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| | SUPERVISOR: PERSON IN CHARGE: DOCKET NO: A-310782 F7 | 000 | | DATE FILED: 03/27/03 EFFECTIVE DATE: 00/00/00 |
| | PARTY/COMPLAINANT: | VERIZON PENNSYL | VANIA | INC. |
| | RESPONDENT/APPLICANT: | IDT AMERICA, CO | RP. | |
| | COMP/APP COUNTY: | | UTII | LITY CODE: 310782 |
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ALLEGATION OR SUBJECT

JOINT PETITION OF VERIZON PENNSYLVANIA INC. AND IDT AMERICA CORP. FOR APPROVAL OF ADOPTION OF AN INTERCONNECTION AGREEMENT UNDER SECTION 252(I) OF THE TELE-COMMUNICATIONS ACT OF 1996.

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| 8. | DOCKET NO: A-310782 F7000 | : 9. EFFECTIVE DATE: 00/00/00 | | |
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| | PARTY/COMPLAINANT: VERIZON PENNS | YLVANIA INC. | | |
| | RESPONDENT/APPLICANT: IDT AMERICA, (| CORP. | | |
| | COMP/APP COUNTY: | UTILITY CODE: 310782 | | |
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| 8. | DOCKET NO: A-310782 F7000 | : 9. EFFECTIVE DATE: 00/00/00 |
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| | PARTY/COMPLAINANT: VERIZON PENN | NSVIJANTA INC |
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| | RESPONDENT/APPLICANT: IDT AMERICA, | , CORP. |
| | COMP/APP COUNTY: | UTILITY CODE: 310782 |
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ALLEGATION OR SUBJECT



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March 27, 2003

1717 Arch Street, 32NW Philadelphia, PA 19103

Tel: (215) 963-6004 Fax: (215) 563-2658 Daniel.Monagle@Verizon.com

VIA UPS OVERNIGHT

Daniel E. Monagle Assistant General Counsel

Pennsylvania

James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2nd Floor Harrisburg, PA 17120

MAR 2 7 2003

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

RE: Joint Filing of Verizon Pennsylvania Inc. and IDT America Corp. of Adoption of an Interconnection Agreement $A - 3/078 \supseteq F 7006$

Dear Mr. McNulty:

Enclosed please find an original and three (3) copies of the Joint Filing of Verizon Pennsylvania Inc. and IDT America Corp. of Adoption of an Interconnection Agreement. The Agreement being adopted is the Agreement between Verizon New York Inc. d/b/a Verizon New York, and MCImetro Access Transmission Services LLC, as approved by the Connecticut Department of Public Utility Control on June 3, 1998 in Connecticut Case No. 98-04-36. A copy of that Agreement, as modified to reflect a December 1998 Amendment, is included with this filing.

Please date stamp the enclosed additional copy and return it to me in the enclosed selfaddressed, stamped envelope.

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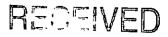
Very truly yours,

Daniel E. Monagle Daniel E. Monagle

DEM/slb Enclosure

cc: James Courter, President, IDT America Corp. Attached Service List





BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION MAR 2 7 2003

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

JOINT FILING BY VERIZON PENNSYLVANIA INC. AND IDT AMERICA CORP. OF ADOPTION OF AN INTERCONNECTION AGREEMENT

PUC Docket No. A - 3/0782 F7000

JOINT FILING

Verizon Pennsylvania Inc. ("Verizon PA") and IDT America Corp. ("IDT") respectfully submit to the Commission the attached adoption letter effective January 17, 2003 (the "Adoption") under the Memorandum Opinion and Order of the Federal Communications Commission in CC Docket No. 98-184, at ¶ 305 and Appendix D ¶ 32 (rel. June 16, 2000) ("BA/GTE Merger Conditions"). The Adoption provides for the continued interconnection of the two companies' networks and makes available to IDT access to unbundled network elements, wholesale telecommunications services, and certain ancillary services offered by Verizon PA.

In support of this filing, Verizon PA and IDT state as follows:

THE PARTIES

1. Verizon PA is an incumbent local exchange carrier authorized to provide local exchange telephone service in Pennsylvania.

2. IDT is a competitive local exchange carrier authorized to provide local telephone service in Pennsylvania consistent with appropriate legal requirements established by the Commission.

THE ADOPTION

3. Pursuant to the BA/GTE Merger Conditions, IDT has adopted the terms of the Interconnection Agreement between Verizon New York Inc., d/b/a Verizon New York and MCImetro Access Transmission Services LLC, which the Connecticut Department of Public

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Utility Control approved on June 3, 1998 in Case No. 98-04-36. Under the Adoption, IDT agrees to be bound by the terms of the Agreement between Verizon New York Inc., d/b/a Verizon New York and MCImetro Access Transmission Services LLC as such agreement is in effect on the date hereof after giving effect to operation of law.

4. The Adoption sets forth the terms, conditions and prices under which Verizon PA and IDT will offer and provide certain network interconnection services, access to network elements and wholesale telecommunications services available for resale to each other within each Local Access and Transport Area ("LATA") in which both Verizon PA and IDT operate in Pennsylvania, to the extent required by the BA/GTE Merger Conditions.

5. Key provisions of the Adoption provide for:

- (i) Unbundled loops -- providing IDT access to existing Verizon PA customers -- based on a rate methodology specified in Appendix 2 to the Adoption;
- (ii) Customers to retain their telephone numbers when they switch to IDT;
- (iii) Including IDT customers' primary listings in the appropriate alphabetical directory ("White Pages") and, for business customers, in the appropriate classified directory ("Yellow Pages");
- (iv) The resale of Verizon PA telecommunications services for a wholesale discount as specified in Appendix 2 to the Adoption;
- (v) The continued provision of 911 services to all customers; and
- (vi) Performance standards for services provided by Verizon PA to IDT equal to the level of service provided by Verizon PA to its own end-user customers and other telecommunications carriers.

COMPLIANCE WITH THE BA/GTE MERGER CONDITIONS

6. If the Commission determines that it wishes to (or must) review the Adoption under

the Telecommunications Act of 1996 or otherwise, the Adoption satisfies the requirements of the

BA/GTE Merger Conditions. Specifically, the Adoption is of those voluntarily negotiated terms

of a Verizon interconnection agreement from another state in what is defined as the "Bell Atlantic Service Area" that are eligible for adoption under the BA/GTE Merger Conditions.

7. The Adoption does not discriminate against any other telecommunications carrier, as any telecommunications carrier may seek an adoption pursuant to the same conditions set forth herein.

REVIEW OF THE ADOPTION

8. Verizon PA and IDT respectfully request that, if the Commission chooses to review the Adoption, it expedite such review to facilitate implementation of competition in the local exchange market.

WHEREFORE, Verizon PA and IDT respectfully submit the attached Adoption under the

BA/GTE Merger Conditions.

Respectfully submitted,

6.1 Nones

Julia A. Conover Vice President and General Counsel Verizon Pennsylvania Inc. Daniel E. Monagle Verizon Pennsylvania Inc. 1717 Arch Street, 32N Philadelphia, PA 19103 Tel. (215) 963-6001 Fax (215) 563-2658

Attorneys For Verizon Pennsylvania Inc.

James Courter President IDT America Corp. 520 Broad Street

Newark, New Jersey 07102-3111 Tel. (973) 438-4300

IDT America Corp.

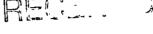
Of Counsel Jack H. White

Dated: Eebruary __, 2003

Jeffrey A. Masoner Vice President Interconnection Services Policy and Planning Wholesale Marketing APR 0 2 2003

2107 Wilson Boulevard Arlington, VA 22201

Phone 703 974-4610 Fax 703 974-0314 jeffrey.a.masoner@verizon.com



MAR 2 7 2003

January 23, 2003

PA PUBLIC UTILITY COMMITCION SECRETARY'S BURLAU

A-310783 F7000

James Courter President IDT America, Corp. 520 Broad Street Newark, New Jersey 07102-3111

Re: Requested Adoption Under the FCC Merger Conditions

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FOLDER

Dear Mr. Courter:

Verizon Pennsylvania Inc., f/k/a Bell Atlantic – Pennsylvania, Inc. ("Verizon"), a Pennsylvania corporation with its principal place of business at 1717 Arch Street, Philadelphia, Pennsylvania 19103, has received your letter stating that, pursuant to paragraph 32 of the BA/GTE Merger Conditions ("Merger Conditions"), released by the FCC on June 16, 2000 in CC Docket No. 98-184, IDT America, Corp. ("IDT"), a New Jersey corporation with its principal place of business at 520 Broad Street, Newark, New Jersey 07102-3111, wishes to provide services to customers in Verizon's service territory in the Commonwealth of Pennsylvania by adopting the First Amended Interconnection Agreement between MCImetro Access Transmission Services, LLC ("MCIm") and Verizon New York Inc., d/b/a Verizon New York, f/k/a New York Telephone Company, d/b/a Bell Atlantic – New York ("Verizon New York") dated April 20, 1998 and last revised December 17, 1998, that was approved by the Connecticut Department of Public Utility Control as an effective agreement in the State of Connecticut, as such agreement exists on the date hereof after giving effect to operation of law (the "Verizon Connecticut Terms").

I understand that IDT has a copy of the Verizon Connecticut Terms which, in any case, are attached hereto as Appendix 1. Please note the following with respect to IDT's adoption of the Verizon Connecticut Terms.

- 1. By the Parties' countersignature on this letter, Verizon and IDT each hereby represent and agree to the following four points:
 - (A) IDT adopts the Verizon Connecticut Terms in the service territory of Verizon, as they are in effect on the date hereof after giving effect to operation of law, and in applying the Verizon Connecticut Terms, the Parties agree to be bound by the Verizon Connecticut Terms and that:
 - 1. IDT shall be substituted in place of MCImetro Access Transmission Services, LLC and MCIm in the Verizon Connecticut Terms wherever appropriate;
 - 2. The Pennsylvania Public Utility Commission ("PAPUC") shall be substituted in place of the Connecticut Department of Public Utility Control ("Department") wherever appropriate;
 - 3. Except with respect to conflict of law principles, the domestic law of the Commonwealth of Pennsylvania shall be substituted in place of Connecticut law as the governing state law referenced at Section 20.5, and wherever else appropriate, in the Verizon Connecticut Terms.
 - (B) Section 20.9 is hereby amended to substitute the following recipients for purposes of Notice to either IDT or Verizon as may be required or permitted under the Verizon Connecticut Terms, subject to designation from time to time of such other recipients as either Party may designate pursuant to proper Notice:

To IDT:

Attention: David W. Lucky IDT America, Corp. 520 Broad Street, 14th Floor Newark, New Jersey 07102-3111 Telephone Number: 973-438-3891 Facsimile Number: 973-438-1479 Internet Address: dlucky@corp.idt.net

with a copy to each of:

Carl Billek IDT America, Corp. 520 Broad Street, 14th Floor Newark, New Jersey 07102-3111 Telephone Number: 973-438-4854 Facsimile Number: 973-438-1455 Internet Address: carl.bille@corp.idt.net

Richard S. Dodd II

Of Counsel IDT America Corp. 1850 M Street, Suite 300 Washington, DC 20036 Telephone Number: 202-367-7601 Facsimile Number: 202-659-1931 Internet Address: rdodd@winstar.com

To Verizon:

Director-Contract Performance & Administration Verizon Wholesale Markets 600 Hidden Ridge, HQEWMNOTICES Irving, TX 75038 Telephone Number: 972/718-5988 Facsimile Number: 972/719-1519 Internet Address: wmnotices@verizon.com

with a copy to:

Vice President and Associate General Counsel Verizon Wholesale Markets 1515 North Court House Road, Suite 500 Arlington, VA 22201 Facsimile: 703/351-3664

- (C) IDT represents and warrants that it is a certified provider of local telecommunications service in the Commonwealth of Pennsylvania, and . that its adoption of the Verizon Connecticut Terms will only cover services in the service territory of Verizon in the Commonwealth of Pennsylvania.
- (D) In the event an interconnection agreement between Verizon and IDT is currently in effect in the Commonwealth of Pennsylvania (the "Original ICA"), this adoption shall be an amendment and restatement of the operating terms and conditions of the Original ICA, and shall replace in their entirety the terms of the Original ICA. This adoption is not intended to be, nor shall it be construed to create, a novation or accord and satisfaction with respect to the Original ICA. Any outstanding payment obligations of the parties that were incurred but not fully performed under the Original ICA shall constitute payment obligations of the parties under this adoption.
- 2. IDT's adoption of the Verizon Connecticut Terms shall become effective on January 17, 2003. Verizon shall file this adoption letter with the PAPUC promptly upon receipt of an original of this letter, countersigned by an authorized officer of IDT. The term and termination provisions of the MCIm/Verizon

Connecticut agreement shall govern IDT's adoption of the Verizon Connecticut Terms.

- 3. As the Verizon Connecticut Terms are being adopted by IDT pursuant to the Merger Conditions, Verizon does not provide the Verizon Connecticut Terms to IDT as either a voluntary or negotiated agreement. The filing and performance by Verizon of the Verizon Connecticut Terms does not in any way constitute a waiver by Verizon of any position as to the Verizon Connecticut Terms or a portion thereof. Nor does it constitute a waiver by Verizon of any rights and remedies it may have to seek review of the Verizon Connecticut Terms, or to seek review of any provisions included in these Verizon Connecticut Terms as a result of IDT's election pursuant to the Merger Conditions.
- 4. For avoidance of doubt, please note that adoption of the Verizon Connecticut Terms will not result in reciprocal compensation payments for Internet traffic. Verizon has always taken the position that reciprocal compensation was not due to be paid for Internet traffic under section 251(b)(5) of the Act. Verizon's position that reciprocal compensation is not to be paid for Internet traffic was confirmed by the FCC in the Order on Remand and Report and Order adopted on April 18, 2001 ("FCC Remand Order"), which held that Internet traffic constitutes "information access" outside the scope of the reciprocal compensation obligations set forth in section 251(b)(5) of the Act.¹ Accordingly, compensation for Internet traffic – if any – is governed by the terms of the FCC Remand Order: not pursuant to adoption of the Verizon Connecticut Terms.² Moreover, in light of the FCC Remand Order, even if the Verizon Connecticut Terms include provisions invoking an intercarrier compensation mechanism for Internet traffic, any reasonable amount of time permitted for adopting such provisions has expired under the FCC's rules implementing section 252(i) of the Act.³ In fact, the FCC Remand Order made clear that carriers may not adopt provisions of an existing interconnection agreement to the extent that such provisions provide compensation for Internet Traffic.⁴

¹ Order on Remand and Report and Order, In the Matters of: Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68 (rel. April 27, 2001) ("FCC Remand Order") ¶44, remanded, WorldCom, Inc. v. FCC, No. 01-1218 (D.C. Cir, May.3, 2002). Although the D.C. Circuit remanded the FCC Remand Order to permit the FCC to clarify its reasoning, it left the order in place as governing federal law. See WorldCom, Inc. v. FCC, No. 01-1218, slip op. at 5 (D.C. Cir. May 3, 2002).

² For your convenience, an industry letter distributed by Verizon explaining its plans to implement the *FCC Internet Order* can be viewed at Verizon's Customer Support Website at URL <u>www.verizon.com/wise</u> (select Verizon East Customer Support, Business Resources, Customer Documentation, Resources, Industry Letters, CLEC, May 21, 2001 Order on Remand).

³ See, e.g., 47 C.F.R. Section 51.809(c). These rules implementing section 252(i) of the Act apply to interstate adoptions under the Merger Conditions as well. See, e.g., Merger Conditions \$32 (such adoptions shall be made available "under the same rules that would apply to a request under 47 U.S.C. Section 252(i)").

⁴ FCC Remand Order ¶82.

5. IDT's adoption of the Verizon Connecticut Terms pursuant to the Merger Conditions is subject to all of the provisions of such Merger Conditions. Please note that the Merger Conditions exclude the following provisions from the interstate adoption requirements: state-specific pricing, state-specific performance measures, provisions that incorporate a determination reached in an arbitration conducted in the relevant state under 47 U.S.C. Section 252 and provisions that incorporate the results of negotiations with a state commission or telecommunications carrier outside of the negotiation procedures of 47 U.S.C. Section 252(a)(1). Verizon, however, does not oppose IDT's adoption of the Verizon Connecticut Terms at this time, subject to the following reservations and exclusions:

- (A) Verizon's standard pricing schedule for interconnection agreements in the Commonwealth of Pennsylvania (as such schedule may be amended from time to time) (attached as Appendix 2 hereto), which includes (without limitation) rates for reciprocal compensation, shall apply to IDT's adoption of the Verizon Connecticut Terms. IDT should note that the aforementioned pricing schedule may contain rates for certain services the terms for which are not included in the Verizon Connecticut Terms or that are otherwise not part of this adoption. In an effort to expedite the adoption process, Verizon has not deleted such rates from the pricing schedule. However, the inclusion of such rates in no way obligates Verizon to provide the subject services and in no way waives Verizon's rights under the Merger Conditions.
- (B) IDT's adoption of the Verizon Connecticut Terms shall not obligate Verizon to provide any interconnection arrangement or unbundled network element unless it is feasible to provide given the technical, network and Operations Support Systems attributes and limitations in, and is consistent with the laws and regulatory requirements of the Commonwealth of Pennsylvania and with applicable collective bargaining agreements.
- (C) Nothing herein shall be construed as or is intended to be a concession or admission by Verizon that any provision in the Verizon Connecticut Terms complies with the rights and duties imposed by the Act, the decisions of the FCC and the Commissions, the decisions of the courts, or other law, and Verizon expressly reserves its full right to assert and pursue claims arising from or related to the Verizon Connecticut Terms.
- (D) Terms, conditions and prices contained in tariffs cited in the Verizon Connecticut Terms shall not be considered negotiated and are excluded from IDT's adoption.
- (E) IDT's adoption does not include any terms that were arbitrated in the Verizon Connecticut Terms.

