface from MCIm local switching systems; and,

12.3.2 Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:

12.3.2.1 An A-link layer shall consist of two links, as depicted in Figure 6.



Figure 6. A-Link Interface

12.3.3 The Signaling point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where the BellSouth STPs is located. There shall be a DSI or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface.

BellSouth shall offer higher rate DS1 signaling for interconnecting MCIm local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs. MCIm and ILEC shall cooperate to establish mutually agreed upon SPOI's.

12.3.4 BellSouth shall provide MTP and SCCP protocol interfaces that shall conform to all sections relevant to the MTP or SCCP in the following specifications:

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12.3.4.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and

12.3.4.2 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

#### 12.4 Message Screening

12.4.1 BellSouth shall set message screening parameters so as to accept messages from MCIm local or tandem switching systems destined to any signaling point in the BellSouth SS7 network with which the MCIm switching system has a legitimate signaling relation.

12.4.2 BellSouth shall set message screening parameters so as to accept messages from MCIm local or tandem switching systems destined to any signaling point or network interconnected to the BellSouth SS7 network with which the MCIm switching system has a legitimate signaling relation.

12.4.3 BellSouth shall set message screening parameters so as to accept messages destined to an MCIm local or tandem switching system from any signaling point or network interconnected to the BellSouth SS7 network with which the MCIm switching system has a legitimate signaling relation.

12.4.4 BellSouth shall set message screening parameters so as to accept and send messages destined to an MCIm SCP from any signaling point or network interconnected to the BellSouth SS7 network with which the MCIm SCP has a legitimate signaling relation.

12.5 STP Requirements

12.5.1 STPs shall be equal to or better than all of the requirements for STPs set forth in the following technical references:

MCImetro-BellSouth Florida Interconnection Agreement 12.5.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Message Transfer Part (MTP);

12.5.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Message Transfer Part (MTP) Supplement;

12.5.4 ANSI T1.112-1992 American National, Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);

12.5.5 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;

12.5.6 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Operations, Maintenance and Administration Part (OMAP);

12.5.7 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Intermediate Signaling Network Identification (ISNI);

12.5.8 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and

12.5.9 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

#### Section 13. Service Control Points/Databases

#### 13.1 Definition

13.1.1 Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System, and AIN.

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13.1.2 A Service Control Point (SCP) is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data. (e.g., an 800 database stores subscriber record data that provides information necessary to route 800 calls).

13.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this section address storage of information, access to information (e.g. signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to MCIm in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subsections 13.3through 13.7:

13.2.1 BellSouth shall provide physical interconnection to SCPs through the SS7 network and protocols, as specified in Section 12 of this Attachment, with TCAP as the application layer protocol.

13.2.2 BellSouth shall provide physical interconnection to databases via industry standard interfaces and protocols (e.g., ISDN and X.25).

13.2.3 The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in Section 12 of this Attachment (which applies to both SS7 and non-SS7 interfaces).

13.2.4 Database functionality shall be unavailable a maximum of 30 minutes per year.

13.2.5 BellSouth shall provide Database provisioning consistent with the provisioning requirements of this Agreement (e.g., data required, edits, acknowledgments, data format and transmission medium and notification of order completion).

13.2.6 The operational interface provided by BellSouth shall complete Database transactions (i.e., add, modify, delete) for

MCImetro-BellSouth Florida Interconnection Agreement MCIm subscriber records stored in BellSouth databases within an interval at parity with BellSouth's own provisioning schedule..

13.2.7 BellSouth shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of BellSouth Network Affecting Events, testing, dispatch schedule and measurement and exception reports).

13.2.8 BellSouth shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).

13.2.9 BellSouth shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.

13.2.10 BellSouth shall provide SCPs/Databases in accordance with the logical security requirements specified in this Agreement.

13.3 Number Portability Database

Permanent Number Portability (PNP) is currently being worked in industry forums. The results of these forums will dictate the industry direction of PNP. BellSouth and MCIm agree to implement PNP as directed by the FCC as a result of final, nonappealable orders in FCC Docket 95-116 and the appropriate industry forums.

#### 13.4 Line Information Database (LIDB)

This Subsection 13.4 defines and sets forth additional requirements for the Line Information Database. This Subsection 13.4 supplements the requirements of Subsection 13.2 and 13.7.

13.4.1 Definition:

The Line Information Database (LIDB) is a transaction-oriented database accessible through Common Channel Signaling (CCS) networks. It contains records associated with subscriber Line Numbers and Special Billing Numbers (in accordance with the requirements in the technical reference in Section 13.7.5). LIDB accepts queries from other Network Elements, or MCIm's network, and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions

MCImetro-BellSouth Florida Interconnection Agreement such as screening billed numbers that provides the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the BellSouth CCS network and other CCS networks. LIDB also interfaces to administrative systems. The administrative system interface provides Work Centers with an interface to LIDB for functions such as provisioning, auditing of data, access to LIDB measurements and reports.

#### 13.4.2 Technical Requirements

13.4.2.1 Prior to the availability of a long-term solution for Number Portability, BellSouth shall enable MCIm to store in BellSouth's LIDB any subscriber Line Number or Special Billing Number record, (in accordance with the technical reference in Section 13.7.5) whether ported or not, for which the NPA-NXX or NXX-0/IXX Group is supported by that LIDB.

> 13.4.2.1.1 MCIm agrees that it will accept responsibility for telecommunications services billed by BellSouth for its billing and collection customers for MCIm's end user accounts which are resident in LIDB pursuant to this Agreement. MCIm authorizes BellSouth to place such charges on MCIm's bill from BellSouth and agrees that it shall pay such charges. Charges for which MCIm hereby takes responsibility include, but are not limited to, collect and third number calls.

> 13.4.2.1.2 Charges for such services shall appear on a separate BellSouth bill page identified with the name of the entity for which BellSouth is billing the charge.

> 13.4.2.1.3 MCIm shall have the responsibility to render a billing statement to its end users for these charges, but MCIm's obligation to pay BellSouth for the charges billed shall be independent of whether MCIm is able or not to collect from MCIm's end users.

13.4.2.1.4 BellSouth shall not become involved in any disputes between MCIm and the entities for

MCImetro-BellSouth Florida Interconnection Agreement which BellSouth performs billing and collection. BellSouth will not issue adjustments for charges billed on behalf of an entity to MCIm. It shall be the responsibility of MCIm and the other entity to negotiate and arrange for any appropriate adjustments.

> 13.4.2.2 Prior to the availability of a long-term solution for Number Portability, BellSouth shall enable MCIm to store in BellSouth's LIDB any subscriber Line Number or Special Billing Number (in accordance with the technical reference in Section 13.7.5) record, whether ported or not, and NPA-NXX and NXX-0/IXX Group Records, belonging to an NPA-NXX or NXX-0/I XX owned by MCIm.

> 13.4.2.3 Prior to the availability of a long-term solution for Number Portability, BellSouth shall enable MCIm to store in BellSouth's LIDB any subscriber Line Number or Special Billing Number (in accordance with the technical reference in Section 13.7.5) record, whether ported or not, regardless of the number's NPA-NXX or NXX-0/IXX.

13.4.2.4 BellSouth shall perform the following LIDB functions (i.e., processing of the following query types as defined in the technical reference in Section 13.7.5) for MCIm's subscriber records in LIDB:

13.4.2.4.1 Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls); and

13.4.2.4.2 nonproprietary Calling Card Validation.

13.4.2.5 BellSouth shall process MCIm's subscriber records in LIDB at least at parity with BellSouth subscriber records, with respect to other LIDB functions (as defined in the technical reference in Section 13.5). BellSouth shall indicate to MCIm what additional functions (if any) are performed by LIDB in their network.

13.4.2.6 Within two (2) weeks after a request by MCIm, BellSouth shall provide MCIm with a list of the subscriber data items which MCIm would have to provide in order to support each required LIDB function. The list shall indicate

MCImetro-BellSouth Florida Interconnection Agreement which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.

13.4.2.7 BellSouth shall provide LIDB systems for which operating deficiencies that would result in calls being blocked, shall not exceed 30 minutes per year.

13.4.2.8 BellSouth shall provide LIDB systems for which operating deficiencies that would not result in calls being blocked shall not exceed 12 hours per year.

13.4.2.9 BellSouth shall provide LIDB systems for which the LIDB function shall be in overload (degraded performance in accordance with the technical reference in Section 13.7.5) no more than 12 hours per year. Such deficiency period is in addition to the periods specified in Sections 13.4.2.7 and 13.4.2.8 above.

13.4.2.10 BellSouth shall provide MCIm with the capability to provision (e.g., to add, update, and delete) NPA-NXX and NXX-0/IXX Group Records, and Line Number and Special Billing Number Records, associated with MCIm subscribers, directly into BellSouth's LIDB provisioning (i.e. service order) process.

13.4.2.11 Unless directed otherwise by MCIm, in the event that end user subscribers change their local service provider, BellSouth shall maintain subscriber data (for line numbers, card numbers, and for any other types of data maintained in LIDB) so that such subscribers shall not experience any interruption of service due to the lack of such maintenance of subscriber data. In the event that end user subscribers change their local service provider, BellSouth shall use its best efforts to avoid service interruption in those situations where BellSouth has control over additions and deletions in the database as LIDB provider.

13.4.2.12 All additions, updates and deletions of MCIm data to the LIDB shall be solely at the direction of MCIm.

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13.4.2.13 BellSouth shall provide, at parity, priority updates to LIDB for MCIm data upon MCIm's request (e.g., to support fraud protection).

13.4.2.14 BellSouth shall provide MCIm reports of all MCIm data in LIDB.

13.4.2.15 Pursuant to BellSouth procedures, BellSouth shall provide LIDB systems such that no more than 0.01% of MCIm subscriber records will be missing from LIDB, as measured by MCIm audits.