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- 6. Verizon reserves the right to deny IDT's adoption and/or application of the Verizon Connecticut Terms, in whole or in part, at any time:
 - (A) when the costs of providing the Verizon Connecticut Terms to IDT are greater than the costs of providing them to MCIm;
 - (B) if the provision of the Verizon Connecticut Terms to IDT is not technically feasible;
 - (C) if Verizon otherwise is not obligated to permit such adoption and/or application under the Merger Conditions or under applicable law.
- 7. Should IDT attempt to apply the Verizon Connecticut Terms in a manner that conflicts with paragraphs 3-6 above, Verizon reserves its rights to seek appropriate legal and/or equitable relief.
- 8. In the event that a voluntary or involuntary petition has been or is in the future filed against IDT under bankruptcy or insolvency laws, or any law relating to the relief of debtors, readjustment of indebtedness, debtor reorganization or composition or extension of debt (any such proceeding, an "Insolvency Proceeding"), then: (i) all rights of Verizon under such laws, including, without limitation, all rights of Verizon under 11 U.S.C. § 366, shall be preserved, and IDT's adoption of the Verizon Connecticut Terms shall in no way impair such rights of Verizon; and (ii) all rights of IDT resulting from IDT's adoption of the Verizon Connecticut Terms shall in no way Stipulations and Orders entered in the Insolvency Proceeding, including, without limitation, any Stipulation or Order providing adequate assurance of payment to Verizon pursuant to 11 U.S.C. § 366.

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Please arrange for a duly authorized representative of IDT to sign this letter in the space provided below and return it to the undersigned.

Reviewed and countersigned as to paragraphs 1 through 8:

VERIZON PENNSYLVANIA INC.

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Vice President - Interconnection Services Policy & Planning

Reviewed and countersigned as to points A, B, C, and D of paragraph 1: IDT acknowledges Verizon's position statements of paragraphs 2 through 8 above ("Verizon'Statements of Position"), but IDT (i) disagrees with them, (ii) reserves all rights to dispute any and all of Verizon's Statements of Position, and (iii) asserts that Verizon's Statements of Position do not, and should not be used to, change or alter the underlying Terms adopted by IDT.

IDT AMERIGA, CORP. Bγ, S. Titlé ÷., 111 Attachment

c: Stephen Hughes - Verizon (w/out attachments)

RECENT

MAR 2 7 2003

AGREEMENT

DMENT

A-310782

FOLDER

Part A

PA PUBLIC UTILITY COM ... 3SICN SECRETARY'S BUREAU

APR 0.2 2003 This Agreement ("Agreement") is effective as of the Effective Date, by and between MCImetro Access Transmission Services LLC ("MCIm"), on behalf of itself and its Affiliates, a Delaware corporation with offices at 8521 Leesburg Pike, Vienna, Virginia 22182, and New York Telephone Company, d/b/a Bell Atlantic – New York ("BA"), a New York corporation with offices at 1095 Avenue of the Americas, New York, New York 10036.

WHEREAS, the Parties are entering into this Agreement to set forth the respective obligations of the Parties and the terms and conditions under which the Parties will interconnect their networks and provide other services as required by the Act (as defined below) and additional services as set forth herein; and

WHEREAS, the Parties wish to interconnect their local exchange networks in a technically and economically efficient manner for the transmission and termination of calls, so that subscribers of each can seamlessly receive calls that originate on the other's network and place calls that terminate on the other Party's network, and for MCIm's use in the provision of exchange access ("Local Interconnection"); and

WHEREAS, MCIm wishes to purchase Telecommunications Services for resale to others ("Local Resale" or "Services for Resale"), and BA is willing to provide such service; and

WHEREAS, MCIm wishes to purchase on an unbundled basis network elements, ancillary services and functions and additional features ("Network Elements"), separately or in any combination, and to use such services for itself or for the provision of its Telecommunications Services to others, and BA is willing to provide such services; and

WHEREAS, the Parties intend the rates, terms and conditions of this Agreement, and their performance of obligations thereunder, to comply with the Act, as amended by the Telecommunications Act of 1996, the Rules and Regulations of the Federal Communications Commission ("FCC"), and the orders, rules and regulations of the Connecticut Department of Public Utility Control ("Department").

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 BA hereby agree as follows:

SECTION 1 DEFINITIONS

Certain terms used in this Agreement shall have the meanings specified in Part B -DEFINITIONS attached hereto and made a part hereof, unless otherwise expressly defined herein. Other terms used but not defined herein will have the meanings ascribed to them in the Act and the FCC Rules and Regulations.

SECTION 2 INTERPRETATION AND CONSTRUCTION

2.1 All references to Parts, Sections, Attachments and Annexes shall be deemed to be references to Sections of, and Parts, Attachments and Annexes to, this Agreement unless the context shall otherwise require. The headings and numbering of the Sections, Parts, Attachments and Annexes are inserted for convenience of reference only and shall not be construed to define or limit any of the terms herein, or to affect the meaning of this Agreement. Unless the context shall otherwise require, any reference to any agreement, any other instrument, statute, regulation, rule or tariff shall be to such agreement, instrument, statute, regulation, rule or tariff, to any successor provision).

2.2 This Agreement reflects a mutual understanding of the Parties, reached in July 1997, that they would base their Interconnection Agreement for the State of Connecticut (this Agreement) on the Interconnection Agreement entered into between them for the State of New York (the New York Agreement), which had not been completed at the time, but which was subsequently finalized and which became effective October 1, 1997. Pursuant to that understanding, the New York Agreement contains provisions that are identical in all material respects to provisions of this Agreement (the Identical Provisions). The Parties agree that if any of the Identical Provisions is subsequently amended in the New York Agreement, then either Party may, at its sole option, avail itself of any such amendment in this Agreement by providing written notice to the other Party. In such instances, the Parties agree to cooperate in effecting the same amendment to the corresponding provisions contained in this Agreement, which amendment shall be effective from the date of written notice by the availing Party.

Among the Identical Provisions are certain provisions requiring BA to combine or bundle unbundled Network Elements for MCIm which BA believes are no longer required under the Act as currently interpreted, and which BA would not have included had the current state of the law prevailed at the time BA entered into the New York Agreement. These provisions, insofar as they require BA to combine or bundle unbundled Network Elements for MCIm, are referred to herein as the Objectionable Provisions. The list of Objectionable Provisions is as follows: Part A, Section 3.2; Attachment III, Sections 2.4, 2.5, 2.6, 3.4 and 15.2.5.2.1; and Attachment VIII, Sections

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1)

2.2.2.1, 3.2.15.1, 3.2.15.5, 3.4.1.1, 6.1.1, 6.1.1, 6.1.3, 6.1.5 and 6.1.9. Conversely, MCIm believes that Bell Atlantic entered into the Objectionable Provisions and is legally bound to perform the obligations contained therein in the State of New York. BA has taken steps to eliminate the Objectionable Provisions from the New York Agreement and MCIm has opposed these steps. BA's acquiescence at this time in the inclusion of the Objectionable Provisions in this Agreement (a) is based solely on BA's desire to implement in good faith the mutual understanding of the Parties described above regarding the New York Agreement and to avoid engaging in simultaneous (and perhaps unnecessary) duplicative negotiation and litigation; and (b) should under no circumstances be taken as an admission by BA that (i) the Act requires BA to combine or bundle unbundled Network Elements; or (ii) that BA has voluntarily agreed to combine or bundle unbundled Network Elements for MCIm or any other CLEC notwithstanding BA's belief that there exists no legal requirement to do so. Regardless of the outcome of any negotiation or proceeding concerning the New York Agreement, BA reserves the right to seek elimination from this Agreement of any of the Objectionable Provisions, to the extent that they require BA to combine or bundle unbundled Network Elements for MCIm, on the grounds that they are neither legally required nor the result of any voluntary agreement on BA's part. Regardless of the outcome of any negotiation or proceeding concerning the New York Agreement, MCIm reserves the right to seek preservation in this Agreement of the Objectionable Provisions.

SECTION 3 SCOPE OF AGREEMENT

3.1 This Agreement, including all Parts, Sections, Attachments and Annexes, specifies the rights and obligations of each Party with respect to the purchase and sale of Local Interconnection, Local Resale, Network Elements, access to poles, ducts, Conduits and ROW, Interim Number Portability, dialing parity, Collocation and any other services set forth herein. This Part A includes all the general terms and conditions as defined in this Agreement and descriptions of the services, pricing, technical and business requirements and physical and network security requirements are contained in the Parts, Attachments and Annexes attached hereto.

3.2 The Parties shall provide the services pursuant to this Agreement. BA shall provide the unbundled Network Elements in any technically feasible combination requested by MCIm.

3.3 This Agreement shall only apply to that portion of the State of Connecticut in which BA provided telecommunications service as an incumbent local exchange carrier as of January 1, 1998.

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1)

SECTION 4 TERM AND TERMINATION

4.1 This Agreement shall become binding upon the Parties as of the Effective Date. The initial term of this Agreement shall commence on the Effective Date and shall expire on September 30, 2000 or coincident with the expiration of the New York Agreement, whichever is earlier. Absent the receipt by one Party of written notice from the other Party at least one hundred twenty (120) days prior to the expiration of the Term to the effect that such Party intends to terminate this Agreement, this Agreement shall automatically renew and shall remain in full force and effect on and after the expiration of the Term.

4.2 If pursuant to Section 4.1 the Agreement continues in full force and effect after the expiration of the Term, either Party may terminate the Agreement by delivering one hundred twenty (120) days' advance written notice to the other Party of the intention to terminate this Agreement.

4.3 In the event of breach of any material provision of this Agreement by either Party, the non-breaching Party shall give the other Party written notice thereof, and:

4.3.1 If such material breach is for non-payment of amounts due hereunder pursuant to Attachment VIII, the breaching Party shall cure such breach within thirty (30) days of receiving such notice. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach. Amounts disputed in good faith and withheld or set off shall not be deemed "amounts due hereunder" for the purpose of this provision.

4.3.2 If such material breach is for any failure to perform in accordance with this Agreement, which, in the sole judgment of the non-breaching Party, adversely affects the non-breaching Party's subscribers, the non-breaching Party shall give notice of the breach and the breaching Party shall cure such breach to the non-breaching Party's reasonable satisfaction within ten (10) days or within a period of time equivalent to the applicable interval required by this Agreement, whichever is shorter, and if the breaching Party does not, the non-breaching Party may, at its sole option, terminate this Agreement. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach.

4.3.3 If such material breach is for any other failure to perform in accordance with this Agreement, the breaching Party shall cure such breach to the nonbreaching Party's reasonable satisfaction within forty-five (45) days, and if it does not do so, the non-breaching Party may, at its sole option, terminate this Agreement. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach.

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1)

4.3.4 [INTENTIONALLY LEFT BLANK]

4.4 Upon termination or expiration of this Agreement in accordance with this Section 4:

(a) Each Party shall promptly pay all amounts (including any late payment charges) owed under this Agreement;

(b) Each Party shall continue to perform its obligations and provide its services described herein until such time as a survivor Agreement between the Parties is entered into; provided, however, that if the Parties are unable to reach agreement within six (6) months after the termination or expiration of this Agreement, either Party has the right to submit this matter to the Department for resolution. Until a survivor agreement is reached or the Department resolves this matter, whichever is sooner, the terms, conditions, rates and charges stated herein will continue to apply, subject to a true-up based on the Department action, if any; and

(c) In the event of any termination under this Section 4, the Parties agree to provide for an uninterrupted transition of services to each other or another vendor designated by such Party.

SECTION 5 WARRANTIES

5.1 As more specifically set forth herein, each Party shall perform its obligations hereunder at parity, as embodied in the performance provisions set forth in 47 U.S.C. § 251, and any implementing regulations thereunder, as those provisions may apply to the Party and obligation in question.

5.2 As more specifically set forth in Attachment II, BA shall provide Local Resale at parity.

5.3 As more specifically set forth in Attachment III, BA shall provide Network Elements at parity.

5.4 As more specifically set forth in Attachment IV, BA shall provide Interconnection at parity and on a non-discriminatory basis. MCIm shall provide Interconnection on a non-discriminatory basis.

5.5 As more specifically set forth in Attachment V, BA shall provide Collocation in accordance with the legally effective rules, regulations and orders of the FCC and the Department.

5.6 As more specifically set forth in Attachment VI, BA shall provide non-discriminatory

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) access to Poles, Ducts, Conduits, and ROW owned or controlled by BA, in accordance with the requirements of section 224 of the Act and legally effective rules, regulations and orders of the FCC and the Department.

5.7 As more specifically set forth in Attachment VII, BA and MCIm shall provide Interim Number Portability and Number Portability in accordance with the legally effective rules, regulations and orders of the FCC and the Department.

5.8 As more specifically set forth in Attachment VIII, BA and MCIm shall meet Business Process Requirements.

5.9 [INTENTIONALLY LEFT BLANK]

5.10 As more specifically set forth in Attachment VIII, BA and MCIm shall provide dialing parity in accordance with the legally effective rules, regulations and orders of the FCC and the Department.

5.11 As more specifically set forth in Attachment IX, BA and MCIm shall meet security requirements, to the extent applicable to the security requirement in question.

5.12 As more specifically set forth in Attachment X, BA shall provide performance reporting and credits.

EXCEPT AS SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY ' WARRANTIES WITH RESPECT TO ITS SERVICES, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, IN FACT OR IN LAW. THE WARRANTIES SET FORTH IN THIS AGREEMENT ARE A PARTY'S EXCLUSIVE WARRANTIES WITH RESPECT TO ITS SERVICES AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WRITTEN OR ORAL, IN FACT OR IN LAW. EACH PARTY DISCLAIMS ANY AND ALL OTHER WARRANTIES WITH RESPECT TO ITS SERVICES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST INFRINGEMENT.

SECTION 6 COVENANTS

6.1 Neither Party shall use any service related to or using any of the services provided in this Agreement in any manner that interferes with other persons in the use of their service, prevents other persons from using their service, or otherwise impairs the quality of service to other carriers or to either Party's end users. Upon such impairment, the affected Party shall provide the other Party notice and the other Party shall use reasonable efforts to remedy the impairment.

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SECTION 7 CHARGES AND PAYMENT

7.1 In consideration of the services provided by a Party under this Agreement, the other Party shall pay the charges set forth in Attachment I. The billing and payment procedures for charges incurred by a Party hereunder, including disputed amounts, are set forth in Attachment VIII.

SECTION 8 REGULATORY APPROVAL

8.1 This Agreement, and any amendment or modification hereof, will be submitted to the Department for approval in accordance with Section 252 of the Act. In the event any governmental authority or agency rejects any provision hereof, the Parties shall negotiate promptly and in good faith such revisions as may reasonably be required to achieve approval.

8.2 In the event the FCC or the Department promulgates rules or regulations, or issues orders, or a court of competent jurisdiction issues orders, which make unlawful any provision of this Agreement, or which materially reduce or alter the services required by statute or regulations and embodied in this Agreement, then the Parties shall negotiate promptly and in good faith in order to amend the Agreement to substitute contract provisions which conform to such rules, regulations or orders. In the event the Parties cannot agree on an amendment within thirty (30) days after the date any such rules, regulations or orders become effective, then the Parties shall resolve their dispute under the applicable procedures set forth in Section 16 (Dispute Resolution Procedures) hereof.

8.3 In the event that any legally effective legislative, regulatory, judicial or other legal action materially affects any material terms of this Agreement, or the ability of MCIm or BA to perform any material terms of this Agreement, MCIm or BA may, on thirty (30) days written notice (delivered not later than thirty (30) days following the date on which such action has become legally binding or has otherwise become legally effective) require that such terms be renegotiated, and the Parties shall renegotiate in good faith such mutually acceptable new terms as may be required.

8.4 The Parties intend that any additional services requested by either Party relating to the subject matter of this Agreement that are not offered hereunder will be incorporated into this Agreement by amendment upon agreement by the Parties.

8.5 The Parties understand and agree that this Agreement will be filed with the Department and may thereafter be filed with the FCC. Subject to the Parties' rights to challenge the Agreement as permitted by applicable law, the Parties covenant and agree that this Agreement is satisfactory to them as an agreement under Section 251 of

the Act. Each Party covenants and agrees to fully support approval of this Agreement by the Department or the FCC under Section 252 of the Act without modification. The Parties, however, reserve the right to seek regulatory relief and otherwise seek redress from each other regarding performance and implementation of this Agreement. In the event the Department or FCC rejects this Agreement in whole or in part, the Parties agree to meet and negotiate in good faith to arrive at a mutually acceptable modification of the rejected portion(s); provided that such rejected portion(s) shall not affect the validity of the remainder of this Agreement.

8.6 The Parties acknowledge that the terms of this Agreement were established pursuant to an order of the Department. Any or all of the terms of this Agreement may be altered or abrogated by a successful challenge to the Agreement (or to the order approving the Agreement) as permitted by applicable law. By signing this Agreement, the Parties do not waive their right to pursue such a challenge.

SECTION 9 INDEMNIFICATION

9.1 Each Party agrees to release, indemnify, defend and hold harmless the other Party from and against all losses, claims, demands, damages, expenses, suits or other actions, or any liability whatsoever, including, but not limited to, costs and attorneys' fees (collectively, a "Loss") incurred by the indemnified Party to the extent that such Loss is: (a) suffered, made, instituted, or asserted by any other person, relating to personal injury to or death of any person, or for loss, damage to, or destruction of real and/or personal property, whether or not owned by others, incurred during the term of this Agreement and to the extent legally caused by the acts or omissions of the indemnifying Party, regardless of the form of action; or (b) suffered, made, instituted, or asserted by the indemnifying Party's own customer(s) against the indemnified Party arising out of the indemnified Party's provision of services to the indemnifying Party under this Agreement, except to the extent the Loss arises from a breach of this Agreement by the indemnified Party. Notwithstanding the foregoing indemnification, nothing in this Section 9 shall affect or limit any claims, remedies, or other actions the indemnifying Party may have against the indemnified Party under this Agreement, any other contract, or any applicable Tariff(s), regulations or laws.

9.2 The indemnification provided herein shall be conditioned upon:

9.2.1 The indemnified Party shall promptly notify the indemnifying Party of any action taken against the indemnified Party relating to the indemnification, provided that failure to notify the indemnifying Party shall not relieve it of any liability it might otherwise have under this Section 9 to the extent it was not materially prejudiced by such failure of notification.

9.2.2 The indemnifying Party shall have sole authority to defend any such

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) action, including the selection of legal counsel, and the indemnified Party may engage separate legal counsel only at its sole cost and expense. In the event the indemnifying Party does not accept the defense of any such action, the indemnified Party shall have the right to employ counsel for its own defense at the expense of the indemnifying Party.

9.2.3 In no event shall the indemnifying Party settle or consent to any judgment pertaining to any such action without the prior written consent of the indemnified Party, which consent shall not be unreasonably withheld.

9.2.4 In any action for which indemnity is sought, the indemnified Party shall assert any and all provisions in applicable tariffs that limit liability to third parties as a bar to any recovery by the third party claimant in excess of applicable limitations of liability.

9.2.5 The indemnified Party shall offer the indemnifying Party all reasonable cooperation and assistance in the defense of any such action.

SECTION 10 LIMITATION OF LIABILITY

10.1 Neither Party shall be liable to the other for any indirect, incidental, special or consequential damages arising out of or related to this Agreement or the provision of service hereunder. Notwithstanding the foregoing limitation, a Party's liability shall not be limited by the provisions of this Section 10 in the event of its willful or intentional misconduct, including gross negligence. BA shall be liable to MCIm for lost revenues resulting from BA's breach of this Agreement only to the same extent that BA's Tariffs provide liability for BA end user subscribers' revenue losses. A Party's liability shall not be limited with respect to its indemnification obligations.

SECTION 11 REMEDIES

11.1 The obligations of the Parties and the services offered under this Agreement may be unique. Accordingly, in addition to any other available rights or remedies, either Party may sue in equity for specific performance.

11.2 In the event either Party fails to switch a subscriber to the other Party's service as requested through a service request from the other Party, within any applicable intervals set forth in this Agreement or required by applicable Law, or erroneously switches the other Party's subscriber away from that Party, then such act (including the continued provision of Telecommunications Services to such subscriber by the Party erroneously switching or failing to switch) shall be deemed an improper change in subscriber carrier selection commencing with the time at which such Party erroneously failed to switch

such subscriber, or erroneously switched such subscriber. If such an improper change in subscriber carrier selection should occur, the rights and obligations of the Parties shall be determined in accordance with the regulations pertaining to such conduct on the part of Interexchange Carriers as set forth in the FCC's Rules and Regulations, Part 64, Subpart K, as these may be amended from time to time. For the purpose of this Section 11, MCIm and BA shall be deemed an "Interexchange Carrier."

11.3 At such time as the FCC or other competent regulatory body adopts regulations implementing 47 U.S.C. Section 258 or otherwise adopt regulations applicable to illegal or improper changes in local service, then such regulations shall supersede those applicable to Interexchange Carriers for the purposes of this Section 11.

11.4 Unless otherwise specifically provided hereunder, all rights of termination, cancellation or other remedies prescribed in this Agreement, or otherwise available, are cumulative and are not intended to be exclusive of other remedies to which the injured Party may be entitled at law or equity.

SECTION 12 INTELLECTUAL PROPERTY RIGHTS

12.1 Any intellectual property which originates from or is developed by a Party shall remain in the exclusive ownership of that Party. Except for a limited license to use a Party's patents or copyrights to the extent necessary for the Parties to use any facilities or equipment (including software) or to receive any service solely as provided under this Agreement, no license in patent, copyright, trademark or trade secret, or other proprietary or intellectual property right now or hereafter owned, controlled or licensable by a Party, is granted to the other Party or shall be implied or arise by estoppel.

12.2 BA shall indemnify MCIm with respect to MCIm's use, pursuant to the terms of this Agreement, of intellectual property associated with any new BA network equipment or software acquisitions. BA warrants that it will not enter into any licensing agreements with respect to new BA network equipment or software acquisitions that contain provisions that would disgualify MCIm from using or interconnecting with such network equipment or software pursuant to the terms of this Agreement. BA also warrants that it has not and will not intentionally modify any existing licensing agreements for existing network equipment or software in order to disqualify MCIm from using or interconnecting with such network equipment or software pursuant to the terms of this Agreement. To the extent that the providers of equipment or software in BA's network provide BA with indemnities covering intellectual property liabilities and those indemnities allow a flow through of protection to third parties, BA shall flow those indemnity protections through to MCIm. BA will inform MCIm of any pending or threatened intellectual property claims relating to BA's network of which BA is aware and will update that notification periodically as needed, so that MCIm receives maximum notice of any intellectual property risks it might want to address.

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Notwithstanding any part of this Section 12, MCIm retains the right to pursue legal remedies against BA if BA is at fault in causing intellectual property liability to MCIm.

12.2.1 For purposes of Section 12.2, BA's obligation to indemnify shall include the obligation to indemnify and hold MCIm harmless from and against any loss, cost, expense or liability arising out of a claim that MCIm's use, pursuant to the terms of this Agreement, of such new BA network equipment or software infringes the intellectual property rights of a third party. Moreover, should any such network equipment or software or any portion thereof provided by BA hereunder become, or, in BA's reasonable opinion, be likely to become, the subject of a claim of infringement, or should MCIm's use thereof be finally enjoined, BA shall, at its immediate expense and at its choice:

12.2.1.1 Procure for MCIm the right to continue using such material; or

12.2.1.2 Replace or modify such material to make it non-infringing provided such replacement or modification is functionally equivalent.

SECTION 13 CONFIDENTIALITY

13.1 For the purposes of this Section 13, "Confidential Information" means the following information disclosed by one Party ("Discloser") to the other Party ("Recipient") in connection with this Agreement:

13.1.1 All information disclosed by either Party to the other pursuant to Attachments I-X of this Agreement arising from the performance of this Agreement, including, but not limited to, books, records, documents and other information disclosed in an audit performed pursuant to this Agreement; and

13.1.2 Such other information as is identified as Confidential Information in accordance with Section 13.2.

13.2 All information which is to be treated as Confidential Information under Section 13.1.2 shall:

13.2.1 If in written, graphic, electromagnetic, or other tangible form, be marked as "Confidential Information"; and

13.2.2 If oral, (i) be identified by the Discloser at the time of disclosure to be "Confidential Information", and (ii) be set forth in a written summary which identifies the information as "Confidential Information" and is delivered by the Discloser to the Recipient within ten (10) days after the oral disclosure. 13.2.3 Each Party shall have the right to correct an inadvertent failure to identify such oral information as Confidential Information by giving written notification within thirty (30) days after the information is disclosed. The Recipient shall, from that time forward, treat such information as Confidential Information.

13.3 In addition to any requirements imposed by law, including, but not limited to, 47 U.S.C. § 222, for a period of three (3) years from the receipt of Confidential Information from the Discloser, except as otherwise specified in this Agreement, the Recipient agrees:

13.3.1 To use the Confidential Information only for the purpose of performing under this Agreement, including, to the extent applicable, the planning and operation of the Recipient's network; and

13.3.2 To use the same degree of care that it uses with similar confidential information of its own, to hold the Confidential Information in confidence and to disclose it to no one other than the directors, officers and employees of the Recipient and the Recipient's Affiliates, having a need to know the Confidential Information for the purpose of performing under this Agreement.

13.4 A Recipient may disclose the Discloser's Confidential Information to a third party agent or consultant, provided that prior to such disclosure the agent or consultant has executed a written agreement of non-disclosure and non-use comparable in scope to the terms of this Section 13.

13.5 The Recipient may make copies of Confidential Information only as reasonably necessary to perform its obligations and exercise its rights under this Agreement. All such copies shall bear the same copyright and proprietary rights notices as are contained on the original.

13.6 The Recipient shall return all Confidential Information defined in Section 13.1.2 in the format in which it was received from the Discloser, including any copies made by the Recipient, within thirty (30) days after a written request is delivered to the Recipient, and/or destroy all such Confidential Information, except for Confidential Information that the Recipient reasonably requires to perform its obligations under this Agreement. If the Recipient loses or makes an unauthorized disclosure of the Discloser's Confidential Information, it shall notify the Discloser immediately and use reasonable efforts to retrieve the lost or improperly disclosed information.

13.7 The requirements of this Section 13 shall not apply to Confidential Information:

13.7.1 Which was in the possession of the Recipient free of restriction prior to its receipt from the Discloser;

13.7.2 After it becomes publicly known or available through no breach of this

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Agreement by the Recipient, the Recipient's Affiliates, or the directors, officers, employees, agents, or contractors, of the Recipient or the Recipient's Affiliates;

13.7.3 After it is rightfully acquired by the Recipient free of restrictions on its disclosure;

13.7.4 Which is independently developed by personnel of the Recipient; or

13.7.5 To the extent the disclosure is required by law, or made to a court, or governmental agency for the purpose of enforcing its rights under this Agreement; provided the Discloser has been notified of an intended disclosure promptly after the Recipient becomes aware of a required disclosure or decides to make such a voluntary disclosure to enforce its rights, the Recipient undertakes reasonable, lawful measures to avoid disclosing the Confidential Information until the Discloser has had reasonable time to seek a protective order, and the Recipient complies with any protective order that covers the Confidential Information to be disclosed.

13.8 Each Party's obligations to safeguard Confidential Information disclosed prior to expiration, cancellation or termination of this Agreement shall survive such expiration, cancellation or termination.

13.9 Confidential Information shall remain the property of the Discloser, and the Discloser shall retain all of the Discloser's right, title and interest in any Confidential Information disclosed by the Discloser to the Recipient. Except as otherwise expressly provided elsewhere in this Agreement, no license is granted by this Agreement with respect to any Confidential Information (including, but not limited to, under any patent, trademark, or copyright), nor is any such license to be implied, solely by virtue of the disclosure of any Confidential Information.

13.10 Each Party agrees that the Discloser would be irreparably injured by a breach of this Section 13 by the Recipient, the Recipient's Affiliates, or the directors, officers, employees, agents or contractors of the Recipient or the Recipient's Affiliates, and that the Discloser shall be entitled to seek equitable relief, including injunctive relief and specific performance, in the event of any breach of the provisions of this Section 13. Such remedies shall not be deemed to be the exclusive remedies for a breach of this Section 13, but shall be in addition to any other remedies available at law or in equity.

13.11 The provisions of this Section 13 shall be in addition to and shall not limit, alter, define or contradict any provisions of applicable law, including, but not limited to, 47 U.S.C. § 222, and are not intended to constitute a waiver by a Party of any right with regard to protection of the confidentiality of information (whether or not defined as "Confidential Information" for purposes of this Agreement) of the Party or its customers provided by applicable law.

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13.12 Without in any way limiting the foregoing provisions of Section 13, each Party shall comply with 47 U.S.C. § 222, any implementing rules, regulations, and orders thereunder, and other federal and state rules and regulations addressing Customer Proprietary Network Information ("CPNI") and Carrier Information. A Party shall not access (including, but not limited to, through electronic interfaces and gateways provided under this Agreement), use or disclose CPNI or other customer information unless the Party has obtained any customer authorization required by applicable law for such access, use and/or disclosure. By accessing, using or disclosing CPNI or other customer information, a Party represents and warrants that the Party has obtained any customer authorization required by applicable law for such access, use or disclosure. A Party accessing, using or disclosing CPNI or other customer information shall upon request by the other Party provide proof of any customer authorization for such access, use or disclosure, required by applicable law (including, copies of any written authorization). Without limiting the foregoing provisions of this Section 13, where required by 47 U.S.C. § 222, or other provision of applicable law, a Party shall obtain a signed letter of authorization from the applicable end user in order to obtain CPNI or other customer information from the other Party.

13.13 Each Party ("Auditing Party") shall have the right to audit the other Party ("Audited Party"), to ascertain whether the Audited Party is complying with the requirements of applicable law and this Agreement with regard to the Audited Party's access to, and use and disclosure of, CPNI and other customer information, which is made available by the Auditing Party to the Audited Party under this Agreement. Any audit conducted under this Section 13.13 shall be conducted in accordance with Section 15, "Audits and Inspections". Any information disclosed by the Audited Party to the Auditing Party is employees, Agents or contractors, in an audit conducted under this Section 13.13 shall be considered to be Confidential Information under this Section 13.13 shall be considered to be Confidential Information under this Section 13.

13.14 To the extent permitted by applicable law, each Party ("Auditing Party") shall have the right to monitor the access of the other Party ("Audited Party") to CPNI and other customer information which is made available by the Auditing Party to the Audited Party under this Agreement, to ascertain whether the Audited Party is complying with the requirements of applicable law and this Agreement with regard to the Audited Party's access to, and use and disclosure of, such CPNI and other customer information. To the extent permitted by applicable law, the foregoing right shall include, but not be limited to, the right to electronically monitor the Audited Party's access to and use of CPNI and other customer information which is made available by the Auditing Party to the Audited Party under this Agreement through electronic interfaces or gateways, to ascertain whether the Audited Party is complying with the requirements of applicable law and this Agreement with regard to the Audited Party's access to, and use and disclosure of Party is complying with the requirements of applicable law and this Agreement through electronic interfaces or gateways, to ascertain whether the Audited Party is complying with the requirements of applicable law and this Agreement with regard to the Audited Party's access to, and use and disclosure of, such CPNI and other customer information.

13.15 Nothing herein shall be construed as limiting the rights of either Party with

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respect to its own subscriber information under any applicable law, including without limitation Section 222 of the Act.

SECTION 14 USE OF TRADEMARKS OR SERVICE MARKS

14.1 Neither Party nor its subcontractors or agents shall publish or use the other Party's trademarks, service marks, logos or other proprietary trade dress in any advertising, press releases, publicity matters or other promotional materials, without such Party's prior written consent.

SECTION 15 AUDITS AND EXAMINATIONS

15.1 As applicable consistent with the provision of the relevant services or functions by a Party under this Agreement, each Party may audit the other Party's books, records and documents for the purpose of evaluating the accuracy of the other Party's bills and performance reports rendered under this Agreement. Such audits may be performed no more than a total of four (4) times in a calendar year nor more often than once every nine (9) months for a specific subject matter area; provided, that particular subject matter audits may be conducted more frequently (but no more frequently than once in each calendar quarter) if the immediately prior audit for such area found previously uncorrected net inaccuracies or errors in billing or performance reporting in favor of the audited Party having an aggregate value of at least five percent (5%) of the amounts payable by the auditing Party, or statistics reportable by the audited Party, relating to services provided by the audited Party during the period covered by the audit.

15.2 In addition to the audits described in Section 15.1, each Party may audit the other Party's books, records and documents for the purpose of evaluating compliance with CPNI where the audited Party has access to CPNI in the custody of the auditing Party pursuant to this Agreement. Such CPNI audits must be performed in a minimally disruptive fashion, and an audited Party may bring objections to the Department, if the audits are unnecessarily intrusive and the Parties cannot resolve their disputes. Such CPNI audits may not be performed more frequently than annually; provided, however, that the frequency of CPNI audits may be increased to quarterly if violations of a Party's CPNI obligations exceeds five percent (5%) of the audit sample.

15.3 The auditing Party may employ other persons or firms for this purpose. Such audit shall take place at a time and place agreed on by the Parties; provided, that the auditing Party may require that the audit commence no later than sixty (60) days after the auditing Party has given notice of the audit to the other Party.

15.4 The audited Party shall promptly correct any error that is revealed in a billing audit, including back-billing of any underpayments and making a refund, in the form of a

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billing credit, of any over-payments. Such back-billing and refund shall appear on the audited Party's bill no later than the bill for the third full billing cycle after the Parties have agreed upon the accuracy of the audit results.

15.5 Each Party shall cooperate fully in any audits required hereunder, providing reasonable access to any and all employees, books, records and documents, reasonably necessary to assess the accuracy of the audited Party's bills or performance reports, or compliance with CPNI obligations, as appropriate.

15.6 Audits shall be performed at the auditing Party's expense, provided that there shall be no charge for reasonable access to the audited Party's employees, books, records and documents necessary to conduct the audits provided for hereunder.

15.7 Books, records, documents, and other information, disclosed by the audited Party to the auditing Party or the Auditing Party's employees, agents or contractors in an audit under this Section 15, shall be deemed to be Confidential Information under Section 13.

15.8 This Section 15 shall survive expiration or termination of this Agreement for a period of two (2) years after expiration or termination of this Agreement.

SECTION 16 DISPUTE RESOLUTION PROCEDURES

16.1 The Parties recognize and agree that the Department has continuing jurisdiction to implement and enforce all terms and conditions of this Agreement. Accordingly, the Parties agree that any dispute arising out of or relating to this Agreement that the Parties themselves cannot resolve may be submitted to the Department for resolution and accepted subject to the discretion of the Department. The Parties agree to seek expedited resolution by the Department, and shall request that resolution occur in no event later than sixty (60) days from the date of submission of such dispute. The Parties agree that the Department may direct them to engage an expert(s) or other facilitator(s) to assist in its decision making. Each Party shall pay half of the fees and expenses so incurred. During the Department proceeding each Party shall continue to perform its obligations under this Agreement; provided, however, that neither Party shall be required to act in any unlawful fashion. This provision shall not preclude the Parties from seeking relief available in any other forum.

SECTION 17 OPTION TO OBTAIN SERVICES UNDER OTHER AGREEMENTS

17.1 In accordance with the requirements of 47 U.S.C. § 252(i), each Party shall, upon written request by the other Party, make available to the requesting Party any interconnection, service, or network element provided under an agreement with a third

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party, and which is approved by the Department pursuant to 47 U.S.C. § 252, upon the same terms and conditions (including prices) provided in the agreement with the third party. This Agreement shall thereafter be amended to incorporate the terms and conditions (including prices) from the third party agreement applicable to the interconnection, service, or network element that the requesting Party has elected to purchase pursuant to the terms and conditions of the third party agreement. The amended rates, terms and conditions from the third party agreement shall be effective upon: (i) amendment by the Parties, or (ii) sixty (60) days after the date of written request, whichever is earlier.

17.2 To the extent the exercise of the foregoing option requires a rearrangement of facilities by the providing Party, the requesting Party shall be liable for the non-recurring charges associated therewith, as well as for any termination charges, if any, associated with the termination of existing facilities or services.

SECTION 18 NETWORK ELEMENT BONA FIDE REQUEST

18.1 A Network Element Bona Fide Request ("BFR") shall be submitted by MCIm to BA in writing and shall include a technical description of each requested Network Element.

18.2 MCIm may cancel a BFR at any time, but shall pay, subject to the provisions of this Section 18.2, BA's reasonable and demonstrable costs of processing and/or implementing the BFR up to the date of cancellation. The foregoing obligation to pay shall not apply to any cancellation made within thirty (30) days of BA's receipt of a BFR. If MCIm cancels the BFR after BA provides a quote pursuant to Section 18.7, MCIm shall pay whichever is less: (I) BA's reasonable and demonstrable costs as described above, or (ii) the estimate in the quote plus twenty percent (20%).