13.4.2.16 BellSouth shall perform backup and recovery of all of MCIm's data in LIDB at parity, including sending to LIDB all changes made since the date of the most recent backup copy.

13.4.2.17 BellSouth shall provide to MCIm access to LIDB measurements and reports at least at parity with the capability BellSouth has for its own subscriber records and that BellSouth provides to any other party.

13.4.2.18 BellSouth shall provide MCIm with LIDB reports of data which are missing or contain errors, as well as any misroute errors, within the time period reasonably negotiated between MCIm and BellSouth.

13.4.2.19 BellSouth shall prevent any access to or use of MCIm data in LIDB by BellSouth personnel or by any other party that is not authorized by MCIm in writing.

13.4.2.20 BellSouth shall provide MCIm performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners, (in accordance with the technical reference in Section 13.7.5) for Subscriber Data that is part of an NPA-NXX or NXX-0/IXX wholly or partially owned by MCIm at least at parity with BellSouth Subscriber Data. BellSouth shall obtain from MCIm the screening information associated with LIDB Data Screening of MCIm data in accordance with this requirement.

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13.4.2.21 BellSouth shall accept queries to LIDB associated with MCIm subscriber records, and shall return responses in accordance with the requirements of this Section 13.

13.4.2.22 BellSouth shall provide mean processing time at the LIDB within 0.50 seconds under normal conditions as defined in the technical reference in Section 13.7.5.

13.4.2.23 BellSouth shall provide processing time at the LIDB within 1 second for 99% of all messages under normal conditions as defined in the technical reference in Section 13.7.5.

13.4.2.24 BellSouth shall provide 99.9 % of all LIDB queries in a round trip response within 2 seconds.

13.4.2.25 BellSouth shall provide LIDB performance that complies with the standards set forth below in sections 13.4.2.25.1 through 13.4.2.25.6.3. If MCIm requests, in writing, a higher level of performance than BellSouth provides to its own subscribers. BellSouth shall inform MCIm, in writing, of the amount MCIm's desired performance level exceeds that which BellSouth provides to its subscribers as well as a reasonable estimate of what it would cost BellSouth to meet, measure, and report these standards. If MCIm then communicates, in writing, to BellSouth that it desires such higher levels of performance, MCIm shall pay BellSouth for the costs incurred in providing such higher level of service. Moreover, MCIm shall pay all mechanisms necessary to capture and report data, required to measure, report or track any performance measurement that BellSouth does not, as of the Effective Date, measure, report or track for itself or its own subscribers. In the event such system is not developed exclusively for MCIm, but rather is developed for use with other CLECs, as well as MCIm, BellSouth shall allocate to MCIm, on a competitively neutral basis, MCIm's share of the costs associated with such system.

13.4.2.25.1 There shall be at least a 99.9% reply rate to all query attempts.

13.4.2.25.2 Queries shall time out at LIDB no more than 0.1% of the time.

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13.4.2.25.3 Data in LIDB replies shall have at no more than 2% unexpected data values, for all queries to LIDB.

13.4.2.25.4 No more than 0.01% of all LIDB queries shall return a missing subscriber record.

13.4.2.25.5 There shall be no defects in LIDB Data Screening of responses.

13.4.2.25.6 Group troubles shall occur for no more than 1% of LIDB queries. Group troubles include:

13.4.2.25.6.1 Missing Group — When reply is returned "vacant" but there is no active record for the 6-digit NPA-NXX group.

13.4.2.25.6.2 Vacant Code — When a 6-digit code is active but is not assigned to any subscriber on that code.

13.4.2.25.6.3 Non-Participating Group and unavailable Network Resource — should be identified in the LARG (LIDB Access Routing Guide) so MCIm does not pay access for queries that will be denied in LIDB.

13.4.3 Interface Requirements

BellSouth shall offer LIDB in accordance with the requirements of this subsection 13.4.3.

13.4.3.1 The interface to LIDB shall be in accordance with the technical reference in Section 13.7.3.

13.4.3.2 The CCS interface to LIDB shall be the standard interface described in Section 13.7.3.

13.4.3.3 The LIDB Data Base interpretation of the ANSI-TCAP messages shall comply with the technical reference in Section 13.7.4. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

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### 13.5 Toll Free Number Database

The Toll Free Number Database is a SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional so-called vertical features during call set-up in response to queries from SSPs. This Subsection 13.5 supplements the requirements of Subsection 13.2 and 13.7. BellSouth shall provide the Toll Free Number Database in accordance with the following:

### 13.5.1 Technical Requirements

13.5.1.1 BellSouth shall make the BellSouth Toll Free Number Database available for MCIm to query, from MCIm's designated switch including BellSouth unbundled local switching, with a toll-free number and originating information.

13.5.1.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a BellSouth switch.

13.5.1.3 The SCP shall also provide, at MCIm's option, such additional features as described in SR-TSV-002275 (BOC Notes on the BellSouth Networks, SR-TSV-002275, Issue 2, (Bellcore, April 1994)) as are available to BellSouth. These may include but are not limited to:

13.5.1.3.1 Network Management;

13.5.1.3.2 Subscriber Sample Collection, at charges set forth in Attachment I; and

13.5.1.3.3 Service Maintenance.

13.5.2 Interface Requirements

The signaling interface between the MCIm or other local switch and the Toll-Free Number database shall use the TCAP protocol as specified in the technical reference in Section 13.7.1, together with the signaling network interface as specified in the technical reference in Sections 13.7.2 and 13.7.6.

MCImetro-BellSouth Florida Interconnection Agreement 13.6 Automatic Location Identification/Data Management System (ALI/DMS)

The ALI/DMS Database contains subscriber information (including name, address, telephone information, and sometimes special information from the local service provider or subscriber) used to determine to which Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. This Subsection 13.6 supplements the requirements of Subsection 13.7.2 and 13.7.6. BellSouth shall provide the Emergency Services Database in accordance with the following:

13.6.1 Technical Requirements

13.6.1.1 BellSouth shall offer MCIm a data link to the ALI/DMS database or permit MCIm to provide its own data link to the ALI/DMS database.

BellSouth shall provide error reports from the ALI/DMS data base to MCIm after MCIm inputs information into the ALI/DMS data base. Alternately, MCIm may utilize BellSouth to enter through the service order process subscriber information into the data base on a demand basis, and validate subscriber information on a demand basis.

13.6.1.2 The ALI/DMS database shall contain the following subscriber information:

13.6.1.2.1	Name;
13.6.1.2.2	Address;
13.6.1.2.3	Telephone number; and
13.6.1.2.4 appropriate	Other information as BellSouth deems

13.6.1.3 When BellSouth is responsible for administering the ALI/DMS database in its entirety, ported number NXXs entries for the ported numbers should be maintained unless MCIm requests otherwise and shall be updated if MCIm requests.

MCImetro-BellSouth Florida Interconnection Agreement 13.6.1.4 When Remote Call Forwarding (RCF) is used to provide number portability to the local subscriber and a remark or other appropriate field information is available in the database, the shadow or "forwarded-to" number and an indication that the number is ported shall be added to the subscriber record.

13.6.1.5 If BellSouth is responsible for configuring PSAP features (for cases when the PSAP or BellSouth supports an ISDN interface) it shall ensure that CLASS Automatic Recall (Call Return) is not used to call back to the ported number.

13.6.2 Interface Requirements -

13.6.2.1 The interface between the E911 Switch or Tandem and the ALI/DMS database for MCIm subscribers shall meet industry standards.

13.7 Where Technically Feasible, SCPs/Databases shall be equal to or better than all of the requirements for SCPs/Databases set forth in the following technical references:

13.7.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, ISSUE 1 (Bellcore, December 199);

13.7.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP). (Bellcore, March 1994);

13.7.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);

13.7.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);

13.7.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995)

13.7.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995); and

MCImetro-BellSouth Florida Interconnection Agreement 13.7.7 "Bellcore Special Report SR-TSV-002275, IBOC Notes on the LEC Networks - Signaling".)

13.8 Advanced Intelligent Network (AIN) Access, Service Creation Environment and Service Management System (SCE/SMS) Advanced Intelligent Network Access

13.8.1 BellSouth will make all BellSouth SCP-based AIN retail services available for resale to MCIm. MCIm will be given the opportunity to develop competitive AIN 0.1 service applications via unbundled access to BellSouth's SCE/SMS. Where Technically Feasible, access to BellSouth resold services and MCIm created services may be supported from both MCIm and BellSouth local switches.

13.8.2 SCE/SMS AIN Access shall provide MCIm the ability to create service applications utilizing BellSouth AIN 0.1 service creation tools and deploy those applications via the BellSouth SMS to the BellSouth SCPs. Through traditional mechanisms, MCIm will be supported in provisioning switch triggers in BellSouth local switches which will access these applications. AIN SCE/SMS service development capabilities provided to MCIm will provide the same AIN 0.1 service development opportunities as presented to BellSouth in utilization of its basic AIN programmability tools (DesignEDGE service). See Figure 7 below.

13.8.2.1 BellSouth will participate in standards bodies actively pursuing SMS/SCE standards. If standards are adopted in this area, BellSouth will seek to evolve its AIN SMS/SCE access toward such standards.

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13.8.3 BellSouth's SCE/SMS offering shall provide access to SCE hardware, software, testing and technical support (e.g., help desk, system administrator) resources available to MCIm on a reasonable basis. Scheduling procedures shall provide MCIm equal priority access to these resources.

13.8.4 AIN access BellSouth shall allow for multi-user access with proper source code management and other logical security functions as specified in the Security section of this Agreement.

13.8.5 The BellSouth SCP shall partition and protect MCIm service logic and data from unauthorized access, execution or other types of compromise.

13.8.6 When MCI selects SCE/SMS AIN access, BellSouth shall provide adequate training, documentation, and technical support of MCIm development staff to reasonably expect successful application development. Such training shall address use of SCE/SMS AIN access and administrative functions, but will not include support for creation of a specific service application.