18.3 Within ten (10) days of its receipt, BA shall acknowledge receipt of the BFR.

18.4 Within thirty (30) days of its receipt of a BFR, BA shall provide to MCIm a preliminary analysis of such BFR, stating whether the Network Element is readily or currently available. The preliminary analysis shall confirm that BA will offer access to the Network Element, immediately if the Network Element is readily or currently available, or will provide a detailed explanation that access to the Network Element is not technically feasible and/or that the request does not qualify as a Network Element that is required to be provided under the Act. If BA declines to provide access to the Network Element pursuant to this Section 18.4, the Parties agree to conduct good faith negotiations to attempt to refine the request.

18.5 If BA determines that the Network Element is technically feasible and otherwise qualifies under the Act, it shall promptly proceed with developing the Network Element

upon receipt of written authorization from MCIm. When it receives such authorization, BA shall promptly develop the requested services, determine their availability, calculate the applicable prices and establish installation intervals.

18.6 Unless the Parties agree otherwise, the Network Element requested shall be priced in accordance with Section 252(d)(1) of the Act.

18.7 As soon as feasible, but not more than ninety (90) days after its receipt of authorization to proceed with developing the Network Element, BA shall provide to MCIm a BFR quote which will include, at a minimum, a description of each Network Element, the availability, the applicable rates, and the installation intervals.

18.8 MCIm shall have ninety (90) days after its receipt of the BFR quote to confirm its order for the Network Element pursuant to the BFR quote.

18.9 If a Party to a BFR believes that the other Party is not requesting, negotiating, or processing the BFR in good faith, or disputes a determination, or price or cost quote, or is failing to act in accordance with Section 251 of the Act, such Party may seek mediation or arbitration by the Department pursuant to Section 252 of the Act, or may invoke the Dispute Resolution Procedure as set forth in Section 16.

SECTION 19 RESPONSIBILITY FOR ENVIRONMENTAL CONTAMINATION

19.1 MCIm shall in no event be liable to BA for any costs whatsoever resulting from a violation of a federal, state or local environmental law by BA, its contractors or agents arising out of this Agreement (a "BA Environmental Violation"). BA shall, at MCIm's request, indemnify, defend, and hold harmless MCIm, each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) that are caused by a BA Environmental Violation.

19.2 BA shall in no event be liable to MCIm for any costs whatsoever resulting from a violation of a federal, state or local environmental law by MCIm, its contractors or agents arising out of this Agreement (an "MCIm Environmental Violation"). MCIm shall, at BA's request, indemnify, defend, and hold harmless BA, each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) that are caused by an MCIm Environmental Violation.

19.3 In the event any suspect materials within BA-owned, operated or leased facilities are identified to be asbestos-containing, MCIm will ensure that to the extent any activities which it undertakes in the facility disturb such suspect materials, such MCIm activities will be in accordance with applicable local, state and federal environmental

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and health and safety statutes and regulations. Except for abatement activities undertaken by MCIm or equipment placement activities that result in the generation or placement of asbestos containing material, MCIm shall not have any responsibility for managing, nor be the owner of, not have any liability for, or in connection with, any asbestos containing material at BA-owned, operated or leased facilities. BA agrees to immediately notify MCIm if BA undertakes any asbestos control or asbestos abatement activities that potentially could affect MCIm equipment or operations, including, but not

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limited to, contamination of equipment.

20.1 Authorization

20.1.1 New York Telephone Company is a corporation duly organized, validly existing and in good standing under the laws of the State of New York and has full power and authority to execute and deliver this Agreement and to perform its obligations hereunder.

20.1.2 MCIm is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has full power and authority to execute and deliver this Agreement and to perform its obligations hereunder.

20.2 **Compliance**

20.2.1 Each Party shall comply with all federal, state, and local laws, rules, and regulations applicable to the subject matter of its performance under this Agreement.

20.2.2 Compliance with the Communications Assistance for Law Enforcement Act of 1994 ("CALEA"). Each Party represents and warrants that any equipment, facilities or services provided to the other Party under this Agreement comply with CALEA, to the extent CALEA is effective. Each Party shall indemnify and hold the other Party harmless from any and all penalties imposed upon the other Party for such noncompliance and shall at the non-compliant Party's sole cost and expense, modify or replace any equipment, facilities or services provided to the other Party under this Agreement to ensure that such equipment, facilities and services fully comply with CALEA.

20.3 Independent Contractors. Neither this Agreement, nor any actions taken by BA or MCIm in compliance with this Agreement, shall be deemed to create an agency or joint venture relationship between MCIm and BA, or any relationship other than that of purchaser and seller of services. Neither this Agreement, nor any actions taken by BA

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) or MCIm in compliance with this Agreement, shall create a contractual, agency, or any other type of relationship or third party liability between one Party and the other Party's end users or others.

20.4 Force Majeure. Neither Party shall be held liable for any delay or failure in performance of any part of this Agreement from any cause beyond its control and without its fault or negligence, such as acts of God, acts of civil or military authority, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, power blackouts, strikes, work stoppages, acts or omissions of its vendors, or unusually severe weather. No delay or other failure to perform shall be excused pursuant to this Section 20.4 unless delay or failure and consequences thereof are beyond the control and without the fault or negligence of the Party claiming excusable delay or other failure to perform. In the event of any such excused delay in the performance of a Party's obligation(s) under this Agreement, the due date for the performance of the original obligation(s) shall be extended by a term equal to the time lost by reason of the delay. If any force majeure condition occurs, the Party delayed or unable to perform shall give immediate notice to the other Party and shall take all reasonable steps to correct the force majeure condition. In the event of such delay, the delaying Party shall perform its obligations at a performance level no less than that which it uses for its own operations. In the event of such performance delay or failure by BA, BA agrees to resume performance in a nondiscriminatory manner.

20.5 **Governing Law.** The validity of this Agreement, the construction and enforcement of its terms, and the interpretation of the rights and duties of the Parties shall be governed by the laws of the State of Connecticut other than as to conflicts of laws, except insofar as federal law may control any aspect of this Agreement, in which case federal law shall govern such aspect.

20.6 **Taxes.** Each Party purchasing services hereunder shall pay or otherwise be responsible for all federal, state, or local sales, use, excise, gross receipts, transaction or similar taxes, fees or surcharges levied against or upon such purchasing Party (or the providing Party when such providing Party is permitted to pass along to the purchasing Party such taxes, fees or surcharges), except for any tax on either Party's corporate existence, status or income. Whenever possible, these amounts shall be billed as a separate item on the invoice. To the extent a sale is claimed to be exempt from tax as a sale for resale, the purchasing Party shall furnish the providing Party a proper resale exemption certificate as authorized or required by statute or regulation by the jurisdiction providing said resale tax exemption. Failure to timely provide said resale tax exemption certificate will result in no exemption being available to the purchasing Party. The Party paying any taxes may contest the same in good faith, at its own expense, and shall be entitled to the benefit of any refund or recovery. The Party obligated to collect and remit taxes shall cooperate fully in any such contest by the other Party by providing records, testimony and such additional information or

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assistance as may reasonably be necessary to pursue the contest.

20.7 Assignment

20.7.1 Any assignment or delegation by either Party to any non-affiliated entity of any right, obligation or duty, or of any other interest hereunder, in whole or in part, without the prior written consent of the other Party shall be void (except the assignment of a right to moneys due or to become due), however, such consent shall not be unreasonably withheld. A Party assigning or delegating this Agreement or any right, obligation, duty or other interest hereunder to an Affiliate shall provide written notice to the other Party. All obligations and duties of any Party under this Agreement shall be binding on all successors in interest and assigns of such Party. No assignment or delegation hereof shall relieve the assignor of its obligations under this Agreement.

20.7.2 If any obligation of either Party is performed by a subcontractor or Affiliate, such Party shall remain fully responsible for the performance of this Agreement in accordance with its terms.

20.7.3 This Agreement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors and permitted assigns.

20.8 **Non-Waiver.** Failure of either Party to insist on performance of any term or condition of this Agreement or to exercise any right or privilege hereunder shall not be construed as a continuing or future waiver of such term, condition, right or privilege. No waiver of any provisions of this Agreement and no consent to any default under this Agreement shall be effective unless the same shall be in writing and properly executed by or on behalf of the Party against whom such waiver or consent is claimed. Waiver by either Party of any default by the other Party shall not be deemed a waiver of any other default. By entering into this Agreement, neither Party waives any right granted to it pursuant to the Act.

20.9 **Notices.** Notices given by one Party to the other Party under this Agreement shall be in writing and shall be: (I) delivered personally; (ii) delivered by express delivery service; (iii) mailed, certified mail or first class U.S. mail postage prepaid, return receipt requested; or (iv) delivered by telecopy to the following addresses of the Parties:

To MCIm: MCImetro Access Transmission Services LLC 7900 Westpark Drive, 8th Floor McLean, VA 22102 Attn: Vice President - Eastern Region Facsimile: (703) 905-5103

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Copy to: General Counsel MCI Communications Corporation 1801 Pennsylvania Ave, N.W. Washington, DC 20006 Facsimile: (202) 887-2454

To BA:

Bell Atlantic Network Services, Inc. 1320 North Courthouse Road, 2nd Floor Arlington, Virginia 22201 Attn: Vice President – Interconnection Services Policy & Planning Facsimile: (703) 974-0314

Copy to:

Legal Department, Bell Atlantic Network Services, Inc. 1320 North Courthouse Road, 8th Floor Arlington, Virginia 22201 Attn: Associate General Counsel

Copy to:

. . . .

Bell Atlantic – New York 1095 Avenue of the Americas, Room 3729 New York, New York 10036 Attn: Thomas J. Farrelly, General Counsel

or to such other address as either Party shall designate by proper notice. Notices will be deemed given as of the earlier of: (I) the date of actual receipt; (ii) the next business day when notice is sent via express mail or personal delivery; (iii) three (3) days after mailing in the case of first class or certified U.S. mail; or (iv) on the date set forth on the confirmation in the case of telecopy.

If personal delivery is selected to give notice, a receipt of such delivery shall be obtained. The address to which notices or communications may be given to either Party may be changed by written notice given by such Party to the other pursuant to this Section 20.9.

20:10 **Joint Work Product.** This Agreement is the joint work product of the Parties and has been negotiated by the Parties and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against either Party.

20.11 **No Third Party Beneficiaries/Disclaimer of Agency.** This Agreement is for the sole benefit of the Parties and their permitted assigns, and nothing herein express or

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implied shall create or be construed to create any third-party beneficiary rights hereunder, provided, however, that this shall not be construed to prevent MCIm from providing its Telecommunications Services to other carriers. This Agreement shall not provide any person not a Party hereto with any remedy, claim, liability, reimbursement, claim of action, or other right in excess of those existing without reference hereto. Except for provisions herein expressly authorizing a Party to act for another, nothing in this Agreement shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this Agreement, no Party undertakes to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

20.12 **Technology Upgrades.** Nothing in this Agreement shall limit BA's ability to upgrade its network through the incorporation of new equipment, new software or otherwise. BA shall provide MCIm written notice at least ninety (90) days prior to the incorporation of any such upgrades in BA's network which will materially impact MCIm's service. BA shall provide as much as one hundred eighty (180) days prior notice if it is reasonably possible to do so. MCIm shall be solely responsible for the cost and effort of accommodating such changes in its own network.

20.13 **Survival.** The Parties' obligations or any liabilities under this Agreement which by their nature are intended to continue beyond (or to be performed after) the termination or expiration of this Agreement shall survive the termination or expiration of this Agreement, including without limitation, Sections 4.3, 6, 20.2.2, 20.4, 20.8, 20.9 and 20.11 of this Part A.

20.14 Entire Agreement. The terms contained in this Agreement, and any Parts, Attachments, Annexes, tariffs and other documents or instruments expressly referred to herein, are hereby incorporated into this Agreement by this reference as if set forth fully herein and, constitute the entire agreement between the Parties with respect to the subject matter hereof, superseding all prior understandings, proposals, agreements, representations, statements, negotiations and other communications, oral or written. Neither Party shall be bound by any preprinted terms additional to or different from those in this Agreement that may appear subsequently in the other Party's form documents, purchase orders, quotations, acknowledgments, invoices or other communications.

20.15 **Power and Authority.** Each Party has full power and authority to enter into and perform this Agreement, and the person signing this Agreement on behalf of each has been properly authorized and empowered to enter into this Agreement.

20.16 Amendments and Modifications. No provision of this Agreement shall be

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) deemed amended or modified by either Party unless such an amendment or modification is in writing, dated, and signed by both Parties.

20.17 **Counterparts.** This Agreement may be executed in counterparts. Each counterpart shall be considered an original and such counterparts shall together constitute one and the same instrument.

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Part A

20.18 **Severability.** If any term, condition or provision of this Agreement is held to be invalid or unenforceable for any reason, such invalidity or unenforceability shall not invalidate the entire Agreement, unless such construction would be unreasonable.

20.18.1 [INTENTIONALLY LEFT BLANK]

20.18.2 Nothing in this Agreement shall be construed as requiring or permitting either Party to contravene any mandatory requirement of federal or state law, or any regulations or orders adopted pursuant to such law.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed.

MCImetro Access Transmission Services, Inc.

By: /s/

Printed: Dennis J. Kern

Title: Vice President

New York Telephone Company d/b/a BELL ATLANTIC – NEW YORK

By: /s/

Printed: Jacob J. Goldberg

Title: President - Telecom Industry Services Bell Atlantic

Date: April 20, 1998

Date: April 20, 1998

PART B

DEFINITIONS

1.0 **DEFINITIONS**

As used in this Agreement, the following terms shall have the meanings specified below.

1.1 "911 Service" means a universal telephone number that gives the public direct access to the PSAP. Basic 911 service collects 911 calls from one or more local exchange switches that serve a geographic area. The calls are then sent to the correct authority designated to receive such calls.

1.2 "911 Site Administrator" is a person assigned by MCIm to establish and maintain

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911 service location information for its subscribers.

1.3 "Access Services" means the interstate and intrastate switched access and private line transport services provided to Interexchange Carriers and other interexchange customers.

1.4 "Access Service Request" or "ASR" means the industry standard forms and supporting documentation used for ordering Access Services. The ASR may be used to order trunking and facilities between MCIm and BA for local interconnection.

1.5 "Act" means the Communications Act of 1934 (47 U.S.C. 151, et seq.), as amended.

1.6 "Advanced Intelligent Network" or "AIN" means a network functionality that permits specific conditions to be programmed into a switch that, when met, direct the switch to suspend call processing and to receive special instructions for further call handling instructions in order to enable carriers to offer advanced features and services.

1.7 "Affiliate" is As Defined in the Act.

1.8 "As Defined in the Act" means as specifically defined by the Act and as from time to time interpreted in the FCC Rules and Regulations.

1.9 "As Described in the Act" means as described in or required by the Act and as from time to time interpreted in the duly authorized Rules and Regulations of the FCC or the Department.

1.10 "Asymmetrical Digital Subscriber Line" or "ADSL" means a transmission technology which transmits an asymmetrical digital signal using one of a variety of line codes as specified in ANSI standards T1.413-1995-007R2.

1.11 "Automated Message Accounting" or "AMA" means the structure inherent in switch technology that initially records telecommunication message information. AMA format is contained in the Automated Message Accounting document, published by Bellcore as GR-1100-CORE.

1.12 "Automatic Location Identification" or "ALI" means a proprietary database developed for E911 systems that provides for a visual display of the caller's telephone number, address and the names of the emergency response agencies that are responsible for that address.

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1.13 "Automatic Location Identification/Data Management System" or "ALI/DMS" means the emergency service (E911/911) database containing subscriber location information (including name, address, telephone number, and sometimes special information from the local service provider) used to determine to which PSAP to route the call.

1.14 "Automatic Number Identification" or "ANI" means a signaling parameter which refers to the number transmitted through a network identifying the billing number of the calling Party.

1.15 "Automatic Route Selection" or "ARS" means a service feature that provides for automatic selection of the least expensive or most appropriate transmission facility for each call based on criteria programmed into the system.

1.16 "B.01 Transmission Grade of Service (GOS)" means a trunk facility provisioning standard with the statistical probability of no more than one call in 100 blocked on initial attempt during the average busy hour.

1.17 "Busy Line Verification/Busy Line Verify Interrupt" or "BLV/BLVI" means an operator service call in which the caller inquires as to the busy status of or requests an interruption of a call on a Telephone Exchange Service line.

1.18 "Calling Party Number" or "CPN" is a Common Channel Interoffice Signaling ("CCIS") parameter that refers to the number transmitted through a network identifying the calling party.

1.19 "Carrier Access Billing System" or "CABS" means as defined in a document prepared under the direction of the billing committee of the OBF. The Carrier Access Billing System document is currently published by Bellcore in Volumes 1, 1A, 2, 3, 3A, 4 and 5 as Special Reports SR-OPT-001868, SR-OPT-0011869, SR-OPT-001871, SR-OPT-001872, SR-OPT-001873, SR-OPT-001874, and SR-OPT-001875, respectively, and contains the recommended guidelines for the billing of access and other connectivity services.

1.20 "Central Office Switch" or "Central Office" means a switching entity within the public switched network, including, but not limited to, end office switches and tandem office switches. Central office switches may be employed as a combination end office/tandem office switches (combination Class 5/Class 4).

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1.21 "Centrex" means a Telecommunications Service that uses central office switching equipment for call routing to handle direct dialing of calls and to provide numerous private branch exchange-like features.

1.22 "Competitive Local Exchange Carrier" or "CLEC."

1.23 "Charge Number" is a CCS parameter that refers to the number transmitted through the network identifying the billing number of the calling party.

1.24 "Collocation" shall have the meaning set forth in Attachment V.

1.25 "Combinations" means provision by BA of two or more connected Network Elements ordered by MCIm to provide its Telecommunication Services in a geographic area or to a specific customer and that are placed on the same order by MCIm.

1.26 "Common Channel Interoffice Signaling" or "CCIS" means the signaling system, developed for use between switching systems with stored-program control, in which all of the signaling information for one or more groups of trunks is transmitted over a dedicated high-speed data link rather than on a per-trunk basis and, unless otherwise agreed by the Parties, the CCIS used by the Parties shall be SS7.

1.27 "Common Channel Signaling" or "CCS" means a method of digitally transmitting call set-up and network control data over a digital signaling network fully separate from the public switched telephone network that carries the actual call.

1.28 "Conduit" means a tube or protected pathway that may be used to house transmission facilities. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more inner ducts.

1.29 "Confidential Information" shall have the meaning set forth in Section 13 of Part A of this Agreement.

1.30 "Control Office" means an exchange carrier center or office designated as its company's single point of contact for the provisioning and maintenance of its portion of local interconnection arrangements.

1.31 "Cross Connection" means a connection provided pursuant to Collocation at the digital signal cross connect, MDF, or other technically feasible point including, but not limited to, frame or panel between (i) the collocating Party's equipment and (ii) the equipment or facilities of the housing party.

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1.32 "Custom Calling Features" means a set of switch-based call-management service features available to residential and business customers, including but not limited to, call-waiting, call-forwarding, and three-party calling.

1.33 "Custom Local Area Signaling Services" or "CLASS" means certain CCIS-based features available to customers including, but not limited to: automatic call back; call trace; caller identification; automatic recall and future CCIS-based offerings.

1.34 "Department" or "Commission" means the Connecticut Department of Public Utility Control.

1.35 "Database management system" or "DBMS" is a computer system used to store, sort, manipulate and update the data required to provide selective routing and ALI.

1.36 "Digital Signal Level" means one of several transmission rates in the time-division multiplex hierarchy.

1.37 "Digital Signal Level 0" or "S0" means the 56 Kbps or 64 Kbps zero-level signal in the time-division multiplex hierarchy.

1.38 "Digital Signal Level 1" or "DS1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy.

1.39 "Digital Signal Level 3" or "DS3" means the 44.736 Mbps third-level in the time-division multiplex hierarchy.

1.40 "Direct Customer Access Service" or "DCAS" means an electronic interface system provided by BA to facilitate the ordering, provisioning and maintenance of various interconnection arrangements.

1.41 "Directory Assistance Database" means the information source containing any subscriber record used by BA in its provision of live or automated operator-assisted directory assistance.

1.42 "Directory Assistance Services" means the provision of listings to callers and may include the option to complete the call at the caller's direction.

1.43 "Directory Listings" refers to subscriber information, including but not limited to name, address and phone numbers, that is published in any media, including but not

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limited to traditional white/yellow page directories, specialty directories, CD ROM, and other electronic formats.

1.44 "Disclosing Party" shall have the meaning set forth in Section 13 of Part A of this Agreement.

1.45 "E911 Message Trunk" means a dedicated line, trunk, or channel between two central offices or switching devices that provides a voice and signaling path for E911 calls.

1.46 "Effective Date" is the date on which the Parties execute this Agreement (reflected in Part A of this Agreement).

1.47 "Emergency Response Agency" means a governmental entity authorized to respond to requests from the public to meet emergencies.

1.48 "Emergency Service Number" or "ESN" means a number assigned to the ALI and selective routing databases for all subscriber telephone numbers. The ESN designates a unique combination of fire, police and emergency medical service response agencies that serve the address location of each in-service telephone number.

1.49 "Enhanced 911 Service" or "E911" means a telephone communication service that will automatically route a call dialed "911" to a designated PSAP attendant and will provide to the attendant the calling party's telephone number and, when possible, the address from which the call is being placed and the emergency response agencies responsible for the location from which the call was dialed.

1.50 "Enhanced Directory Assistance" refers to Directory Assistance Services, including, but not limited to, reverse search, talking yellow pages, and locator services.

1.51 "Enhanced White Pages" means optional features available for white pages Directory Listings (e.g., bold, all capitals, logos).

1.52 "Enhanced Yellow Pages" means optional features available for yellow pages Directory Listings (e.g., red type, bold, all capital, additional line of text, indented).

1.53 "Exchange Access" is As Defined in the Act.

1.54 "Exchange Message Record" or "EMR" means a standard used for exchange of telecommunications message information among telecommunications providers for

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billable, non-billable, sample, settlement and study data. EMR format is contained in Bellcore Practice BR-010-200-010 CRIS Exchange Message Record.

1.55 "Expanded Interconnection Service" or "EIS" means the collocation arrangement that BA provides in its designated wire centers.

1.56 "FCC" means the Federal Communications Commission.

1.57 "FCC Rules and Regulations" means the rules, regulations, decisions and orders of the FCC.

1.58 "Gateway" (ALI Gateway) is a telephone company computer facility that interfaces with MCIm's 911 administrative site to receive Automatic Location Identification (ALI) data from MCIm. Access to the Gateway will be via a dial-up modem using a common protocol or other mutually agreed to access means.

1.59 "Government Subscriber Assistance Program" means any program provided to low-income subscribers pursuant to state or federal requirement, including the existing Lifeline and Link-Up Programs.

1.60 "HDSL" or "High-Bit Rate Digital Subscriber Line" means a transmission technology that transmits up to a DS1-level signal, using any one of the following line codes: 2 Binary / 1 Quartenary ("2B1Q"), Carrierless AM/PM, Discrete Multitone ("DMT"), or 3 Binary / 1 Octel ("3BO").

1.61 "Integrated Digital Loop Carrier" or "IDLC" means a subscriber loop carrier system that integrates within the switch, at a DS1 level, twenty-four (24) local Link transmission paths combined into a 1.544 Mbps digital signal.

1.62 "Integrated Services Digital Network" or "ISDN" means a switched network service that provides end-to-end digital connectivity for the simultaneous transmission of voice and data. Basic Rate Interface-ISDN (BRI-ISDN) provides for a digital transmission of two 64 Kbps bearer channels and one 16 Kbps data channel (2B+D).

1.63 "Interconnection" is As Described in the Act and refers to the connection of a network, equipment, or facilities, of one carrier with the network, equipment, or facilities of another for the purpose of transmission and routing of Telephone Exchange Service traffic and exchange access traffic.

1.64 "Interconnection Point" or "IP" means a point of demarcation where the networks

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1.65 "Interexchange Carrier" or "IEC" means provider of interexchange Telecommunications Services.

1.66 "Interim Number Portability" or "INP" is a service arrangement whereby subscribers who change local service providers may retain existing telephone numbers with as little impairment of functioning of quality, reliability, or convenience as possible when remaining at their current location or changing their location within the geographic area served by the initial carrier's serving central office.

1.67 "InterLATA Service" is As Defined in the Act.

1.68 "Line Information Database(s)" or "LIDB" means an SCP database that provides for such functions as calling card validation for telephone line number cards issued by BA and other entities and validation for collect and billed-to-third-party services.

1.69 "Local Access and Transport Area" or "LATA" is As Defined in the Act.

1.70 "Local Exchange Carrier" or "LEC" is As Defined in the Act.

1.71 "Local Traffic" means a call that is originated and terminated within a given LATA, in the state of Connecticut except for those calls that are specified to be terminated through switched access arrangements under applicable Department rules. IntraLATA calls originated on a 1+ presubscription basis or a casual dialed (10XXX/101XXXX) basis are not considered local traffic.

1.72 "Main Distribution Frame" or "MDF" means the distribution frame of the Party providing the link used to interconnect cable pairs and line and trunk equipment terminals on a switching system.

1.73 "Master Street Address Guide" or "MSAG" means a database defining the geographic area of an E911 service. It includes an alphabetical list of the street names, high-low house number ranges, community names, and emergency service numbers provided by the counties or their agents to BA.

1.74 "MCI" means MCI Telecommunications Corporation.

1.75 "MCIm" means MCImetro Access Transmission Services LLC.

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1.76 "Meet-Point Billing" means the process whereby each Party bills the appropriate tariffed rate for its portion of a jointly provided Switched Exchange Access Service as agreed to in the agreement for Switched Access Meet Point Billing.

1.77 "Multiple Exchange Carrier Access Billing" or "MECAB" document prepared by the billing committee of the OBF, that functions under the auspices of the CLC of the ATIS. The MECAB document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of an access service provided by two or more LECs (including a LEC and a CLEC), or by one LEC in two or more states within a single LATA.

1.78 "Multiple Exchange Carriers Ordering and Design" or "MECOD" Guidelines for Access Services - Industry Support Interface, means the document developed by the ordering/provisioning Committee under the auspices of the OBF, that functions under the auspices of the CLC of the ATIS. The MECOD document, currently published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for access service which is to be provided by two or more LECs (including a LEC and a CLEC). It is published by Bellcore as SRBDS 00983.

1.79 "Mutally Agree" means that the Parties intend to agree upon a subject and that neither Party will withhold its agreement unreasonably, except where the Agreement expressly provides that a Party may withhold its agreement in its sole discretion.

1.80 "National Emergency Number Association" or "NENA" is an association with a mission to foster the technological advancement, availability, and implementation of 911 nationwide.

1.81 "Network Element" is As Defined in the Act.

1.82 "Network Element Bona Fide Request" means the process described in Part A that prescribes the terms and conditions relating to a Party's request that the other Party provide a Network Element not otherwise provided by the terms of this Agreement.

1.83 "North American Numbering Plan" or "NANP" means the system or method of telephone numbering employed in the United States, Canada, and certain Caribbean countries. It denotes the three digit Numbering Plan Area code and a seven digit telephone number made up of a three digit NXX Central Office code plus a four digit station number.

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1.84 "Number Portability" is As Defined in the Act.

1.85 "Numbering Plan Area" or "NPA" (sometimes referred to as an area code) means the three digit indicator that is designated by the first three digits of each 10-digit telephone number within the NANP. There are two general categories of NPA, "Geographic NPAs" and "Non-Geographic NPAs." A "Geographic NPA" is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that geographic area. A "Non-Geographic NPA", also known as a "Service Access Code (SAC)" is typically associated with a specialized Telecommunications Service which may be provided across multiple geographic NPA areas; 500, 800, 900, 700, and 888 are examples of Non-Geographic NPAs.

1.86 "NXX," "NXX Code," or "Central Office Code," or "CO Code" is the three digit switch entity indicator that is defined by the fourth, fifth and sixth digits of a 10 digit telephone number within the NANP.

1.87 "OBF" means the Ordering and Billing Forum, that functions under the auspices of the Carrier Liasion Committee ("CLC") of the ATIS.

1.88 "Operator Services" means: (i) operator handling for call completion (e.g., collect calls); (ii) operator or automated assistance for billing after the customer has dialed the called numbed (e.g., credit card calls); (iii) special services (e.g., BLV/BLVI, emergency agency call); and (iv) directory assistance services.

1.89 "Operator Systems" is the Network Element(s) that provides operator and automated call handling with billing, special services, subscriber telephone listings, and optional call completion services.

1.90 "Party" means either BA or MCIm; "Parties" means BA and MCIm.

1.91 "Percent Local Usage" or "PLU" means the calculation that represents the ratio of the local minutes to the sum of local and intraLATA toll minutes between exchange carriers sent over local interconnection trunks. Directory assistance, BLV/BLVI, 900, 976, transiting calls from other exchange carriers and switched access calls are not included in the calculation of PLU.

1.92 "Pole Attachment" means the connection of a facility to a utility pole. Some examples of facilities are mechanical hardware, grounding and transmission cable, and equipment boxes.

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1.93 "Port" means a termination on a Central Office Switch that permits subscribers to send or receive Telecommunications over the public switched network.

1.94 "POT Bay" or "Point of Termination Bay" means the intermediate distributing frame system that serves as the point of demarcation for collocated interconnection.

1.95 "Proprietary Information" shall the same meaning as Confidential Information.

1.96 "Public Safety Answering Point" or "PSAP" means the public safety communications center where 911 calls placed by the public for a specific geographic area will be answered.

1.97 "Rate Center" means the specific geographic point that has been designated by a given LEC as being associated with a particular NPA-NXX code which has been assigned to the LEC for its provision of Telephone Exchange Service. The Rate Center is the finite geographic point identified by a specific V&H coordinate, which is used by that LEC to measure, for billing purposes, distance sensitive transmission services associated with the specific Rate Center. Rate Centers will be identical for each Party until such time as MCIm is permitted by an appropriate regulatory body or elects to create its own Rate Centers within an area.

1.98 "Real Time" means the actual time in which an event takes place, with the reporting on or the recording of the event nearly simultaneous with its occurrence.

1.99 "Recipient" shall have the meaning set forth in Section 13 of Part A of this Agreement.

1.100 "Reciprocal Compensation" means compensation arrangements established between interconnecting local exchange carriers for the exchange of Telecommunications Services on a mutual and reciprocal basis.

1.101 "Reseller" is a category of local exchange service providers who obtain dial tone and associated Telecommunications Services from BA through the purchase of wholesale priced services for resale to their end user subscribers.

1.102 "Right of Way" or "ROW" means the right to use the land or other property of another Party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property)

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and may include the right to use discrete space in buildings, building complexes or other locations.

1.103 "Route Indexing" means the provision of Interim Number Portability through the use of direct trunks provisioned between end offices of BA and MCIm over which inbound traffic to a ported number will be routed.

1.104 "Routing Point" means a location which a LEC has designated on its own network as the homing (routing) point for inbound traffic to one or more of its NPA-NXX codes. The Routing Point is also used to calculate mileage measurements for the distance-sensitive transport element charges of Switched Exchange Access Services. Pursuant to Bell Communications Research, Inc. ("Bellcore") Practice BR 795-100-100 (the "Bellcore Practice"), the Routing Point (referred to as the "Rating Point" in such Bellcore Practice) may be an End Office Switch location or a "LEC Consortium Point of Interconnection." Pursuant to such Bellcore Practice, each "LEC Consortium Point of Interconnection" shall be designated by a common language identifier ("CLLI") code with (x) KD in positions 9, 10, 11, where (x) may be any alphanumeric A-Z or 0-9. The Routing Point must be located within the LATA in which the corresponding NPA-NXX is located. However, Routing Points associated with each NPA-NXX need not be the same as the corresponding Rate Center, nor must there be a unique and separate Routing Point corresponding to each unique and separate Rate Center; provided only that the Routing Point associated with a given NPA-NXX must be located in the same LATA as the Rate Center associated with the NPA-NXX.

1.105 "Selective Routing E911" is a service that automatically routes an E911 call to the PSAP that has jurisdictional responsibility for the service address of the telephone that dialed 911, irrespective of telephone company exchange or wire center boundaries.

1.106 "Service Control Point" or "SCP" means a component of the signaling network that acts as a database to provide information to another component of the signaling network (i.e., Service Switching Point or another SCP) for processing or routing certain types of network calls. A query/response mechanism is typically used in communicating with an SCP.

1.107 "Signaling Transfer Point" or "STP" means a component of the signaling network that performs message routing functions and provides information for the routing of messages between signaling network components. An STP transmits, receives and processes CCIS messages.

1.108 "Switched Exchange Access Service" means the offering of transmission or

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switching services to Telecommunications Carriers for the purpose of the origination or termination of Telephone Toll Service. Switched Exchange Access Services include: Feature Group A, Feature Group B, Feature Group D, 800/888 access, and 900 access and their successors or similar Switched Exchange Access services.

1.109 "Synchronous Optical Network" or "SONET" means an optical interface standard that allows inter-networking of transmission products from multiple vendors. The base transmission rate is 51.84 Mbps (OC-1/STS-1) and higher rates are direct multiples of the base rate.

1.110 "Tandem Office Switch" means a Class 4 switch that is used to connect and switch trunk circuits between and among end office switches and other tandems.

1.111 "Tariff" means a schedule of rates, terms and conditions on file with the Department. References to a Tariff in this Agreement shall be construed to include any tariff or tariffs that may be filed to amend, supersede or replace an existing tariff consistent with the terms of this Agreement.

1.112 "Technically Feasible" refers solely to technical or operational concerns, rather than economic, space, or site considerations.

1.113 "Technically Feasible Point" is As Described in the FCC Rules and regulations.

1.114 "Telecommunications" is As Defined in the Act.

1.115 "Telecommunications Carrier" is As Defined in the Act.

1.116 "Telecommunications Service" is As Defined in the Act.

1.117 "Telephone Exchange Service" is As Defined in the Act.

1.118 "Thousands Block of Numbers" shall mean 1000 or more consecutive numbers beginning and ending on a digit boundary, e.g., 949-1000 to 949-1999.

1.119 [INTENTIONALLY LEFT BLANK]

1.120 "Wire Center" denotes a building or space within a building that serves as an aggregation point on a given carrier's network, where transmission facilities and circuits are connected or switched. Wire Center can also denote a building in which one or more central offices, used for the provision of local exchange services and exchange

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access services, are located. However, for purposes of EIS, Wire Center shall mean those points eligible for such connections as specified in the FCC Rules and Regulations.