MCImetro-BellSouth Florida Interconnection Agreement 13.8.7 BellSouth will provide a secure controlled access environment in association with its internal utilization of AIN components. When MCIm utilizes BellSouth's SCE/SMS, AIN Access will be provided via remote data connections (e.g., dial up, LAN, WAN) to published specifications.

13.8.8 When MCIm selects SCE/SMS AIN Access, BellSouth shall allow MCIm to download data forms and/or tables to the BellSouth SCP via the BellSouth SMS without intervention from BellSouth (e.g., service customization and subscriber subscription).

13.8.9 BellSouth shall offer, through the SCE/SMS AIN Access, access to the SCPs/Databases for control of MCIm end user functionality.

#### Section 14. Tandem Switching

#### 14.1 Definition:

Tandem Switching is the function that establishes a communications path between two switching offices through a third switching office (the tandem switch). BellSouth shall provide MCIm with selective routing via Line Class Codes on a first-come, first-served basis. Further, MCIm and BellSouth shall continue to work with the appropriate industry groups to develop a long term solution for selective routing. BellSouth may reserve for itself a reasonable number of line class codes.

#### 14.2 Technical Requirements

14.2.1 Tandem Switching shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/I/90. The requirements for Tandem Switching include, but are not limited to, the following:

14.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;

14.2.1.2 Subject to section 14.1, above, Tandem Switching shall provide screening as jointly agreed to by MCIm and BellSouth and routing on a per call basis as designated by MCIm;

MCImetro-BellSouth Florida Interconnection Agreement 14.2.1.3 Tandem Switching shall provide recording of all billable events designated by MCIm;

> 14.2.1.4 When Technically Feasible, and requested via BFR by MCIm, Tandem Switching shall provide Advanced Intelligent Network triggers supporting AIN features;

14.2.1.5 Subject to section 14.1, above, Tandem Switching shall provide connectivity to Operator Systems as designated by MCIm;

14.2.1.6 Tandem Switching shall provide access to Toll Free number portability database as designated by MCIm;

14.2.1.7 Tandem Switching shall provide all trunk interconnections discussed under the "Network Interconnection" section (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));

14.2.1.8 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and

14.2.1.9 Tandem Switching shall provide connectivity to transit traffic to and from other carriers.

14.2.2 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IECs, ICOs, CAPs and CLEC switches.

14.2.3 Tandem Switching shall provide local tandeming functionality between two end offices including two offices belonging to different CLEC's (e.g., between an MCIm end office and the end office of another CLEC).

14.2.4 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed. Additional signaling information and requirements are provided in Section 12.

14.2.5 Tandem Switching shall record billable events and send them to the area billing centers designated by MCIm. Billing requirements are specified in Attachment 8 of this Agreement.

MCImetro-BellSouth Florida Interconnection Agreement 14.2.6 Upon reasonable request, BellSouth shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its interconnections. When requested by MCIm, the results and reports of the testing shall be made immediately available to MCIm.

14.2.7 When requested by MCIm, BellSouth shall provide performance data regarding traffic characteristics or other measurable elements to MCIm for review.

14.2.8 Tandem Switching shall be capable of controlling congestion using capabilities such as Automatic Congestion Control (e.g. choke trunk groups) and Network Routing Overflow. Congestion control provided or imposed on MCIm traffic shall be at parity with controls being provided or imposed on BellSouth traffic (e.g., BellSouth shall not block MCIm traffic in a discriminatory manner.

14.2.9 Subject to section 14.1, above, Tandem Switching shall route calls to BellSouth or MCIm endpoints or platforms (e.g., operator services and PSAPs) on a per call basis as designated by MCIm. Detailed primary and overflow routing plans for all interfaces available within the BellSouth switching network shall be mutually agreed to by MCIm and BellSouth. Such plans shall meet reasonable MCIm requirements for routing calls through the local network.

14.2.10 Tandem Switching shall process originating toll-free traffic received from an MCIm local switch.

14.2.11 In support of AIN triggers and features, Tandem Switching, when Technically Feasible and requested via BFR by MCIm, shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.

14.2.12 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

14.3 Interface Requirements

MCImetro-BellSouth Florida Interconnection Agreement 14.3.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

14.3.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which BellSouth interconnects.

14.3.3 BellSouth shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.

14.3.4 Tandem Switching shall interconnect with MCIm's switch, using two-way trunks, for traffic that is transiting via the BellSouth network to interLATA or intraLATA carriers. At MCIm's request, Tandem Switching shall record and keep records of traffic for billing.

14.3.5 Tandem Switching shall provide an alternate final routing pattern for MCIm traffic overflowing from direct end office high usage trunk groups.

14.4 Tandem Switching shall meet or exceed (i.e., be more favorable to MCIm) each of the requirements for Tandem Switching set forth in the following technical references:

14.4.1 Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/I/90;

14.4.2 GR-905-CORE covering CCSNIS;

14.4.3 GR-1429-CORE for call management features; and GR-2863-CORE and GR-2902-CORE covering CCS AIN interconnection.

#### Section 15. Additional Requirements

This Section 15 of Attachment III sets forth the additional requirements for unbundled Network Elements which BellSouth agrees to offer to MCIm under this Agreement.

15.1 Cooperative Testing

15.1.1 Definition:

MCImetro-BellSouth Florida Interconnection Agreement Cooperative Testing means that BellSouth shall cooperate with MCIm upon request or as needed to (1) ensure that the Network Elements and Ancillary Functions and additional requirements being provided to MCIm by BellSouth are in compliance with the requirements of this Agreement, (2) test the overall functionality of various Network Elements and Ancillary Functions provided by BellSouth to MCIm in combination with each other or in combination with other equipment and facilities provided by MCIm or third parties, and (3) ensure that all operational interfaces and processes are in place and functioning properly and efficiently for the provisioning and maintenance of Network Elements and Ancillary Functions and so that all appropriate billing data can be provided to MCIm.

#### 15.1.2 Requirements

Within ninety (90) days of the Effective Date of this Agreement, MCIm and BellSouth will agree upon a process to resolve technical issues relating to interconnection of MCIm's network to BellSouth's network and Network Elements and Ancillary Functions. The agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each company's management. If MCIm and BellSouth do not reach agreement on such a process within ninety (90) days, any issues that have not been resolved by the parties with respect to such process shall be submitted to the procedures set forth in Part A Section 23 of this Agreement unless both parties agree to extend the time to reach agreement on such issues.

> 15.1.2.1 BellSouth shall provide MCIm access for testing at any interface between a BellSouth Network Element or combinations and MCIm equipment or facilities. Such test access shall be sufficient to ensure that the applicable requirements can be tested by MCIm. This access shall be available seven (7) days per week, 24 hours per day.

> 15.1.2.2 MCIm may test any interfaces, Network Elements or Ancillary Functions and additional requirements provided by BellSouth pursuant to this Agreement.

15.1.2.3 BellSouth shall provide engineering data as requested by MCIm for the loop components as set forth in Sections 2, 3 and 4 of this Attachment which MCIm may desire to test. Such data shall include equipment

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MCImetro-BellSouth Florida Interconnection Agreement engineering and cable specifications, signaling and transmission path data.

> 15.1.2.4 Upon MCIm's request, to the extent required by applicable commission orders or by subsequent agreement, BellSouth shall provide to MCIm any office records, central office layout and design records and drawings, system engineering and other applicable documentation pertaining to a Network Element or Ancillary Function or the underlying equipment that is then providing a Network Element or Ancillary Function to MCIm.

15.1.2.5 BellSouth shall provide to MCIm upon request, all applicable test results, from BellSouth testing activities on a Network Element or Ancillary Function or Additional Requirement or the underlying equipment providing a Network Element or Ancillary Function or Additional Requirements. MCIm may review such testing results and may notify BellSouth of any deficiencies that are detected.

15.1.2.6 BellSouth shall temporarily provision MCIm designated Local Switching features for testing. Within ninety (90) days of the Effective Date of this Agreement, MCIm and BellSouth shall mutually agree on the procedures to be established between BellSouth and MCIm to expedite such provisioning processes for feature testing.

15.1.2.7 Upon MCIm's request, BellSouth shall provide technical staff to meet with MCIm representatives to provide required support for Cooperative Testing.

15.1.2.8 Dedicated Transport and Loop Feeder may experience alarm conditions due to in-progress tests. BellSouth shall not remove such facilities from service without obtaining MCIm's prior approval.

15.1.2.9 BellSouth shall get acceptance from MCIm prior to conducting tests or maintenance procedures on Network Elements or Ancillary Functions or on the underlying equipment that is then providing a Network Element or Ancillary Function, that may cause a service interruption or degradation of service

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15.1.2.10 BellSouth shall provide a single point of contact to MCIm that is available 7 days per week, 24 hours per day for trouble status, sectionalization, resolution, escalation, and closure. Such staff shall be adequately skilled to allow expeditious problem resolution.

15.1.2.11 BellSouth shall provide to MCIm electronic access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.

15.1.2.12 BellSouth shall participate in Cooperative Testing with MCIm upon MCIm's request to test any operational interface or process used to provide Network Elements, Ancillary Functions or Services to MCIm.

15.1.2.13 MCIm and BellSouth shall endeavor to complete Cooperative Testing as stated in Attachment 8.

15.1.2.14 BellSouth shall participate in Cooperative Testing requested by MCIm whenever it is deemed necessary by MCIm to insure service performance, reliability and subscriber serviceability.

15.1.2.15 MCIm may accept or reject the Network Element ordered by MCIm if, upon completion of cooperative acceptance testing, the tested Network Element does not meet the requirements stated herein.

15.1.2.16 BellSouth shall provide real-time, remote data access, where available to performance monitoring and alarm data on events affecting (or potentially affecting) MCIm's traffic on BellSouth's network elements.

#### 15.2 Performance

#### 15.2.1 Scope

This section addresses performance requirements for Network Elements and Ancillary Functions to provide local service. It includes requirements for the reliability and availability of Network Elements and Ancillary Functions, and quality parameters such as transmission quality (analog and digital), and speed (or delay). In addition, an overview of service performance requirements is given. These requirements shall apply to the extent they are in

MCImetro-BellSouth Florida Interconnection Agreement conformance with, and applicable to BellSouth under, accepted industry standards, and MCI may request more stringent performance standards, if Technically Feasible, via the bona fide request process.

15.2.1.1 The General Performance Requirements in this section apply to all aspects of Network Elements and Ancillary Functions. Additional requirements are given in this performance section and in the individual Network Elements sections.

15.2.1.2 BellSouth shall work cooperatively with MCIm to determine appropriate performance allocations across Network Elements.

15.2.3 BellSouth shall provide performance equal to or better than all of the requirements set forth in the following technical references:

15.2.3.1 Bell Communications Research, Inc. Documents

15.2.3.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR). This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve subscribers' lines. Some modules of the LSSGR are also referenced separately in this document.

15.2.3.1.2 TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements.

15.2.3.1.3 TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems.

15.2.3.1.4 TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems.

15.2.3.1.5 TR-NWT-000507, Issue 5, December 1993, LSSGR - Transmission, Section 7.

MCImetro-BellSouth Florida Interconnection Agreement 15.2.3.1.6 GR-303-CORE, Issue 1, September 1995, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.

> 15.2.3.1.7 GR-334-CORE, Issue 1, June 1994, Switched Access Service: Transmission Parameter Limits and Interface Combinations.

15.2.3.1.8 TR-NWT-000335, Issue 3, May 1993, Voice Grade Special Access Services - Transmission Parameter Limits and Interface Combinations.

15.2.3.1.9 TR-TSY-000529, Issue 2, July 1987, Public Safety - LSSGR.

15.2.3.1.10 GR-1158-CORE, Issue 2, October 1995, OSSGR Section 22.3: Line Information Database.

15.2.3.1.11 TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).

15.2.3.1.12 TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

15.2.3.1.13 TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems.

15.2.3.1.14 TR-NWT-000505, Issue 3, May 1991, LSSGR Section 5, Call Processing.

15.2.3.1.15 FR-NWT-000271, 1993, Operator Services Systems Generic Requirements (OSSGR).

15.2.3.1.16 TR-NWT-001156, Issue 2, July 1993, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.

15.2.3.1.17 SR-TSY-001 171, Issue 1, January 1989, Methods and Procedures for System Reliability Analysis.

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15.2.3.1.18 Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.

15.2.3.2 ANSI Standards

15.2.3.2.1 ANSI T1.512-1994, Network Performance - Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.

15.2.3.2.2 ANSI T1.506-1990, Network Performance - Transmission Specifications for Switched Exchange Access Network.

15.2.3.2.3 ANSI T1.508-1992, Telecommunications - Network Performance - Loss Plan for Evolving Digital Networks. Also supplement T1.508a-1993.

15.2.3.2.4 ANSI T1.101-1994, Digital Synchronization Network Plan.

15.2.3.3 TIA/EIA Standards

15.2.3.3.1 Requirements not specifically addressed here shall be found in the documents listed in Electronic Industries Association/Telecommunications Industries Association Standards and Engineering Publications.

15.2.3.3.2 TIA/EIA TSB-37A, Telephone Network Transmission Model for Evaluating Modem Performance.

15.2.3.3.3 TIA/EIA TSB-38, Test Procedure for Evaluation of 2-wire 4 kHz Voiceband Duplex Modems.

15.2.3.4 IEEE Standards

15.2.3.4.1 IEEE Standard 743-1984, IEEE Standard Methods and Equipment for Measuring Transmission Characteristics of Analog Voice Frequency Circuits.

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15.2.3.4.2 ANSI/IEEE Standard 820-1984, Telephone Loop Performance Characteristics.

15.2.4 Services and Capabilities

15.2.4.1 All Network Elements shall provide performance sufficient, in combination with other Network Elements, to provide the following applications in accordance with the requirements of this document:

15.2.4.1.1 All types of voice services.

15.2.4.1.2 All types of voice-band data modem connections up to and including 28.8 Kbps V-34.

15.2.4.1.3 All types of FAX transmissions up to and including 14.4 Kbps group 3.

15.2.4.1.4 All CLASS/LASS features.

15.2.4.1.5 All Operator Systems.

15.2.4.2 The following capabilities shall be provided as applicable:

15.2.4.2.1 ISDN BRI

15.2.4.2.2 ISDN PRI

15.2.4.2.3 Switched Digital Data

15.2.4.2.4 Non-Switched Digital Data

15.2.4.2.5 Any types of Video applications that a subscriber may order

15.2.4.2.6 Any Coin Services the subscriber may order

15.2.4.2.7 Frame Relay and ATM

15.2.4.2.8 Private Line Services

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MCImetro-BellSouth Florida Interconnection Agreement 15.2.5 Specific Performance Requirements for Network Elements and Ancillary Functions

> 15.2.5.1 The following sections itemize performance parameters for Network Elements and Ancillary Functions. BellSouth shall provide performance equal to or better than all of the requirements set forth in this Section. Unless noted otherwise, requirements and objectives are given in terms of specific limits. This means that all tests (acceptance and ongoing performance) shall meet the limit(s) to satisfy the requirement.

15.2.5.2 Performance Allocation

15.2.5.2.1 Transmission path impairments may be classified as either analog or digital, and will depend on the nature of the signal transmitted across the Network Element. Analog impairments are introduced on any analog portion of the loop, typically between the NID portion of Loop Distribution and the analog to digital (A/D) conversion, and are usually correlated with the length of the physical plant. Digital impairments are introduced by A/D conversion and by interfaces between digital Network Elements. In addition, noise can be introduced by either analog transmission or the A/D conversion.

15.2.5.3 Loop Combination Architecture Constraints

15.2.5.3.1 The following constraints will limit not only the variety of Loop Combination architectures that may be considered, but also the architectures BellSouth may consider to deliver any Ancillary Function or Network Element. These constraints apply to the entire path between the NID portion of Loop Distribution and the BellSouth switch. Any exceptions to these restrictions shall be specifically requested or approved by MCIm in writing.

15.2.5.3.1.1 No more than 1 A-D conversion.

15.2.5.3.1.2 No more than 1, 2-to-4-wire hybrid.

MCImetro-BellSouth Florida Interconnection Agreement 15.2.5.3.1.3 No voice compression.

15.2.5.3.1.4 No echo canceled or suppressers.

15.2.5.3.1.5 One digital loss pad per PBX.

15.2.5.3.1.6 No digital gain.

15.2.5.3.1.7 No additional equipment that might significantly increase intermodulation distortion.

15.2.5.4 Transmission Impairments

15.2.5.4.1 Analog Impairments

15.2.5.4.1.1 Analog impairments are those introduced on portions of the end-to-end circuit on which communications signals are transmitted in analog format. These portions of the transmission path would typically be between NID and an A/D conversion, most commonly on the metallic loop. The performance on the analog portion of a circuit is typically inversely proportional to the length of that circuit.

15.2.5.4.1.2 Loss

15.2.5.4.1.2.1 Electrical loss is measured using a 1004 Hz 0.0 DB one Milliwatt 900 ohm test tone.

15.2.5.4.1.2.2 Off-hook electrical loss between the NID and the switch shall be no more than 8.0 dB for any line, and the mean value for all lines shall be 3.5 dB  $\pm 0.5$  dB. On-hook electrical loss between the NID and the switch shall be no more than 4.0 dB above the off-hook electrical loss for any line.

15.2.5.4.1.3 Idle Channel Circuit Noise

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15.2.5.4.1.3.1 Idle channel circuit noise (C-message) is added by analog facilities, by the A/D conversion of signals, by digital processing equipment (e.g., echo cancelers, digital loss pads), robbed bit signaling, and errors on digital facilities.

15.2.5.4.1.3.2 Idle channel circuit noise shall be less than or equal to 18 dBrnC.

15.2.5.4.1.4 Talker Echo

15.2.5.4.1.4.1 The primary source of echo is improper impedance-matching at the 2-to-4 wire hybrid in the BellSouth network. The impact on subscriber perception is a function of both echo return loss and delay.

15.2.5.4.1.4.2 Echo Return Loss (ERL) shall be greater than 26 dB to a standard termination (900 ohms, 2.16  $\mu$ Fd), and greater than 14 dB to a telephone set off-hook. Singing Return Loss (SRL) shall be greater than 2I dB to a standard termination, and greater than 11 dB to a telephone set off-hook.

15.2.5.4.1.5 Listener Echo

Listener echo is a double reflection of a transmitted signal at two different impedance mismatches in the end-to-end connection. While in extreme cases it can degrade voice transmission performance, listener echo is primarily an issue for voiceband data. The requirements on Talker Echo shall apply to Listener Echo.

15.2.5.4.1.6 Propagation and Processing Delay
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15.2.5.4.1.6.1 Propagation delay is the delay involved in transmitting information from one location to another. It is caused by processing delays of equipment in the network and delays associated with traveling across transmission facilities.

15.2.5.4.1.6.2 BellSouth shall cooperate with MCIm to limit total service propagation and processing delay to levels at parity with that within the BellSouth local network.

15.2.5.4.1.7 Signal-to-Noise Ratio

15.2.5.4.1.7.1 The Signal-to-Noise Ratio (S/N) is a critical parameter in determining voiceband data performance. It is typically measured with a 1004 Hz tone.

15.2.5.4.1.7.2 BellSouth must provide on the Loop Combination a signal-tonoise ratio of at least 37 dB between the NID and the end office.

15.2.5.4.1.8 C-Notched Noise

The requirements for Signal-to-Noise Ratio shall apply to C-Notched Noise.