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PART B

APPENDIX 1 ACRONYM LIST

| MATIC CALL DISTRIBUTOR |
|---|
| |
| OG / DIGITAL CONVERSION |
| IMETRICAL DIGITAL SUBSCRIBER LINE |
| NCED INTELLIGENT NETWORK |
| MATIC MESSAGE ACCOUNTING |
| MATIC NUMBER IDENTIFICATION |
| MATIC NUMBER IDENTIFICATION (INFORMATION S) |
| RICAN NATIONAL STANDARDS INSTITUTE |
| AGE REVENUE PER MESSAGE |
| DMATIC ROUTE SELECTION |
| MATIC RESPONSE UNIT |
| SS SERVICE REQUEST |
| NCE FOR TELECOMMUNICATIONS INDUSTRY |
| NG ACCOUNT NUMBER |
| DING INTEGRATED TIMING SUPPLY |
| LINE INTERRUPT |
| LINE VERIFICATION |
| LINE VERIFICATION INTERRUPT |
| |

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Part B

| BNS | BILLED NUMBER SCREENING |
|-----------|---|
| BOS | BILLING OUTPUT SPECIFICATIONS |
| BRI | BASIC RATE INTERFACE (for ISDN) |
| САМА | CENTRALIZED AUTOMATIC MESSAGE ACCOUNTING |
| CAP | COMPETITIVE ACCESS PROVIDER |
| CÁTC | CARRIER ACCOUNT TEAM CENTER |
| CATS | CONSORTIUM FOR AUDIOGRAPHICS TELECONFERENCING STANDARDS |
| CATV | CABLE TELEVISION |
| CCIS | COMMON CHANNEL INTEROFFICE SIGNALING |
| CCITT | INTERNATIONAL TELEGRAPH AND TELEPHONE CONSULTATIVE COMMITTEE |
| CCL | COMMON CARRIER LINE |
| CCRS | CENTREX CUSTOMER REARRANGEMENT SYSTEM |
| CCS | COMMON CHANNEL SIGNALING |
| CCSNIS | COMMON CHANNEL SIGNALING NETWORK INTERFACE SPECIFICATION |
| CF/B | CALL FORWARD ON BUSY |
| CF/DA | CALL FORWARD DON'T ANSWER |
| CF - B/DA | CALL FORWARD ON BUSY/DON'T ANSWER |
| CIC | CARRIER IDENTIFICATION CODE |
| CLAS | CENTREX LINE ASSIGNMENT SERVICE |
| CLASS | CUSTOM LOCAL AREA SIGNALING SERVICES |
| CLC | CARRIER LIAISON COMMITTEE |
| CLEC | COMPETITIVE LOCAL EXCHANGE CARRIER |
| CLLI-MSG | COMMON LANGUAGE LOCATION IDENTIFIER - MESSAGE |

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| CUSTOMER PROPRIETARY NETWORK INFORMATION | | |
|--|--|--|
| CUSTOMER RECORD INFORMATION SYSTEM | | |
| CIRCUIT SWITCHED DATA | | |
| CUSTOMER SERVICE RECORD | | |
| DATABASE MANAGEMENT SYSTEM | | |
| DATA COMMUNICATIONS CHANNEL | | |
| DIGITAL CROSS-CONNECT SYSTEM | | |
| DESIRED DUE DATE | | |
| DEMARCATION POINT | | |
| DIRECT INWARD DIALING | | |
| DIGITAL LOOP CARRIER | | |
| DIGITAL SERVICE, LEVEL 0 | | |
| DIGITAL SERVICE, LEVEL 1 | | |
| DIGITAL SERVICE, LEVEL 3 | | |
| DIGITAL SIGNAL, LEVEL 0 | | |
| DIGITAL SIGNAL, LEVEL 1 | | |
| DIGITAL SIGNAL, LEVEL 3 | | |
| DIGITAL SIGNAL CROSS-CONNECT FRAME | | |
| DIGITAL SIGNAL CROSS-CONNECT LEVEL 1 | | |
| DIGITAL SIGNAL CROSS-CONNECT LEVEL-3 | | |
| DUAL TONE MULTI-FREQUENCY | | |
| EAR AND MOUTH SIGNALING | | |
| EQUAL ACCESS MULTI-FREQUENCY SIGNALING | | |
| EXTENDED BINARY - CODED DECIMAL | | |
| | | |

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT Part B Appendix 1 - 3 (LAST REVISED 12/17/98: Amendment Number 1)

| EIF | ELECTRONIC INTERFACE |
|--------|--|
| EMR | EXCHANGE MESSAGE RECORD |
| ESF | EXTENDED SUPERFRAME |
| ETTR | ESTIMATED TIME TO REPAIR |
| FDI | FEEDER DISTRIBUTION INTERFACE |
| FG-D | FEATURE GROUP D |
| FOC | FIRM ORDER CONFIRMATION |
| GTT | GLOBAL TITLE TRANSLATION |
| GUI | GRAPHICAL USER INTERFACE |
| HDSL | HIGH BIT RATE DIGITAL SUBSCRIBER LINE |
| IC/M | INTELLIGENT LOOP CONCENTRATOR/MULTIPLEXER |
| ICO | INDEPENDENT COMPANY |
| IDLC | INTEGRATED DIGITAL LOOP CARRIER |
| IEC | INTEREXCHANGE CARRIER |
| IMAS | INTELLIGENT MAINTENANCE ADMINISTRATION SYSTEM |
| ISDN | INTEGRATED SERVICES DIGITAL NETWORK |
| ISDNUP | INTEGRATED SERVICES DIGITAL NETWORK USER POINT |
| ISNI | INTERMEDIATE SIGNALING NETWORK IDENTIFIER |
| ISUP | ISDN USER PART |
| ITU | INTERNATIONAL TELECOMMUNICATIONS UNION |
| IVMS | INTER-SWITCH VOICE MESSAGING SWITCH |
| LAN | LOCAL AREA NETWORK |
| LASS | LOCAL AREA SIGNALING SERVICES |
| LGX | LIGHT GUIDE CROSS CONNECT |

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT Part B Appendix 1 - 4 (LAST REVISED 12/17/98: Amendment Number 1)

| LIDB | LINE INFORMATION DATABASE | |
|-------|---|--|
| | LINE INSULATION TESTING | |
| LOA | LETTER OF AUTHORIZATION | |
| LRECL | LOGICAL RECORD LENGTH | |
| LRN | LOCATION ROUTING NUMBER | |
| LSO | LOCAL SERVICING OFFICE | |
| LSP | LOCAL SERVICE PROVIDER | |
| MDF | MAIN DISTRIBUTION FRAME | |
| MF | MULTI-FREQUENCY | |
| МРВ | MEET-POINT BILLING | |
| MR | MODIFICATION REQUEST | |
| MRVT | MTTP ROUTING VERIFICATION TEST | |
| MSAG | MASTER STREET ADDRESS GUIDE | |
| МТР | MESSAGE TRANSFER POINT | |
| MWI | MESSAGE WAITING INDICATOR | |
| N11 | NUMBER 11 | |
| NANPA | NORTH AMERICAN NUMBERING PLAN AREA | |
| NDM | NETWORK DATA MOVER | |
| NECA | NATIONAL EXCHANGE CARRIER ASSOCIATION | |
| NID · | NETWORK INTERFACE DEVICE | |
| NOF | NETWORK OPERATIONS FORUM | |
| NPAC | NUMBER PORTABILITY ADMINISTRATION CENTER | |
| OAM&P | OPERATIONS, ADMINISTRATION, MAINTENANCE AND PROVISIONING | |

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT Part B Appendix 1 - 5 (LAST REVISED 12/17/98: Amendment Number 1)

| OBF | ORDERING AND BILLING FORUM | | |
|--------|-----------------------------------|--|--|
| OC-3 | OPTICAL CARRIER, LEVEL 3 | | |
| OC-12 | OPTICAL CARRIER, LEVEL 12 | | |
| OC-48 | OPTICAL CARRIER, LEVEL 48 | | |
| OCn | OPTICAL CARRIER, LEVEL N | | |
| OEC | ORDER ENTRY CONFIRMATION | | |
| OLI | ORIGINATING LINE INFORMATION | | |
| OSPS | OPERATOR SERVICES POSITION SYSTEM | | |
| OSS | OPERATIONS SUPPORT SYSTEMS | | |
| PAL | PUBLIC ACCESS LINE | | |
| PASL | PUBLIC ACCESS SMARTLINE | | |
| PBX | PRIVATE BRANCH EXCHANGE | | |
| PDH | PLESIOCHRONOUS DIGITAL HIERARCHY | | |
| PIC | PRIMARY INTEREXCHANGE CARRIER | | |
| PLU | PERCENT LOCAL USE | | |
| POC | POINT OF CONTACT | | |
| PON | PURCHASE ORDER NUMBER | | |
| POT | POINT OF TERMINATION | | |
| PRI | PRIMARY RATE INTERFACE (for ISDN) | | |
| PSAP " | PUBLIC SAFETY ANSWERING POINT | | |
| PSD | PACKET SWITCHED DATA | | |
| PTN | PORTED TELEPHONE NUMBER | | |
| RCF | REMOTE CALL FORWARDING | | |
| RECFM | RECORD FORMAT | | |

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| RI | ROUTE INDEXING |
|---------------|---|
| RIC | RESIDUAL INTERCONNECTION CHARGE |
| RT | REMOTE TERMINAL |
| SAG | STREET ADDRESS GUIDE |
| SCCP | SIGNALING CONNECTION CONTROL POINT |
| SCE/SMS | SERVICE CREATION ENVIRONMENT AND SERVICE MANAGEMENT SYSTEM |
| SCP | SERVICE CONTROL POINT |
| SDM | SYNCHRONOUS DIGITAL HIERARCHY |
| SIF | SONET INTEROPERABILITY FORUM |
| SMDI | STATION MESSAGE DISK INTERFACE |
| SMDI-E | STATION MESSAGE DISK INTERFACE - ENHANCED |
| SOC | SERVICE ORDER CONFIRMATION |
| SONET | SYNCHRONOUS OPTICAL NETWORK |
| SPOC | SINGLE POINT OF CONTACT |
| SPOI | SIGNALING POINT OF INTERCONNECTION |
| SRVT | SCCP ROUTING VERIFICATION TEST |
| SS7 | SIGNALING SYSTEM 7 |
| SSP | SWITCHING SERVICES POINT |
| STP . | SIGNALING TRANSFER POINT |
| STPS | SIGNALING TRANSFER POINT SWITCH |
| STS-1 | SYNCHRONOUS TRANSPORT SIGNAL LEVEL 1 |
| STS-3 | SYNCHRONOUS TRANSPORT SIGNAL LEVEL 3 |
| ТСАР | TRANSACTION CAPABILITIES APPLICATION PART |
| TCIF-EDI-SOSC | TELECOMMUNICATIONS INDUSTRY FORUM ELECTRONIC |

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT Part B Appendix 1 - 7 (LAST REVISED 12/17/98: Amendment Number 1)

| | DATA INTERCHANGE SERVICE ORDER SUBCOMMITTEE | |
|---------|---|--|
| TCSI | TRANSACTION CODE STATUS INDICATORS | |
| TGSR | TRUNK GROUP SERVICE REQUEST | |
| TLN | TELEPHONE LINE NUMBER | |
| TNS | TRANSIT NETWORK SELECTION | |
| TSP | TELEPHONE SERVICE PRIORITIZATION | |
| TTY/TDD | TELECOMMUNICATIONS DEVICES FOR THE DEAF | |
| USOC | UNIVERSAL SERVICE ORDER CODE | |
| VT 1.5 | VIRTUAL TRIBUTARY EQUALS 1.544 MEGABITS PER SECOND | |
| WAN | WIDE AREA NETWORK | |
| WTN | WORKING TELEPHONE NUMBER | |

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1)

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Part B Appendix 1 - 8

ATTACHMENT I

PRICING

BA-NY Pricing Schedule for Connecticut

Prices for all service offerings are subject to the continuing jurisdiction of the Department.

As described in Section 2.2 of Part A, the prices set forth in this Attachment I (unless indicated otherwise) reflect the prices in the New York Agreement and are subject to change from time to time as the prices in the New York Agreement change.

All prices shown are permanent unless otherwise noted as temporary. Additional charges shall apply as agreed by the Parties or as determined by the New York Public Service Commission for service provided to MCIm under the New York Agreement retroactive to date of provision.

Notwithstanding the above, the prices set forth in this Attachment I shall be amended when and if the Department establishes (or otherwise orders) relevant prices for BA's provision of service to MCIm in Connecticut. Nothing herein shall prevent either Party from challenging the appropriateness or lawfulness of these prices for Connecticut in any Department proceeding, including appellate review thereof.

I. Reciprocal Compensation

Local Switch

Temporary operations support charge of \$0.0014/mou +:

Per MOU (DAY) Per MOU (EVE) Per MOU (NIGHT) 0.004685 0.002051 0.001603

Tandem²

Temporary operations support charge of \$0.0014/mou +:

Per MOU (DAY)0.008839Per MOU (EVE)0.003816Per MOU (NIGHT)0.002502Plus tandem trunk port charge of \$5.28 [per DS0 equivalent per month]*

* MCIm shall order and BA shall bill on a DS1 level utilizing a DS0 fillfactor of 19.

II. Information Services Billing and collection

\$0.05 per message

III. BLV/BLVI [PER FCC TARIFF NO. 1, AS APPLICABLE]

\$2.00 per Busy Line Verification \$3.00 per Busy Line Verification Interrupt (in addition to \$2.00 for Busy Line Verification)

IV. Transit Service

Terminating carrier access +:

¹ Local Switching = (Local Switch Common Trunk) and (Local Switch Usage)

² Tandem Switching Reciprocal Compensation = (Tandem Trunk Ports x 2) and (Tandem Switch Usage) and Common Transport and Local Switching.





- A. Transit Service Temporary operations support charge of \$0.0014/mou +: Per MOU (DAY) 0.005072 Per MOU (EVE) 0.001193 Per MOU (NIGHT) 0.00112 0.001128
- Dedicated Transit Service³ Β.

3.80 Month - Voice, 2X SAC Rate⁴ 7.02 Month - DS1 Circuits, 2X SAC Rate⁵

V. Interim Number Portability

A. Rochester Open Market Plan with access charges shared on a meet point billing arrangement.

B. [INTENTIONALLY LEFT BLANK]

VI. IntraLata 800

Reciprocal Compensation rates from (I) above apply to originating minutes.

[INTENTIONALLY LEFT BLANK]

800 Database query charge (\$0.001265)(See IX I (3) below)

VII. Collocation

Α. Service Access Charges

| . | | Monthly Rate | USOC |
|----------|---|--------------|----------|
| grade l | nal grade, other than signal pop or J.F.K. Airport loop | \$1.90 | |
| grade lo | nal grade, other than signal op or J.F.K. Airport loop nal grade or other than signal | 3.83 | • • |
| grade in | iteroffice mileage | 1.90 | |
| | nal grade or other than signal teroffice mileage | 3:83 | |
| | e line terminal | 3.83 | |
| | n 1.5 mb/sec service | 3.51 | |
| | 145 mb/sec service | 35.87 | |
| | Reconfiguration Service: | 00.07 | |
| | 5 kb/sec port | 3.83 | |
| | .5 mb/sec port | 3.51 | |
| | Network Access Port Service: | 0.01 | |
| | lexpath Digital PBX Service | 3.51 | -OA9KX |
| | SDN Primary Service | 3.51 | OA9KX |
| | Il other ports listed in | 0.01 | 0/10/10/ |
| | | 1.90 | OA9LX |
| | Voice Grade Analog Link Service | 1.90 | |
| | Link Basic Service | 1.90 | |
| | Link Primary Service | 45.60 | |
| | iroups B, C and D | | |
| | ion 6 of P.S.C. No. | | |
| `913 Tel | ephone Tariff.) | | |
| a) 2- | wire connection | 1.90 | OA9MX |
| | wire connection | 3.83 | OA9NX |
| | | | |

³ Order p. 8

⁴ From PSC 900 Tariff Section 12

⁵ From NYPSC 900 Tariff Section 12

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| c) 1.5 mb/sec connection d) 45 mb/sec connection #. Common Channel Signaling Access | 3.51 35.87 | OA9OX OA9PX |
|---|-----------------------|----------------|
| 4-wire connection Enterprise DSO 2-wire 4-wire | 3.83 1.90 3.83 | OA9QX |
| Enterprise Fractional DS1 Enterprise DS1 Enterprise DS3 | 3.51 3.51 35.87 | |

B. Other Collocation Charges (As Per NYPSC Tariff No. 900 [TEMPORARY])

VIII. Poles, Conduit and Rights of Way

A. Pole Attachments: \$8.97/year/pole/attachment

B. Prices for Poles, Conduit and Rights of Way are governed by the following Agreements:

- 1. New York Telephone Company's Standard Licensing Agreements for Access to Ducts and Conduit
- 2. New York Telephone Company's Standard Pole Attachment Agreement
 - 3. Master Right of Way Licensing and Apportionment Agreement (Connecticut)

IX. Network Elements. For any usage sensitive elements, BA will add an operations support charge of \$0.0014/MOU. For combinations of elements, BA will apply the charge only once per MOU to all usage associated with the combination.

A. Loop⁶

| 2 Wire Analog | Per Link/Mo | Major City \$12.49 | Rest of State \$19.24 |
|--------------------|-------------|-----------------------|--------------------------|
| 2 Wire Conditioned | Per Link/Mo | \$24.27 | \$31.04 |
| 4 Wire Analog | Per Link/Mo | \$38.07 | \$50.48 |
| 4 Wire Conditioned | Per Link/Mo | \$98.32 | \$112.29 |

B. NID⁷ C. Loca

\$ 0.58/Month [TEMPORARY]

C. Local Switching Ports

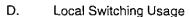
Anolog Line PortPort/Mo\$2.50Digital PortPer DS0 equivalent/Mo**\$2.50ISDN-BRI PortPort/Mo\$11.77Dedicated Digital trunk[Per DSO equivalent/Mo]*\$6.75ISDN-PRIDS1 Port/Mo\$184.64

* MCIm shall order and BA shall bill on a DS1 level utilizing a DS0 fill-factor of 19.

⁶ For Loop NRC see NYPSC 900 Tariff

⁷ Appendix C. Order p. 30

⁸ If BA chooses to provision the analog line using digital SLC technology, then pricing will be at the analog line port rate.



| Per MOU | (Day) | 0.003806 |
|------------|----------|----------|
| Per MOU | (Eve) | 0.001837 |
| Per MOU | (Night) | 0.001508 |
| Local Comm | on Trunk | |

Per MOU (Day) Per MOU (Eve) Per MOU (Night)

E.

0.000879 0.000214 0.000095

Dedicated Trunk Port

\$6.75 [per DS0 equivalent per month]*

* MCIm shall order and BA shall bill on a DS1 level utilizing a DS0 fill-factor of 19.

F. Tandem Switching

| Per MOU | (Day) | 0.001156 |
|---------|---------|----------|
| Per MOU | (Evé) | 0.000741 |
| Per MOU | (Night) | 0.000670 |

G. Tandem Common Trunk

| Per MOU | (Day) | 0.001958 |
|---------|---------|----------|
| Per MOU | (Evé) | 0.000476 |
| Per MOU | (Night) | 0.000229 |

Dedicated Tandem Trunk Port \$5.28 [per DS0 equivalent per month]*

* MCIm shall order and BA shall bill on a DS1 level utilizing a DS0 fill-factor of 19.