15.2.5.4.1.9 Attenuation Distortion

15.2.5.4.1.9.1 Attenuation distortion, also known as frequency distortion or gain slope, measures the variations in loss at different frequencies across the voice frequency spectrum (200 Hz -3400 Hz). It is measured by subtracting the loss at 1004 Hz from the loss at the frequency of interest.

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15.2.5.4.1.9.2 Attenuation distortion from the NID to the switch shall be within the range  $\pm 0.5$  dB for frequencies between 304 and 3004 Hz; from the switch to NID attenuation distortion shall be within the range  $\pm 0.5$  dB for frequencies between 204 Hz and 3004 Hz. In addition, attenuation distortion shall remain within the range +1 dB/-3 dB for frequencies between 200 Hz and 3500 Hz.

15.2.5.4.1.10 Envelope Delay Distortion

15.2.5.4.1.10.1 Envelope Delay Distortion (EDD) measures the difference in transit time of signals at different frequencies. EDD is measured relative to the transit time of a 1704 Hz tone, and is given in microseconds. EDD is used as an approximation of the group delay of the channel.

15.2.5.4.1.10.2 EDD shall be: 1704 Hz to 604 Hz —  $\leq$  350 µsec.; 1704 Hz to 2804 Hz —  $\leq$  195 µsec.; 1704 Hz to 204 Hz —  $\leq$  580 µsec.; 1704 Hz to 3404 Hz —  $\leq$  400 µsec.

15.2.5.4.1.11 Phase Jitter

15.2.5.4.1.11.1 Phase jitter measures the unwanted angular modulation of a signal. It is caused by noise or the actual modulation of the signal by another unwanted signal. It displaces the zero crossings of a signal. It is measured in terms of peak-to-peak deviations of a 1004 Hz tone from its nominal zero crossings, and in a particular frequency band (200-300 HZ and either 4-300 Hz or 2-300 Hz). Phase jitter impacts voiceband data

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performance and can make modems more susceptible to other impairments, including noise.

15.2.5.4.1.11.2 From the NID to the interexchange carrier point of termination, phase jitter shall be < 1.5° point-to-point in the 0-300 Hz band, and < 1.8° point-to-point in the 4-300 Hz band.

15.2.5.4.1.12 Amplitude Jitter

15.2.5.4.1.12.1 Amplitude jitter is any deviation of the peak value of a 1004 Hz signal from its nominal value. Excessive amounts can impair voiceband data performance. It is primarily caused by noise but can also be caused by phase jitter, gain hits, or single frequency interference.

15.2.5.4.1.12.2 In NID-interexchange carrier point of termination,  $\leq$  2.5% of amplitude jitter is permitted in the 20-300 Hz band and  $\leq$  2.9% in the 4-300 Hz band.

15.2.5.4.1.13 Intermodulation Distortion

15.2.5.4.1.13.1 Intermodulation distortion (IMD) measures non-linear distortions of a signal. It compares the power of harmonic tones to the power of the transmitted tones. It is measured for both the 2nd and 3rd harmonics of the transmitted tones. IMD is caused by compression or clipping and can impair voiceband data performance.

15.2.5.4.1.13.2 Both 2nd and 3rd order IMD between the NID and end office must be  $\geq$  52 dB.

MCImetro-BellSouth Florida Interconnection Agreement 15.2.5.4.1.14 Impulse Noise

> 15.2.5.4.1.14.1 Impulse noise is a sudden and large increase in noise on a channel for a short duration of time. Impulse noise is measured as a count of the number of times a noise threshold is exceeded during a given time period (typically 5 or 15 minutes). It is caused by protection switching, maintenance activities, electromechanical switching systems, digital transmission errors, and line coding mismatches. Impulse noise sounds like clicking noises or static on voice connections. Impulse noise impairs voiceband data performance.

15.2.5.4.1.14.2 The NID to interexchange carrier point of termination portions of connections shall introduce no impulse noise events within 6 dB of the received signal power on 93% of all 15 minute connections. In addition, there shall be no more than 1 impulse noise event within 6 dB of the received signal power during any 30minute period.

### 15.2.5.4.1.15 Phase Hits

15.2.5.4.1.15.1 Phase hits are a sudden change in the phase of a signal lasting at least 4 msec. Phase hits are measured using a threshold which indicates how much the phase of the signal has changed with respect to its nominal phase. Phase hits are caused by protection switching and slips or other synchronization errors. Phase hits can impair voiceband data performance.

15.2.5.4.1.15.2 Between the NID and interexchange carrier point of termination, 99.75% of all 15-minute

MCImetro-BellSouth Florida Interconnection Agreement connections shall have no phase hits exceeding 10°. In addition, there shall be no more than 1 phase hit exceeding 10° in any 30-minute period.

### 15.2.5.4.1.16 Gain Hits

15.2.5.4.1.16.1 Gain hits are sudden changes in the level of a signal that last at least 4 msec. Gain hits are measured against a threshold of typically 2-5 dB relative to the signal's nominal level. Gain hits are usually caused by protection switches and can impair voiceband data performance.

15.2.5.4.1.16.2 Between the NID and the interexchange carrier point of termination, 99.5% of all 15-minute connections shall have no gain hits exceeding 3 dB. In addition, there shall be no more than 1 gain hit exceeding 3 dB in any 30-minute period.

### 15.2.5.4.1.17 Dropouts

15.2.5.4.1.17.1 Dropouts are drops in the level of a signal of 12 dB or more for at least 4 msec. They are caused by protection switching events, radio fading, and conditions causing digital carrier systems to lose frame. Dropouts are critical for voiceband data performance but, if severe enough, will also affect voice quality.

15.2.5.4.1.17.2 Between the NID and the interexchange carrier point of termination, 99.9% of all 15-minute connections shall have no dropouts and in addition, no connection shall suffer more than 1 dropout in any 60-minute period.

MCImetro-BellSouth Florida Interconnection Agreement 15.2.5.4.1.18 Frequency Shift

> 15.2.5.4.1.18.1 Frequency shift measures any frequency changes that occur when a signal is transmitted across a channel. It is typically measured using a 1004 Hz tone. Frequency shift has very little impact on voice or voiceband data performance; however, round-trip frequency shifts can affect the ability of echo cancelers to remain converged.

> 15.2.5.4.1.18.2 No more than 0.2 Hz frequency shift shall be on any connection. In addition, 99.5% of all calls shall have frequency shift < 0.1 Hz.

15.2.5.4.1.19 Crosstalk

15.2.5.4.1.19.1 Crosstalk is the presence of signals from other telephone connections on a circuit. Crosstalk can be either intelligible, when speech from other connections can be heard and understood, or unintelligible. Crosstalk is caused by inter-channel interference on the transmission system. Crosstalk is difficult to measure: it requires correlating signals on different circuits or using human listeners to identify its presence. Trouble reports may be used to estimate the probability of crosstalk.

15.2.5.4.1.19.2 99% of Loop Combinations shall have probability  $\leq$  0.1% of experiencing crosstalk exceeding -65 dBm0.

15.2.5.4.1.20 Clipping

15.2.5.4.1.20.1 Clipping occurs when part of a transmitted signal is dropped

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and does not reach the receiving portion on a connection. It can be caused by Digital Speech Interpolation (DSI) equipment used in Digital Circuit Multiplication Systems (DCMS) which increase the amount of traffic that transmission facilities carry, and by echo cancelers or echo suppressers.

15.2.5.4.1.20.2 No clipping incidents shall occur on any call.

15.2.5.4.2 Digital Impairments

Digital impairments occur in the signal wherever it is transmitted in digital format. These errors are usually introduced upon conversion of the signal from analog to digital, as well as at interfaces between digital components. While many digital impairments have little impact on subjective voice quality, they can impact voiceband data performance.

15.2.5.4.2.1 Signal Correlated Distortion

15.2.5.4.2.1.1 Signal correlated distortion (SCD) is unwanted noise or distortion introduced into a signal through the conversion of a signal from analog to digital format or through digital processing that changes the transmitted signal. SCD affects performance when a sign is being transmitted. The primary sources of SCD are signal encoders, echo cancelers, digital loss pads, and robbed bit signaling. SCD affects both voice and voiceband data performance.

15.2.5.4.2.1.2 The NID-to-end-office connection shall allow:

15.2.5.4.2.1.2.1 A maximum of 1 A/D conversion, using 64 Kbps  $\mu$ -law ( $\mu$ =255) PCM;

MCImetro-BellSouth Florida Interconnection Agreement 15.2.5.4.2.1.2.2 No voice

compression;

15.2.5.4.2.1.2.3 No echo cancellation; and

15.2.5.4.2.1.2.4 Robbed bit signaling only if SS7 or ISDN are not used.

15.2.5.4.2.2 Slips

15.2.5.4.2.2.1 Slips occur when a frame of digital data is either deleted or repeated because of differences in the clocks used to synchronize digital facilities. Slips sound like clicks or pops on voice calls and have major impact on voiceband data performance.

15.2.5.4.2.2.2 The NID-tointerexchange carrier point of termination portion of connections shall have fewer than 0.45 slips every 24 hours on average.

15.2.5.4.2.3 Digital Timing Jitter and Wander

15.2.5.4.2.3.1 Digital timing jitter is the unwanted phase modulation of digital signals at rates above 10 Hz. Wander is the unwanted phase modulation of digital signals at rates below 10 Hz. Digital timing litter is caused by imperfections in the timing recovery process of repeaters and the stuffing synchronization process used by multiplexer/demultiplexers. Wander is caused by slowly varying changes in digital signal phase due to clock frequency offset and drift, changes in propagation delay of terrestrial facilities due to temperature changes and changes in the distance of satellites

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from the earth. These events have a major impact on voiceband data performance.

15.2.5.4.2.3.2 The maximum digital timing jitter allowed in the 10 Hz to 8 kHz frequency band at any network interface or any terminal equipment in the network is 5 Unit Intervals (UI). The maximum digital timing jitter allowed in the 8 kHz to 40 kHz frequency band is 0.1 UI. The objective for wander is less than 28 UI at any network interface or terminal equipment.

15.2.5.4.2.4 DS-1 Errored Seconds

15.2.5.4.2.4.1 An Errored Second (ES) on a DS-1 facility is any second during which at least 1 bit is in error. The impact of an ES on performance depends on the number of errors that occur during a second. Typically, voice performance is not significantly impacted by ES but they can cause errors in voiceband data transmissions.

15.2.5.4.2.4.2 Each BellSouth network shall have less than 20 ESs per 24 hour period.

15.2.5.4.2.5 DS-1 Severely Errored Seconds

15.2.5.4.2.5.1 A severely Errored Second (SES) is any second during which a DS-1 has an error rate exceeding 0.001. An SES can be caused by a loss of framing, a slip, or a protection switch. SESs have impacts on both voice and voiceband data performance. For voice, a SES will sound like a burst of noise or static. SESs that occur during a voiceband data transmission cause a significant

MCImetro-BellSouth Florida Interconnection Agreement burst of errors and can cause modems to retrain

15.2.5.4.2.5.2 The digital portion of each NID to POP connection shall have less than 2 SESs per 24 hour period.

15.2.5.4.2.6 Short Failure Events

15.2.5.4.2.6.1 A Short Failure Event (SFE) is a Loss of Frame (LOF) event of less than two minutes' duration. An LOF event is declared when, on detection of a Loss of Signal (LOS) or Out-of-Frame (OOF), a rise-slope-type integration process starts that declares a LOF after 2.5±0.5 sec. of continuous LOS or OOF. If the LOS or OOF is intermittent the integration process shall decay at a slope of 1/5 the rise slope during the period when the signal is normal. Thus, if the ratio of a LOS or OOF to a normal signal is greater than 1/2, a LOF will be declared. A LOS condition shall be declared when the Network Channel Terminating Equipment has determined that 175±75 successive pulse positions with no pulses of either positive or negative polarity have occurred. An OOF condition shall be declared when either Network equipment or Digital Terminal Equipment detects errors in the framing pattern.

15.2.5.4.2.6.2 There shall be fewer than 1 SFE per month.

15.2.5.5 Service Availability and Reliability

Availability refers to the time period during which the service is up and usable for its intended purpose. Reliability refers to the probability that a task will be completed successfully, given that it is successfully begun.

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15.2.5.5.1 Blocked Calls

15.2.5.5.1.1 Blocking is the fraction of call origination attempts denied service during a stated measurement period. Blocking occurs because of competition for limited resources within the network.

15.2.5.5.1.2 For intraLATA toll service and local exchange service, the blocking level from originating (NID) to terminating NID shall not exceed 1% in any hour, except under conditions of service disruption. For access to or egress from a long distance network, the blocking rate shall not exceed 0.5% in any hour.

15.2.5.5.2 Downtime

Downtime is the period of time that a system is in a failed state.

15.2.5.5.2.1 The average downtime for all subscriber Loop Combinations shall be less than 49 minutes per year. The maximum downtime for 99% of all subscriber Loop Combinations shall be less than 74 minutes per year.

15.2.5.5.2.2 The average downtime for an end office switch shall be less than 3 minutes per year. The average downtime for individual trunks shall be less than 28 minutes per year. The average downtime for digital trunk groups shall be less than 20 minutes per year. The average downtime for an individual line appearance at the switch shall be less than 28 minutes per year. The average downtime for a Remote Terminal (RT) shall be less than 17 minutes per year. The average downtime for an individual line on a Remote Terminal (RT) shall be less than 13 minutes per year. MCImetro-BellSouth Florida Interconnection Agreement

15.2.5.5.2.3 The mean time to repair (MTTR) of any equipment at an attended site shall be less than 3 hours. The mean time to repair (MTTR) of any equipment at an unattended site shall be less than 4 hours. 95% of all repairs to the network interface (NID) shall be completed within 24 hours.

15.2.5.5.2.4 There shall be no downtime due to power failures at the switch.

15.2.5.5.2.5 The probability of a stable call being cut off shall be less than 20 cutoffs per one million 1 minute calls.

15.2.5.5.2.6 The rate of ineffective machine attempts at the end office shall be less than 0.0005 (5 failures per 10,000 call attempts).

15.2.5.5.2.7 BellSouth shall meet all requirements for private line services in TR-NWT-000335, ANSI T1.512-1994.

15.2.5.5.3 Dial Tone Delay

15.2.5.3.1 Dial-Tone Delay is the time period between a subscriber off-hook and the receipt of dial tone from an originating end office. Dial-Tone Delay has a significant effect on subscriber opinion of service quality.

15.2.5.3.2 The average dial-tone delay shall not exceed 1.5% of calls delayed more than 3 seconds. At most 20% of calls during the high day busy hour (HDBH) shall experience dialtone delay greater than 3 seconds.

15.2.5.5.4 Dial Tone Removal

15.2.5.5.4.1 Dial tone removal is the time between recognition of the first address digit to the removal of dial tone on the line.

MCImetro-BellSouth Florida Interconnection Agreement 15.2.5.5.4.2 The maximum dial tone removal interval shall be ≤500 milliseconds.

15.2.5.5.5 Post Dial Delay

15.2.5.5.1 Post Dial Delay (PDD) is the amount of time a caller must wait after entering or dialing the last digit of a Destination Telephone Number (DTN) before hearing a valid audible network response. The PDD for an end user is measured from the time the caller has pressed or dialed the last digit of a DTN until receipt of an audible network response.

15.2.5.5.2 The requirements given reflect an end-to-end CCS7 protocol for MCIm end users. Where a mixture of CCS7 and inband (MF) signaling protocols are employed, an increase in the PDD can be expected.

15.2.5.5.5.2.1 PDD 1 - A - Intra LSO

15.2.5.5.2.1.1 Intra-LSO calls do not employ external signaling protocols. The PDD for intra-LSO calls flows are dependent upon the processor cycle time and traffic load conditions. This PDD is assumed to be between subscribers on the same LSO, between the Remote Switch Modules (RSMs) on the same Host, or between an RSM and Host subscribers.

15.2.5.5.5.2.1.2 The objective for intra-LSO PDD is less than 310 milliseconds for 50% of all calls and less than 460 milliseconds for 95% of all calls.

15.2.5.5.5.2.2 PDD1 - B - LSO to Another Local LSO

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15.2.5.5.2.2.1 The signaling protocols from an LSO to another LSO are assumed to employ out-ofband Common Channel Signaling System 7 (CCS7) format. Local calls, that is, calls from an LSO to another LSOs are assumed to have no more than one pair of Signaling Transfer Point Switches (STPs) and no more than one data base dip.

15.2.5.5.5.2.2.2 This PDD is expected to be better than the MCIT Long Distance objective with an average PDD of  $\leq$  8.70 seconds with 95%  $\leq$ 1.34 seconds.

15.2.5.5.5.2.3 PDD1 - C - MCIm LSO to Other LSO

15.2.5.5.2.3.1 Calls from an MCIm LSO to other LSOs are dependent upon the interface agreements between MCIm and the LSO service provider and may employ CCS7, inband (MF) or a combination of both protocols.

15.2.5.5.5.2.3.2 Calls from an MCIm LSO to another LSO via the Public Switched Telecommunications Network (PSTN), using end-to-end CCS7 signaling protocols, can expect to meet the MCIm PDD objectives of an average of 2.0 seconds with 95% in <2.5 seconds. Calls from an MCIm LSO via the PSTN to LSOs outside the local service area are assumed to use CCS7 signaling protocols to the MCIm switch. The egress signaling protocols from the MCIT Switched Network to the many different local telephone company service

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providers however does not necessarily utilize CCS7 signaling. There are three basic egress signaling configuration. They are:

15.2.5.5.5.2.3.2.1 Network Inter-Connect, CCS7 between MCIm and the local telephone company.

15.2.5.5.5.2.3.2.2 Inband Multifrequency (MF) signaling protocols without a BellSouth egress tandem in the connection.

15.2.5.5.5.2.3.2.3 Inband MF signaling protocols with a BellSouth egress tandem in the connection.

15.2.5.5.5.2.3.2.3.1 Calls from an MCIm LSO to other LSOs outside the local service area are assumed to have multiple STPs for 1+ traffic in the access and PSTN portion of the connection. The egress from the PSTN for 1+ traffic is again dependent upon the interface agreements in that service area and may consist of CCS7 or inband MF protocols.

15.2.5.5.5.2.3.2.3.2 Calls from an MCIm's LSO to another MCIm LSO with a mixture of CCS7 or all inband signaling protocols are expected to receive PDDs on the average of 2.9 seconds with 95% in <6.5 seconds.

15.2.5.5.5.2.4 Impact of Number Portability (NP)

If a call forwarding option is used as an interim solution for NP, the delay due to additional switching in the local access shall not exceed 0.4 seconds when MCIm is direct connected to the

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MCImetro-BellSouth Florida Interconnection Agreement BellSouth end office, and 0.8 seconds when MCIm is connected to the BellSouth tandem, in addition to the PDDs described above.

> 15.2.5.5.5.2.5 Custom Local Area Subscriber Services (CLASS)

CLASS<sup>™</sup> features such as Calling Name Delivery can contribute to the PDD of a call. This delay is caused by the additional time (BellSouth option) before the ringing interval commences. This default delay is 3 seconds. Optional settings are available in 1 second intervals from 1 to 6 seconds. Calls to DTNs that have CLASS<sup>™</sup> features, particularly with calling name delivery, can expect to experience from 1 to 6 seconds (3 seconds default) of additional PDD compared to the PDDs shown for PDD1-C. MCI will specify optimal settings.

15.2.5.5.5.2.6 Partial Dial Timing

15.2.5.5.5.2.6.1 The interval between each information digit from a subscriber's line, until the LSO or switching system has determined that the digit string is incomplete.