H. Interoffice Transmission

| | nbundled Common andem Trunk Charge UTTC) |
|---------------------|--|
| Per MOU/LEG (Day) | 0.001040 |
| Per MOU/LEG (Eve) | 0.000548 |
| Per MOU/LEG (Night) | 0.000000 |

2. [INTENTIONALLY LEFT BLANK]

3. Dedicated Transport

| OC-48 | Rate/Mo = Fixed + Per Mile | \$9,768 + \$375.81/mile |
|------------------------|---------------------------------------|-------------------------|
| OC-12 | Rate/Mo = Fixed + Per Mile | \$4,145 + \$241.21/mile |
| OC-3 | Rate/Mo = Fixed + Per Mile | \$1,365 + \$60.31/mile |
| DS-3 | Rate/Mo = Fixed + Per Mile | \$911 + \$20.10/mile |
| DS-1 | Rate/Mo = Fixed + Per Mile | \$110. + \$0.72/mile |
| CO Multiplexing 3/1 | Per arrangement per central office/Mo | \$223.52 |

I. Signaling Networks and Call Related Databases

- 1. [INTENTIONALLY LEFT BLANK]
- 2. SS7 Port; [INTENTIONALLY LEFT BLANK] Message Rated Flat Rate \$775.22
- 3. SCP Query 800 Price per Query \$0.001265

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I-12

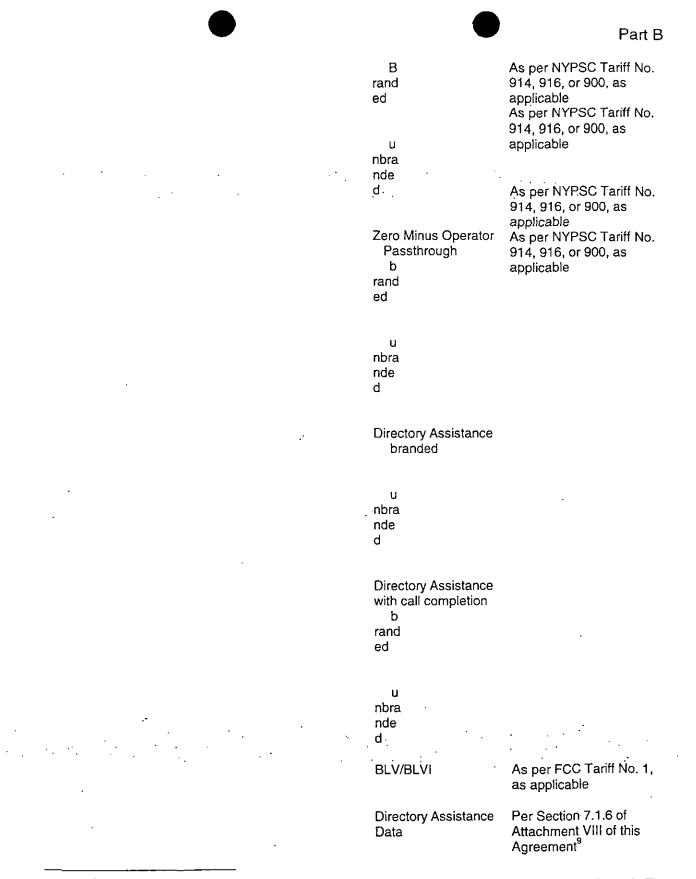
LIDB Price Per Query

\$0.001411

| 4. | SS7 Link Per Month | \$31.97 |
|----|-----------------------|---------|
| | r et Monat | φυ1.97 |

J. Other Elements

| Features listed below have recurring and NRC (NRC shown; \$4.67 per line in Linsider) | not . | |
|---|---|--|
| Three Way Calling | : | \$0.16 per line port |
| Centrex (Basic) | | \$0.45 per CTX port |
| Custom Ringing | | \$0.52 per port month |
| Operations Support System (OSS) access charges by OSS (applicable to an individual element or a combination of elements) |) | \$0.0014/minute of use [TEMPORARY] |
| Operator Services and Directory Assistance [TEMPORARY] : | Calling Card b rand ed u nbra nde d Collect | As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as |
| | b rand ed u nbra nde d | applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable |
| | Bill to third number b rand ed | As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable |
| | u nbra nde d Operator Assisted | As per NYPSC Tariff No. 914, 916, or 900, as applicable As per NYPSC Tariff No. 914, 916, or 900, as applicable |



⁹ The rate for directory assistance data is not a temporary rate as that term is defined in this Attachment I. The rate for Bell Atlantic's provision of directory assistance data to MCIm is governed by the Directory Assistance License Agreement executed by the Parties on November 19, 1998, and as may be subsequently amended.

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TOPS Trunk Ports

As per NYPSC Tariff No. 914, 916, or 900, as applicable

L Non-recurring Charges Bill Record Charge \$0.00858 [TEMPORARY] Record Change Charge \$25.00 per record per change [TEMPORARY] **Trunk Installation** \$288.00* [TEMPORARY] Carrier Service Order Charge \$105.00/service order* [TEMPORARY] Engineering Charge \$80:00* [TEMPORARY] Expedite Trunk Installation \$358.00* [TEMPORARY] Expedite Service Order \$131.00* [TEMPORARY] SS7 Point Code Charge \$169.00 (1st) and \$34.34 (each additional) [TEMPORARY] **Dispatch In** \$59.00 [TEMPORARY] **Dispatch Out** \$157.06 [TEMPORARY] Х. **RESALE OF BA RETAIL SERVICES** Α. Discount rates **Business with O&DA** 19.10% Business w/out O&DA 21.70% Residence with O&DA 19.10% Residence w/out O&DA 21.70% Β. [INTENTIONALLY LEFT BLANK] С. Non-recurring CUDS Record processing per record processed 0.00858 [TEMPORARY] Tape transmission per record per record transmitted 0.00094 [TEMPORARY] Tape or cartridge per tape or cartridge required 26.55 [TEMPORARY] CSR retrieval 0.39 [TEMPORARY] [INTENTIONALLY LEFT BLANK] D.

XI. NON-RECURRING SERVICE CONNECTION CHARGES

| | Residence | <u>Business</u> |
|---------------------|-----------|-----------------|
| Service Charge | \$16.00 | \$56.00 |
| Record Order Charge | \$10.00 | \$35.90 |

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| Part | В |
|------|---|
|------|---|

| Premises Visit Charge Central Office Line or | \$12.25 | \$19.00 |
|---|---------|---------|
| Port Charge | \$39.00 | * |
| Line or Port Change Charge | \$26.05 | \$26.05 |
| Network Interface Jack | | |
| Installation Charge | ** | ** |
| Standard Network Interface | *** | *** |
| Network Interface | *** | *** |
| · · | | |

*Central Office Line or Port Charge

1 to 99 lines or ports Connected, each Line or Port: \$50.05 Each Line or Ports, each: \$35.90

See Section 8, Paragraph D of P.S.C. Tariff No. 900 *See Section 1, Paragraph D.2 of P.S.C. Tariff No. 900

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ATTACHMENT II LOCAL RESALE

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ATTACHMENT II

LOCAL RESALE

Section 1 Telecommunications Services Provided for Resale

1.1 At the request of MCIm, and pursuant to the requirements of the Act and FCC Rules and Regulations, BA shall make available to MCIm for resale any Telecommunications Service that BA currently provides or may offer hereafter. BA shall also provide service functions, as set forth in Section 4 of this Attachment II, subject to the terms and conditions contained in BA's retail tariffs. The Telecommunications Services and Service Functions provided by BA to MCIm pursuant to this Agreement are collectively referred to as "Local Resale."

1.2 To the extent that this Attachment II describes services which BA shall make available to MCIm for resale pursuant to this Agreement, such services are neither all inclusive nor exclusive. All Telecommunications Services of BA which are to be offered for resale are subject to the terms herein.

1.3 BA shall make all of its Telecommunications Services available for resale to MCIm on terms and conditions that are reasonable and nondiscriminatory.

1.4 BA will provide MCIm with services for resale which will be at least equal in quality to that provided by BA to any other party to which BA directly provides any such service, and such services shall be provided in accordance with the specific requirements of Attachment VIII.

1.5 The Parties shall use the specific business process requirements and systems interface requirements set forth in Attachment VIII in connection with their performance under this Attachment II.

1.6 BA shall provide MCIm the option of reselling BA access lines that do not provide access to BA operator services and/or directory assistance in those switches where BA possesses the capability to perform such routing. This option shall be provided to MCIm no later than the issuance of the Department order approving this Interconnection Agreement, through the technology of BA's choice, and as detailed below. The rate for this option shall be set forth in Attachment I.

1.6.1 Effective June 1, 1997, BA shall provide MCIm with the option of using the MCIm brand on all calls that originate on resold lines that are routed to the BA operator and directory assistance platforms. Effective March 1, 1997, all such calls shall not be branded.

1.6.2 No later than the issuance of the Department order approving this

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Interconnection Agreement, BA shall provide MCIm with the option of ordering routing of all operator assisted and directory assistance calls on resold lines to MCIm in those switches where BA possesses the capability to perform such routing.

1.6.3 For MCIm to obtain routing of operator assisted and directory assistance calls on resold lines, MCIm shall identify the particular switches for which such capability is requested. Such identification shall be made not less than sixty (60) days before the date on which MCIm requires that such capability be implemented in a switch. Upon such request, the Parties shall negotiate a reasonable deployment schedule.

1.7 Notwithstanding any other provision of this Agreement, nothing herein (except the grandfathered services provisions of Section 2.3.4 of this Attachment) shall obligate BA to provide to MCIm for resale in Connecticut any Telecommunications Service which it does not currently provide on a retail basis in Connecticut.

Section 2 General Terms and Conditions for Resale

2.1 Pricing. The prices charged to MCIm for Local Resale are set forth in Attachment I.

2.2 No Restrictions on Resale. MCIm may resell to any and all classes of end-users Telecommunications Services obtained from BA under this Agreement. BA will not prohibit, nor impose unreasonable or discriminatory conditions or limitations on the resale of its Telecommunications Services. BA agrees to remove all tariff restrictions which prohibit or limit the resale of any such Telecommunications Services. BA will not prohibit resale of Telecommunications Services by MCIm to another reseller, however, BA will not have any obligation to interface with the reseller customer of MCIm.

2.3 Requirements for Specific Services

2.3.1 CENTREX Requirements

2.3.1.1 At MCIm's option, MCIm may purchase the entire set of CENTREX features or a subset of any one or any combination of such features that BA offers to its retail customers. The CENTREX Service provided for resale will meet the requirements of this Section 2.3.1.

2.3.1.2 All features and functions of CENTREX Service, including CCRS/CLAS or similar service, whether offered under tariff or otherwise, shall be available to MCIm for resale at the same terms and conditions that BA offers to its retail customers.

2.3.1.3 [INTENTIONALLY LEFT BLANK]

2.3.1.4 BA shall provide to MCIm a list by central office of all

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CENTREX or CENTREX-like features and functions offered by BA within ten (10) days of the Effective Date of this Agreement, and shall provide updates to such list as specified in Attachment VIII.

2.3.1.5 All service levels and features of CENTREX Service provided by BA for resale by MCIm shall meet the service parity requirements set forth in Attachment VIII.

2.3.1.6 MCIm may aggregate the CENTREX local exchange and IntraLATA traffic usage of MCIm subscribers to qualify for volume discounts on the basis of such aggregated usage under the terms and conditions of the applicable retail tariffs.

2.3.1.7 MCIm may aggregate multiple MCIm subscribers on dedicated access facilities as allowed by the applicable BA retail tariffs. MCIm may request that BA suppress the need for MCIm subscribers to dial "9" when placing calls outside the CENTREX system, providing MCIm requests the suppression for all lines within a CENTREX system.

2.3.1.8 [INTENTIONALLY LEFT BLANK]

2.3.1.9 MCIm may purchase any CENTREX service for resale, subject to the terms and conditions contained in the applicable BA retail tariffs without restriction on the minimum or maximum number of lines that may be resold by MCIm for any one level of service.

2.3.1.10 BA shall make available to MCIm for resale, at standard tariff rates, if applicable, intercom calling among all MCIm subscribers who utilize resold CENTREX service.

2.3.1.11 MCIm may utilize ARS to route access.

2.3.2 Government Subscriber Assistance Programs. When a BA subscriber who is eligible for a Government Subscriber Assistance Program chooses to obtain Local Resale from MCIm, the information regarding the subscriber's eligibility to participate in such program, if currently participating, will be contained in the subscriber's CSR which may be obtained by MCIm through the pre-order functionality of the GUI or the EIF interface. BA will provide MCIm information about the certification process for the provisioning of Government Subscriber Assistance Programs. BA will be entitled to any subsidy associated with the provision of Government Subscriber Assistance Programs, through resale, to a subscriber of MCIm.

2.3.3 [INTENTIONALLY LEFT BLANK]

2.3.4 Grandfathered Services. BA shall offer for resale by MCIm all grandfathered services. MCIm may resell grandfathered services only to those

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subscribers currently purchasing the Grandfathered Service at their current location. For purposes of this Agreement, a grandfathered service is a service that BA offers to existing retail subscribers but not to new subscribers. MCIm shall have the right to review any BA request for the termination of service and/or its grandfathering filed with the Department through the normal regulatory process.

2.3.5 N11 Service

2.3.5.1 BA agrees not to offer any new retail N11 service after the Effective Date of this Agreement unless BA makes such service available for resale.

2.3.5.2 MCIm shall have the right to resell any retail N11 service. BA will provide MCIm unbranded N11 services no later than March 1, 1997 and rebranded N11 services no later than June 1, 1997, with the exception of 211 service which shall be unbranded. Costs for rebranding of services to MCIm brand will be recovered via a BA charge.

2.3.6 Contract Service Arrangements, Special Arrangements, and Promotions. BA shall offer for resale all of its services available to any retail subscriber, including, but not limited to, Contract Service Arrangements, Special Arrangements, and Promotions, all in accordance with FCC Rules and Regulations.

2.3.7 **Discount Plans and Services.** BA shall offer for resale all Discount Plans and Services in accordance with FCC Rules and Regulations.

2.3.8 [INTENTIONALLY LEFT BLANK]

2.3.9 **Public Telephone Services**. MCIm may purchase PASL or PAL service as described in BA's retail tariffs. BA shall provide PASL and PAL services at parity to which BA provides such services to itself or its pay phone Affiliates. The wholesale discount set forth in Attachment I shall apply to all PASL or PAL services purchased by MCIm as a Telecommunications Carrier for resale to unaffiliated pay phone providers. The wholesale discount shall also apply to PASL or PAL service purchased by MCIm for resale to its own pay phone Affiliate, provided that: (i) MCIm is reselling such services to pay phone providers generally; and (ii) MCIm resells such services to its own Affiliate on a nondiscriminatory basis. In all other instances, retail tariffed rates, without application of any wholesale discount, shall apply to PASL or PAL service purchased by MCIm.

2.3.10 Voice Mail Service

2.3.10.1 MCIm shall have the right to resell BA voice mail services within BA's service territory in Connecticut only to the extent that BA makes voice mail services available generally for resale in Connecticut

pursuant to tariff.

2.3.10.2 BA shall make available the SMDI-E where available, or SMDI, where SMDI-E is not available, feature capability allowing for voice mail services. BA shall make available the MWI stutter dialtone and message waiting light feature capabilities. BA shall make available CF-B/DA, CF/B, and CF/DA feature capabilities allowing for voice mail services.

2.3.11 Hospitality Service

2.3.11.1 MCIm may purchase all blocking, screening, and all other applicable functions available for hospitality lines subject to availability.

2.3.12 TLN Calling Cards. Effective with the close of a billing cycle or within twenty-four hours after MCIm has notified BA that it has replaced the subscriber's calling card, whichever is earlier, BA will terminate its existing telephone line number-based calling cards and remove any BA-assigned Telephone Line Calling Card Number (including area code) from the LIDB. MCIm may issue a new telephone calling card to such subscriber, utilizing the same TLN, and MCIm shall have the right to enter such TLN in LIDB for calling card validation purposes. BA will direct-bill each subscriber on the subscriber's final bill. BA will coordinate the disconnection of subscriber's calling card with MCIm to ensure that there is no time that a subscriber is without a calling card. In order to determine exchange rates and for rates and billing purposes, BA will provide MCIm access to the system file linking the address to the central office.

Section 3 [INTENTIONALLY LEFT BLANK]

Section 4 Service Functions

4.1 MCIm may obtain the information MCIm will need to certify subscribers as exempt from charges (including taxes), or eligible for reduced charges associated with providing services, including, but not limited to, handicapped individuals, and certain governmental bodies and public institutions, by purchasing the CSR of existing BA customers. BA will not be responsible for maintaining MCIm subscriber information.

4.2 BA shall provide MCIm with appropriate notification of all area transfers with line level detail one hundred twenty (120) days before service transfer, and BA will also notify MCIm within one hundred twenty (120) days before such change of any LATA boundary changes.

4.3 BA will work cooperatively with MCIm in connection with the practices and procedures regarding the handling of law enforcement and service annoyance calls.

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Section 5 Availability of Services for Resale by BA

5.1 MCIm shall make available MCIm's Telecommunications Services for resale at retail rates to BA in accordance with Section 251(b)(1) of the Act.

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ATTACHMENT III

NETWORK ELEMENTS

Section 1 Introduction BA shall provide Network Elements in accordance with this Agreement and appropriate State and Federal Rules and Regulations. The price for each Network Element is set forth in Attachment I. Except as otherwise set forth in this Attachment III, MCIm may order Network Elements as of the date set forth in Annex 1 attached hereto.

Section 2 Unbundled Network Elements

2.1 BA 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 BA shall permit MCIm to connect MCIm's facilities or facilities provided to MCIm by third parties with each of BA's Network Elements at any point requested by MCIm that is technically feasible. If MCIm's facilities are terminated on BA's premises, it will be effected through collocation pursuant to Attachment V of this Agreement and the relevant tariffs and license agreements.

2.3 MCIm may use one or more of BA's Network Elements to provide any feature, function, capability, or service option that such Network Element(s) is capable of providing.

2.3.1 MCIm may, at its option, request any technically feasible method of access to unbundled elements, including access methods currently or previously in use.

2.4 BA shall offer each Network Element individually or as technically feasible logical and contiguous combinations of 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, BA shall provide a demarcation point (e.g., at a POT which may include a DSX, LGX panel or a MDF) which will allow MCIm access to such Network Elements at the demarcation point, which MCIm agrees is suitable. However, where BA provides combined Network Elements at MCIm's direction, no demarcation point is required between such contiguous Network Elements.

2.6 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).

2.7 This Attachment III describes the initial set of Network Elements which MCIm and BA have



identified as of the Effective Date of this Agreement

Loop Loop Distribution Loop Feeder Loop Concentrator/Multiplexer NID Local Switching Operator Services Common Transport Dedicated Transport Dedicated Transport Signaling Link Transport Signaling Transfer Points SCPs/Databases Tandem Switching Directory Assistance

MCIm and BA agree that the Network Elements identified in this Attachment III are not all of the possible Network Elements.