15.2.5.5.5.2.6.2 For subscriber lines, partial dial timing shall be  $\geq$ 16 seconds and  $\leq$ 24 seconds. For trunks, inband signaling time-out shall be  $\geq$ 5 seconds and  $\leq$ 20 seconds.

### 15.2.5.6 Local Switching

BellSouth shall provide performance equal to or better than the requirements for Local Switching set forth in Bellcore LSSGR TR-TSY-000511. Post dial delay for connections to

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MCImetro-BellSouth Florida Interconnection Agreement MCIm local operator services shall be no worse than Operator Services provided by BellSouth. Additionally, post dial delay from the Operator Services to destination numbers shall be no worse than that provided by BellSouth. Post dial delay for connections to MCIm local directory services shall be no worse than directory services provided by BellSouth. Additionally, post dial delay from the directory system to destination numbers shall be no worse than that provided by BellSouth.

15.2.5.7 Operator Systems

Operator System connections shall comply with the requirements for the Loop Combination, Local Switching, Operator Service, and Directory Assistance Service requirements.

15.2.5.8 Common Transport

Specific requirements for this Network Element or Ancillary Function are in the Common Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between MCIm and BellSouth consistent with sound engineering principles.

15.2.5.9 Dedicated Transport

Specific requirements for this Network Element are in the Dedicated Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." (Allocation of impairments shall be negotiated between MCIm and BellSouth consistent with sound engineering principles.)

15.2.5.10 Signaling Transfer Points

Specific requirements for this Network Element are in the Signaling Transfer Points section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." (Allocation of impairments shall be negotiated between MCIm and BellSouth.)

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15.2.5.11 Signaling Link Transport Specific requirements for this Network Element are in the Signaling Link Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between MCIm and BellSouth consistent with sound engineering principles.

15.2.5.12 SCPs/Databases

The performance requirements for databases (NP, LIDB, E911, etc.) vary depending or the database and the applications it supports. Database-specific performance requirements are included in the sections addressing individual Network Elements and in applicable Bellcore documents. In all cases, the query response time, availability, accuracy, updating capabilities, and other performance parameters shall at least be at parity with those services as provided to BellSouth or other subscriber.

15.2.5.13 Tandem Switching

Specific requirements for this Network Element are in the Tandem Switching section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between MCIm and BellSouth consistent with sound engineering principles.

15.2.6 Test and Verification

15.2.6.1 BellSouth shall permit MCIm to confirm acceptable performance of any Network Element.

15.2.6.1.1 At MCIm's request, BellSouth will provide access to the Network Element sufficient for MCIm to test the performance of that Network Element to MCIm's satisfaction.

15.2.6.1.2 At MCIm's request, BellSouth will perform tests to confirm acceptable performance and provide

### MCImetro-BellSouth Florida Interconnection Agreement MCIm with documentation of test procedures and results acceptable to MCIm.

15.3 Protection, Restoration, and Disaster Recovery

15.3.1 Scope:

This Section refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration, and disaster recovery.

#### 15.3.2 Requirements

15.3.2.1 BellSouth shall provide protection, restoration, and disaster recovery capabilities at parity with those capabilities provided for their own services, facilities and equipment (e.g., equivalent circuit pack protection ratios, facility protection ratios).

15.3.2.2 BellSouth shall provide Network Elements and Ancillary Functions equal priority in protection, restoration, and disaster recovery as provided to their own services, facilities and equipment.

15.3.2.3 BellSouth shall provide Network Elements and Ancillary Functions equal priority in the use of spare equipment and facilities as provided to their own services, facilities and equipment.

15.3.2.4 BellSouth shall restore Network Elements which are specific to MCIm end user subscribers on a priority basis as MCIm may designate.

15.4 Synchronization

15.4.1 Definition:

Synchronization is the function which keeps all digital equipment in a communications network operating at the same average frequency. With respect to digital transmission, information is coded into discrete pulses. When these pulses are transmitted through a digital communications network, all synchronous Network Elements are traceable to a stable and accurate timing source. Network synchronization is accomplished by timing all synchronous

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MCImetro-BellSouth Florida Interconnection Agreement Network Elements in the network to a stratum 1 source so that transmission from these network points have the same average line rate.

#### 15.4.2 Technical Requirements

The following requirements are applicable to the case where BellSouth provides synchronization to equipment that MCIm owns and operates within a BellSouth location. In addition, these requirements apply to synchronous equipment that is owned by BellSouth and is used to provide a Network Element to MCIm.

15.4.2.1 The synchronization of clocks within digital networks is divided into two parts: intra-building and interbuilding. Within a building, a single clock is designated as the Building Integrated Timing Supply (BITS), which provides all of the DS1 and DS0 synchronization references required by other clocks in such building. This is referred to as intra-building synchronization. The BITS receives synchronization references from remotely located BITS. Synchronization of BITS between buildings is referred to as inter-building synchronization.

15.4.2.2 To implement a network synchronization plan, clocks within digital networks are divided into four stratum levels. All clocks in strata 2, 3, and 4 are synchronized to a stratum 1 clock, that is, they are traceable to a stratum 1 clock. A traceable reference is a reference that can be traced back through some number of clocks to a stratum 1 source. Clocks in different strata are distinguished by their free running accuracy or by their stability during trouble conditions such as the loss of all synchronization references.

15.4.2.2.1 Intra-Building

15.4.2.2.1.1 Within a building, there may be different kinds of equipment that require synchronization at the DS1 and DS0 rates. Synchronization at the DS1 rate is accomplished by the frequency synchronizing presence of buffer stores at various DSI transmission interfaces. Synchronization at the DS0 rate is accomplished by using a composite clock signal that phase

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synchronizes the clocks. Equipment requiring DS0 synchronization frequently does not have adequate buffer storage to accommodate the phase variations among different equipment. Control of phase variations to an acceptable level is accomplished by externally timing all interconnecting DS0 circuits to a single clock source and by limiting the interconnection of DS0 equipment to less than 1,500 cable feet. Therefore, a BITS shall provide DS1 and composite clock signals when the appropriate composite signal is a 64-kHz 5/8<sup>th</sup> duty cycle, return to zero with a bipolar violation every eighth pulse (B8RZ).

15.4.2.2.2 Inter-Building

15.4.2.2.2.1 BellSouth shall provide interbuilding synchronization at the DSI rate, and the BITS shall accept the primary and secondary synchronization links from BITS in other buildings. From hierarchical considerations, the BITS shall be the highest stratum clock within the building and BellSouth shall provide operations capabilities (this includes, but is not limited to: synchronization reference provisioning; synchronization reference status inquiries; timing mode status inquiries; and alarm conditions).

15.4.3 Synchronization Distribution Requirements

15.4.3.1 Central office BITS shall contain redundant clocks meeting or exceeding the requirements for a stratum 2 clock as specified in ANSI T1.101-1994 and Bellcore TR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.

15.4.3.2 Central office BITS shall be powered by primary and backup power sources.

15.4.3.3 If both reference inputs to the BITS are interrupted or in a degraded mode (meaning off frequency greater than

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15.4.3.4 DS1s multiplexed into a SONET synchronous payload envelope within an STS-n (where n is defined in ANSI T1.105-1995) signal shall not be used as reference facilities for network synchronization.

15.4.3.5 The total number of Network Elements cascaded from the stratum 1 source shall be minimized.

15.4.3.6 A Network Element shall receive the synchronization reference signal only from another Network Element that contains a clock of equivalent or superior quality (stratum level).

15.4.3.7 BellSouth shall select for synchronization those facilities shown to have the greatest degree of availability (absence of outages).

15.4.3.8 Where possible, all primary and secondary synchronization facilities shall be physically diverse (this means the maximum feasible physical separation of synchronization equipment and cabling).

15.4.3.9 No timing loops shall be formed in any combination of primary and secondary facilities.

15.4.3.10 An Operations Support System (OSS) shall continuously monitor the BITS for synchronization related failures or degradation.

15.4.3.11 An OSS shall continuously monitor all equipment transporting synchronization facilities for synchronization related failures or degradation.

15.4.3.12 For non-SONET equipment, BellSouth shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.

MCImetro-BellSouth Florida Interconnection Agreement 15.4.3.13 For SONET equipment, BellSouth shall provide synchronization facilities that have time deviation (TDEV) for integration times greater than 0.05 seconds and less than or equal to 10 seconds, that is less than or equal to 10 nanoseconds. TDEV, in nanoseconds, for integration times greater than 10 seconds and less than 1000 seconds, shall be less than 3.1623 times the square-root of the integration time. For example, for integration times of 25 seconds, TDEV shall be less than 15.8 nanoseconds.

15.5 SS7 Network Interconnection

15.5.1.1 Definition:

Figure 8 depicts Signaling System 7 (SS7) Network Interconnection. SS7 Network Interconnection is the interconnection of MCIm local Signaling Transfer Point (STPs) with BellSouth STPs. This interconnection provides connectivity that enables the exchange of SS7 messages among BellSouth switching systems and databases (DBs), MCIm local or tandem switching systems, and other thirdparty switching systems directly connected to the BellSouth SS7 network.





15.5.2 Technical Requirements

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15.5.2.1 SS7 Network Interconnection shall provide connectivity to all components of the BellSouth SS7 network. These include:

15.5.2.1.1 BellSouth local or tandem switching systems;

15.5.2.1.2 BellSouth DBs; and

15.5.2.1.3 Other third-party local or tandem switching systems.

15.5.2.2 The connectivity provided by SS7 Network Interconnection shall fully support the functions of BellSouth switching systems and DBs and MCIm or other third-party switching systems with A-link access to the BellSouth SS7 network.

15.5.2.3 In particular, Figure 9 depicts a circumstance where SS7 Network Interconnection shall provide transport for certain types of Transaction Capabilities Application Part (TCAP) messages. If traffic is routed based on dialed or translated digits between an MCIm local switching system and a BellSouth or other third-party local switching system, either directly or via a BellSouth tandem switching system, then it is a requirement that the BellSouth SS7 network convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the MCIm local STPs and the BellSouth or other third-party local switch.





FIGURE 9. Interswitch TCAP Signaling for SS7 Network Interconnection

15.5.2.4 When the capability to route messages based on Intermediate Signaling Network Identifier (ISNI) is generally available on BellSouth STPs, the BellSouth SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the BellSouth switch routes traffic based on a Carrier Identification Code (CIC).

15.5.2.5 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1. 111 (Reference 12.5.2). This includes:

15.5.2.5.1 Signaling Data Link functions, as specified in ANSI T1.111.2;

15.5.2.5.2 Signaling Link functions, as specified in ANSI T1.111.3; and

15.5.2.5.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

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15.5.2.6 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112 (Reference 12.5.4). In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4.

15.5.2.7 Where the destination signaling point is a BellSouth switching system or DB, or is another third-party local or tandem switching system directly connected to the BellSouth SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.

15.5.2.8 Where the destination signaling point is an MCIm local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of MCIm local STPs, and shall not include SCCP Subsystem Management of the destination.

15.5.2.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.

15.5.2.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.

15.5.2.11 If and when Internetwork MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of BellSouth STPs, SS7 Network Interconnection shall provide these functions of the OMAP.

15.5.2.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:

15.5.2.12.1 MTP Performance, as specified in ANSI T1.111.6;

15.5.2.12.2 SCCP Performance, as specified in ANSI T1.112.5; and

MCImetro-BellSouth Florida Interconnection Agreement 15.5.2.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.

15.5.3 Interface Requirements

15.5.3.1 BellSouth shall offer the following SS7 Network Interconnection options to connect MCIm or MCImdesignated STPs to the BellSouth SS7 network:

15.5.3.1.1 D-link interface from MCIm STPs.

15.5.3.2 Each interface shall be provided by one or more sets (layers) of signaling links, as follows:

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15.5.3.3 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, including but not limited to a DSX-1, in the Central Office (CO) where the BellSouth STPs is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. BellSouth shall offer higher rate DS1 signaling links for interconnecting MCIm local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs.

15.5.3.3.1 In each LATA, there will be two signaling points of interconnection (SPOIs). The requirement for two SPOIs is driven by the critical importance attached by all parties to signaling link diversity.

15.5.3.3.2 Each party will designate one of the two SPOIs in the LATA. A SPOI can be any existing cross connect point in the LATA. Since each party will designate a SPOI, we believe that both parties will be incented to select reasonable and efficient SPOI locations. MCImetro-BellSouth Florida Interconnection Agreement

15.5.3.3.3 Each signaling link requires a port on each party's STP, which each party shall provide without explicit charge.

15.5.3.4 The BellSouth CO shall provide intraoffice diversity between the SPOIs and the BellSouth STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to a BellSouth STPs.

15.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. These protocol interfaces shall conform to the following specifications:

> 15.5.3.5.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital network User Part (ISDNUP);

15.5.3.5.2 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;

15.5.3.5.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and

15.5.3.5.4 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

15.5.3.5 BellSouth shall set message screening parameters to block accept messages from MCIm local or tandem switching systems destined to any signaling point in the BellSouth SS7 network with which the MCIm switching system has a legitimate signaling relation.

15.5.4 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following technical references:

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15.5.4.1 ANSI T1.110-1992 American National Standard Telecommunications Signaling System Number 7 (SS7) -General Information;

15.5.4.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);

15.5.4.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;

15.5.4.4 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Signaling Connection Control Part (SCCP);

15.5.4.5 ANSI T1.113-1995 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Integrated Services Digital Network (ISDN) User Part;

15.5.4.6 ANSI T1.114-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Transaction Capabilities Application Part (TCAP);

15.5.4.7 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Monitoring and Measurements for Networks;

15.5.4.8 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Operations, Maintenance and Administration Part (OMAP);

15.5.4.9 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) -Intermediate Signaling Network Identification (ISNI);

15.5.4.10 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);

MCImetro-BellSouth Florida Interconnection Agreement 15.5.4.11 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service;

15.5.4.12 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;

15.5.4.13 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and,

15.5.4.14 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

- 15.6 Network Interconnection
  - 15.6.1 Technical Requirements -

15.6.1.1 When requested by MCIm, BellSouth shall provide interconnections between the BellSouth Network Elements provided to MCIm and MCIm's network at transmission rates designated by MCIm.

15.6.1.2 Traffic shall be combined and routed as follows:

15.6.1.2.1 BellSouth shall provide direct trunks for intraLATA traffic (except 911, directory assistance, operator services, and other services that may require special routing) and, at MCIm's request, BellSouth shall allow MCIm to route such traffic either directly to a BellSouth tandem or directly to a BellSouth endoffice. At MCIm's option, intraLATA toll and local traffic shall be combined onto one trunk group.

15.6.1.2.2 At MCIm's request, BellSouth shall receive MCIm traffic destined to the BellSouth Operator Systems Network Element, on trunks from an MCIm end-office or an MCIm tandem.

15.6.1.2.3 At MCIm's request, BellSouth shall receive MCIm CAMA-ANI (Centralized Automatic Message Accounting - Automatic Number identification) traffic

MCImetro-BellSouth Florida Interconnection Agreement destined to the BellSouth B911 PSAPs, or E911 tandems, on trunks from an MCIm end-office.

> 15.6.1.2.4 If and when S911 is being provided by BellSouth, at MCIm's request, BellSouth shall receive MCIm SS7 traffic destined to any BellSouth S911 tandem on trunks from an MCIm end-office.

15.6.1.3 When requested by MCIm and a third party carrier, BellSouth shall provide interconnections between MCIm's network, and the other carrier's network through the BellSouth network at transmission rates designated by MCIm, including, but not limited to DS1, DS3, and STS-1. BellSouth shall combine and route traffic to and from other local carriers and interLATA carriers through the BellSouth network, and at MCIm's request, BellSouth shall record and keep records of such traffic for MCIm billing purposes.

15.6.1.4 BellSouth shall provide two-way trunk groups for interconnections. At MCIm's request, BellSouth shall provide unidirectional traffic on such trunks, in either direction, effectively operating them as if they were one-way trunk groups.

15.6.1.5 BellSouth shall provision trunks without any user restrictions (e.g., option for two-way trunking where mutually agreed to, and no unnecessary trunk group fragmentation by traffic types; provided that the Party receiving the traffic has the right to receive traffic in the manner set forth in Section 1.1.2 of Attachment IV).

15.6.1.6 All trunking provided by BellSouth shall adhere to the applicable performance requirements set forth in the "General Performance Requirements" section of this Agreement.

15.6.1.7 At MCIm's request, BellSouth shall provide for overflow routing from a given trunk group or groups onto another trunk group or groups as MCIm designates.

15.6.1.8 BellSouth and MCIm shall agree on the establishment of two-way trunk groups for the exchange of traffic for other IXCs. These trunk groups can be provided in a "meet point" arrangement.

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15.6.1.9 Interconnection shall be made available upon MCIm's request at any Technically Feasible point of interface. All trunk interconnections shall be provided, including, SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID (Direct Inward Dialing), CAMA-ANI, and trunking necessary so that interim NP can be provided.

15.6.1.10 Trunk Interface Requirements

15.6.1.10.1 B911/E911 Trunks

15.6.1.10.1.1 BellSouth shall allow MCIm to provide direct trunking to BellSouth E911 tandem. These trunks are to be provided as one-way trunks from a given MCIm end office to the BellSouth 911 tandem.

15.6.1.10.2 S911 Trunks

In areas where S911 tandems are used, BellSouth shall allow MCIm to provide direct trunking to each BellSouth S911 tandem. Such SS7 trunks are to be provided as one-way trunks from a given MCIm endoffice to the BellSouth S911 tandem.

15.6.1.10.3 Local Switch and Access Tandem Trunks

15.6.1.10.3.1 BellSouth shall provide trunks groups provisioned exclusively to carry intraLATA traffic, as designated by MCIm.

15.6.1.10.3.2 BellSouth shall provide trunk groups provisioned exclusively to carry interLATA traffic, as designated by MCIm.

15.6.1.10.3.3 BellSouth shall provide SS7 trunks which provide SS7 interconnection. At MCIm's request, MF trunks may be substituted for SS7 trunks where applicable.

15.6.1.10.3.4 When and if Technically Feasible, BellSouth shall simultaneously route calls based on dialed digits (in accordance with

MCImetro-BellSouth Florida Interconnection Agreement the standard GR-317-CORE), and Carrier Identification Code (in accordance with the standard GR-394-CORE) over a single SS7 trunk group.

15.6.1.10.4 BellSouth Operator Services Trunk

15.6.1.10.4.1 For traffic from the BellSouth network to MCIm for Operator Services, BellSouth shall provide one trunk group per NPA served by the local BellSouth switch.

15.6.1.10.4.2 BellSouth shall provide such trunks as one-way trunks from the BellSouth network to the MCIm network.

15.6.2 Network Interconnection between BellSouth and MCIm shall meet or exceed all of the requirements for Network Interconnection set forth in the following technical references:

15.6.2.1 GR-317-CORE, Switching System generic requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February, 1994;

15.6.2.2 GR-394-CORE, Switching System generic requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February, 1994;

15.6.2.3 FR-NWT-000271, OSSGR Operator Services Systems generic requirements, Bellcore, 1994 Edition; and

15.6.2.4 FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition.

### Section 16. Basic 911 and E911

See Attachment VIII, Section 6.1.1 911 General Requirements and Section 6.2.1 911 System Interface and Exchanges

### Section 17. Directory Assistance Data

MCImetro-BellSouth Florida Interconnection Agreement See Attachment VIII, Section 6.1.6, Directory Assistance Data General Requirements and Section 6.2.2, Directory Assistance Data Interfaces and Exchanges.