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 may request such additional Network Elements in accordance with the Bona Fide Request Process described in Section 18 of Part A of this Agreement. Additionally, if BA provides any Network Element that is not identified in this Agreement to itself, to its own subscribers, to a BA Affiliate or to any other entity, BA shall make available the same Network Element to MCIm on terms and conditions no less favorable to MCIm than those provided to itself or any other party.

2.8 BA and MCIm recognize that unbundled Network Elements must only be made available to requesting Telecommunications Carriers to the extent required by Section 251(d)(2) of the Act. Notwithstanding the foregoing, if either Party makes unbundled Network Elements other than those contained in this Agreement or those contained in this Agreement on more favorable terms and conditions to customers or other parties who are not Telecommunications Carriers, such other Network Elements or more favorable terms and conditions will be available to the other Party.

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 this Attachment III, as well as any performance or other requirements identified herein. In the event Bell Communications Research, Inc. ("Bellcore"), or industry standard (e.g., 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 are in conflict, MCIm may, where a choice is technically and operationally feasible, request which requirement shall apply.

3.3 Each Network Element provided by BA 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 BA provides to itself, BA's own subscribers, a BA Affiliate or to any other entity.

3.3.1 BA shall provide to MCIm, upon request, performance and other non-proprietary 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, BA shall make a good faith effort to cure any design, performance or other deficiency within ten (10) days and provide new data sufficient for MCIm to determine that such deficiencies have been cured. If such deficiency is not cured within said ten-day period, BA shall use its best efforts to cure such deficiency as soon as possible thereafter.

3.3.1.1 BA will bear the financial responsibility for demonstrating that Network Elements are being provided at parity.

3.3.2 BA agrees to work cooperatively with MCIm to provide Network Elements to the extent technically feasible that will meet MCIm's needs in providing services to its subscribers.

3.4 Unless otherwise requested by MCIm, each Network Element and the connections between Network Elements provided by BA to MCIm shall be made available to MCIm on an expedited basis, at any technically feasible point, that is equal to or better than the priorities that BA provides to itself, BA's own subscribers, a BA Affiliate or any other entity.

Section 4 Loop

4.1 **Definition**

4.1.1 A Loop is an integrated element that functions as a transmission facility between a distribution frame cross-connect, or its equivalent, in a BA central office or wire center, and the NID, which is usually located at a subscriber's premises. When BA provides MCIm with an unbundled loop, MCIm will have exclusive use of this loop element. The link may be used to provide modes of transmission that include, but are not limited to two-wire and four-wire analog voice-grade transmission, and two-wire and four-wire transmission of ISDN, ADSL, HDSL, and DS1-level digital signals. A Loop may be composed of the following sub-components:

Loop Concentrator / Multiplexer Loop Feeder NID





Distribution

4.1.2 If BA uses DLC systems to provide the local loop, BA will make alternate arrangements if feasible, equal in quality, to permit MCIm to order an unbundled local loop (Link) at no additional cost to MCIm. These arrangements may, at BA's option, include providing MCIm with copper facilities, universal DLC, or other technical alternatives appropriate for providing MCIm with access to an unbundled loop suitable for the specified application (e.g., 2W analog, 4W analog, ISDN, etc.).

4.2 MCIm may purchase from BA on an unbundled basis (a) the Loop, and (b) any one or more of the four Loop subcomponents, namely: Loop Feeder, Loop Concentrator/Multiplexer, NID, and Loop Distribution. The Parties acknowledge that the New York State Public Service Commission has determined that the provision of Loop Distribution, Loop Feeder, and Loop Concentrator/Multiplexer as unbundled Network Elements is technically feasible and agree that MCIm may purchase any such subcomponent from BA pursuant to an appropriately specific Network Element Bona Fide Request. BA shall evaluate and process any such request in accordance with the relevant and applicable standards and procedures set forth in Section 18 of Part A and shall develop a price for such subcomponents that covers all necessary and appropriate costs.

4.3 [INTENTIONALLY LEFT BLANK]

4.4 Loop Components

4.4.1 Loop Concentrator/Multiplexer

4.4.1.1 Definition:

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

(i) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (ii) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing);
(iii) aggregates a specified number of signals or channels to fewer channels (concentrating); (iv) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (v) 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 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

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4.4.1.2.1 The Loop Concentrator/Multiplexer, if deployed, may 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 and four-wire analog voice grade loops;

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

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

4.4.1.2.2 The Loop Concentrator/Multiplexer may be capable of performing the following functions as appropriate and within the functions and capabilities of the equipment deployed in the BA network at that location:

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 BA 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. To the extent future unbundling may involve "concentration," BA and MCIm will work cooperatively to establish concentration ratios for the specific application within the technical limits that may exist with deployed equipment and facilities.

4.4.1.2.3 When and if BA provides loop concentrator/multiplexor unbundling, BA 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 unless otherwise mutually agreed upon by the Parties. Such power shall also adhere to the requirements stated herein, to the extent technically feasible in deployed equipment and facilities.

4.4.1.2.4 The Loop Concentrator/Multiplexer shall be provided to MCIm in accordance with the relevant sections of the Technical References listed



in Section 18.2.1 of this Attachment.

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 IC/M, if installed, will typically 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 BA shall provide MCIm, for an appropriate price, real time performance and alarm data on IC/M that may affect MCIm's traffic, if and when technically feasible to partition such data for MCIm.

4.4.1.3.6 At MCIm's option, BA shall provide MCIm with real time ability to initiate non service-affecting tests on the underlying device that provides such IC/M function.

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 similarly deployed in BA's network if provided in response to a specific MCIm request.

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 if technically feasible and to the extent deployed in the BA network provide digital 4-wire electrical interfaces at the serving wire center, as described in the references in Section 18.2.1.

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

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described in the references in Section 18.2.1, if the equipment deployed is capable of providing such interfaces.

4.4.1.4.5 If technically feasible and deployed in the BA network at the requested location, the Loop Concentrator/Multiplexer shall provide a DS1 interface that complies with the Bellcore TR-303 interface specifications to MCIm's IP at the serving wire center. If technically feasible, the Loop Concentrator/ Multiplexer shall provide Bellcore TR-08 modes 1&2 DS1 interfaces when requested by MCIm. Such interface requirements are specified in the references in Section 18.2.1.

4.4.1.5 The Intelligent Loop Concentrator/Multiplexer shall, if provided to MCIm or used by BA in conjunction with the provision of unbundled Loops to MCIm, be supplied in accordance with the Technical References set forth in Section 18.2.1.

4.4.2 Loop Feeder

4.4.2.1 Definition:

4.4.2.1.1 The Loop Feeder is the Network Element that will provide connectivity between: (i) a FDI associated with Loop Distribution and a termination point appropriate for the media in a central office; or (ii) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office. BA shall provide MCIm physical access to the FDI, and the right to connect the Loop Feeder to the FDI in response to a specific MCIm request if technically feasible.

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 deployed in the BA network and suitable to meet the requirements requested by MCIm. In certain cases, MCIm will desire a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that BA offers is other than a copper facility. If such facilities are deployed and technically feasible to provide, BA will make them available to MCIm.

4.4.2.2 Requirements for Loop Feeder

4.4.2.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, and in some deployments may be capable of supporting the transmission of BRI, digital data, or analog radio frequency signals as appropriate.

4.4.2.2.2 If technically feasible and specific Loop Feeder elements requiring powering are deployed in BA's network, BA shall provide appropriate power for all active elements in the Loop Feeder. BA will



provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and battery back-up (typically providing eight (8) hours battery protection) when the equipment is located in an outside plant (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 request BA to provide unbundled loop feeder in an area where copper twisted pair Loop Feeder is deployed. If technically feasible to unbundle, loop feeder will be provided as equipped (i.e., if they are loaded facilities, then as unbundled H88 Loop Feeder). Upon specific request, if technically feasible BA will provide unbundled 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. MCIm will bear the cost BA would incur for deloading/providing premium conditioning of unbundled Loop Feeder.

4.4.2.4 Additional Technical Requirements for the Unbundling of DS1 Conditioned Loop Feeder

In addition to the requirements set forth in Section 4.4.2.2 above, MCIm may request that the Loop Feeder be conditioned to transport a DS1 signal. The requirements for such transport are defined in the references below in Section 18.3. If technically feasible to provide, BA will unbundle Conditioned Loop Feeder in response to a specific MCIm request.

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 request unbundling of Loop Feeder in deployed applications in the BA network which will transport DS3 and OCn (where n is defined in the technical reference in Section 18.3.) The requirements for such transport are set forth in Section 18.9.

4.4.2.6 BA shall offer unbundled Loop Feeder when technically feasible based on the deployed facilities and equipment and in accordance with the relevant requirements set forth in the following Technical References in Section 18.3.

4.4.2.7 Interface Requirements

4.4.2.7.1 If MCIm desires access to unbundled Loop Feeder in a BA Central Office, the Loop Feeder POT within a BA central office will be as follows:

4.4.2.7.1.1 Copper twisted pairs shall terminate on a metallic facility POT bay.

4.4.2.7.1.2 DS1 Loop Feeder shall terminate on a suitably equipped DSX-1 POT bay.

4.4.2.7.1.3 Fiber Optic cable shall terminate on a LGX POT bay.

4.4.2.7.2 Depending on the type of Loop Feeder equipment and facilities deployed in the BA network at the requested location, the Loop Feeder shall be provisioned in accordance with the relevant and applicable interface requirements set forth in the technical references listed in Section 18.3.

4.4.3 NID

4.4.3.1 **Definition**:

4.4.3.1.1 The 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 termination for the loop, provide voltage overload protection to ground, provide a termination for an optional 1/2 ringer used for testing purposes, provide proper signal termination, and provide a point of termination and connection for a customer's "inside" wiring. The modern NID features two 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.

4.4.3.1.2 MCIm may connect its NID to BA's NID.

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

4.4.3.1.4 [INTENTIONALLY LEFT BLANK]

4.4.3.2 Technical Requirements

4.4.3.2.1 The technical requirements set forth in Section 18.4 shall apply to the NID.

4.4.3.2.2 The unbundled NID shall provide an accessible point of connection for the inside wiring and for the Distribution Media and/or cross connect to MCIm's NID and shall maintain a connection to ground that meets the requirements set forth below.



4.4.3.2.3 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to MCIm's NID.

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

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

4.4.3.2.6 Where the unbundled NID is not located in a larger, secure cabinet or closet, the NID shall be protected from physical vandalism in the same manner that a NID would be protected in conjunction with a retail service provided by BA at that customer's location. 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.

4.4.3.2.7 BA shall offer the NID together with unbundled local Loops, and separately from the Distribution Media component of Loop Distribution.

4.4.3.3 Interface Requirements

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

4.4.3.3.2 The unbundled NID shall be deployed, depending on vintage, in accordance with the relevant and applicable industry standards for NIDs as set forth in the technical references in Section 18.4.

4.4.3.3.3 BA will provide MCIm with unbundled NIDs and NIDs associated with unbundled Loops in parity with BA's provision of NIDs in connection with its own retail services.

4.4.4 Distribution

4.4.4.1 Definition:

4.4.4.1.1 Distribution provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of a FDI. The FDI is a device that terminates the Distribution Media and the Loop Feeder, and may cross-connect 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 FDI in the interfaced design typically makes use of a manual connection or cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

4.4.4.1.2 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 may also be possible. In certain cases, MCIm may request unbundled copper twisted pair Distribution in instances where the Distribution for services that BA offers is other than a copper facility. In such situations, unbundling at loop distribution even if feasible will be done at MCIm's request, and BA will not be responsible for the performance of such combinations regardless of the intended use.

4.4.4.1.3 BA will provide loop distribution if technically feasible in response to specific MCIm requests for such access.

4.4.4.2 Requirements for All Distribution

4.4.4.2.1 Unbundled Distribution shall be capable of transmitting signals for the following services if provided (as requested by MCIm):

4.4.4.2.1.1 Two-wire and four-wire analog voice grade loops; and

4.4.4.2.1.2 Two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, or transmit ADSL, HDSL, and DS1-level signals. If available facilities are not so capable, BA will endeavor to make them so capable at MCIm's behest and MCIm will be responsible to reimburse BA for such costs as would be incurred.

4.4.4.2.2 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.

4.4.4.2.3 BA shall support functions associated with provisioning, maintenance and testing of the unbundled Distribution itself, as well as provide necessary access to provisioning, maintenance and testing



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functions for Network Elements to which Distribution is associated.

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

4.4.4.2.5 Unbundled Distribution, if technically feasible, shall be provided in conformance with the relevant and applicable requirements set forth in Section 18.5.

4.4.4.2.6 BA shall provide MCIm with physical access to, and the right to connect to, the FDI in conjunction with unbundled Distribution.

4.4.4.2.7 BA shall offer unbundled Distribution together with, and separately from the NID component of Loop Distribution. Where such Distribution is requested without the BA NID, MCIm will provide a suitable NID meeting in accordance with the relevant and applicable standards listed in Section 18.6.

4.4.4.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements in Section 4.4.4.2 above, MCIm may request that unbundled Distribution be provided as copper twisted pairs 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. Upon MCIm's request, BA will provide unbundled copper Distribution with special conditioning to meet MCIm's desired parameters if technically feasible.

4.4.4.4 Additional Requirements for Fiber Distribution

When unbundled fiber optic cable Distribution is deployed, if technically feasible, it will be unbundled in a manner to support transmitting signals for the following services in addition to the ones under Section 4.4.4.2.1 above:

4.4.4.1 DS3 rate private line service;

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4.4.4.2 Optical SONET OCn rate private lines (where n is defined in the technical reference in Section 18.6); and

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

4.4.4.5 Additional Requirements for Coaxial Cable Distribution

If deployed in the BA network and technically feasible to unbundle in response to an MCIm specific request, unbundled Coaxial Cable (coax) Distribution shall be





provided in a manner capable of transmitting signals for the following services in addition to the ones under Section 4.4.4.2.1 above:

4.4.4.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mb/s and 45 Mb/s; and

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

4.4.4.6 Interface Requirements

4.4.4.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the applicable and relevant performance requirements set forth in Sections 18.4 and 18.5 or at a minimum provided on an unbundled basis in parity with BA's own distribution facility operations.

4.4.4.6.2 Distribution shall be provided on an unbundled basis if technically feasible in conformance with the relevant and applicable interface requirements set forth in the technical references in Sections 18.4 through 18.6.

Section 5 [INTENTIONALLY LEFT BLANK]

Section 6 [INTENTIONALLY LEFT BLANK]

Section 7 Local Switching

7.1 **Definition**:

7.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the MDF or DSX panel to a desired line or trunk appearance on the Local Switch. MCIm shall define the routing plan that will be used by their end users for each switching entity in which unbundled Local Switching will be provided. BA will implement, where it is technically feasible to do so, that dialing plan and any associated dedicated trunking needed to support the introduction of their retail services on that unbundled switching network element. Such functionality shall include all of the features, functions, and capabilities that BA has purchased and deployed in the underlying BA switch that is providing such Local Switching function, including, but not limited to: line signaling, 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 features, ACD,





Carrier pre-subscription (e.g., long distance carrier, intraLATA toll as deployed), CIC portability capabilities, Number Portability for their lines, testing and other operational features inherent to the switch and switch software. Local Switching also provides access to transport, signaling (ISUP and TCAP) and platforms such as adjuncts, Public Safety Systems (911), operator services, directory services and AIN where deployed in the BA network. Remote Switching Module functionality is included in the Local Switching function. Local Switching shall also be capable of routing local, intraLATA, and interLATA 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.

7.2. Technical Requirements

7.2.1 Local Switching shall be provided in accordance with the relevant and applicable requirements for Local Switching set forth in Section 18.7.

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

7.2.1.2 BA shall route calls on a per line or per screening class basis to (i) BA platforms providing Network Elements or additional requirements, (ii) MCIm designated platforms, or (iii) third-party platforms with appropriate authorization.

7.2.1.3 BA shall provide recorded announcements as designated by MCIm and standard call progress tones to alert callers of call progress and disposition.

7.2.1.4 BA shall change a subscriber from BA's services to MCIm's services without loss of feature functionality if MCIm purchases such feature functionality.

7.2.1.5 BA shall perform routine testing (e.g., LIT and trunk transmission test calls such as 105, 107 and 108 type calls) and fault isolation on a schedule in parity with BA's own testing operations. Where MCIm requires a unique schedule for such testing, BA, where it is technically feasible to do so and will not interfere with other carriers' use of the same capabilities, handle such requests on a Bona Fide Request basis.

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

7.2.1.7 BA is responsible for the network management and control functions for its network. It will respond to network abnormalities, such as mass calling events using capabilities such as Automatic Call Gapping, Automatic Congestion

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Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or BA.

7.2.1.8 BA shall perform manual call trace as requested by MCIm and permit subscriber originated call trace.

7.2.1.9 BA shall record all billable events, involving usage of the element where technically feasible, and will send the appropriate recorded data to MCIm as outlined in Attachment VIII.

7.2.1.10 For Switching used as 911 Tandems, BA shall allow interconnection from MCIm local switching elements and BA shall route the calls to the appropriate PSAP.

7.2.1.11 Where technically feasible and where BA provides the following special treatments, it shall provide to MCIm unbundled switching with operational parity to enable MCIm to characterize its customers' lines as:

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 BA 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 Where technically feasible BA shall provide SSP capabilities and signaling software to interconnect the signaling links destined to the STPs. In the event that Local Switching is provided out of a switch without SS7 capability, the Tandem shall provide this capability as described in the Section 14 of this Attachment. These capabilities shall adhere to the relevant and applicable Bellcore specifications listed in Section 18.7.

7.2.1.13 Where it has deployed such equipment, BA shall provide interfaces from unbundled switching elements where technically feasible to adjuncts through interfaces that meet appropriate and relevant industry standard and Bellcore interfaces. These adjuncts can include, but are not limited to, Service Node, Service Circuit Node, and Automatic Call Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.

7.2.1.14 BA shall provide available performance data regarding an MCIm subscriber's line, traffic characteristics or other measurable elements of unbundled switching to MCIm, upon MCIm's request.



7.2.1.15 BA shall offer all Local Switching features that are technically feasible, deployed and installed in the given switch, and provide feature offerings at parity to those provided by BA to itself or any other party. Such feature offerings shall include, but are not limited to:

7.2.1.15.1 BRI and PRI Switching;

7.2.1.15.2 Residential features;

7.2.1.15.3 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 If technically feasible and installed, AIN triggers supporting MCIm, and BA service applications, in BA's SCPs. BA shall offer to MCIm all AIN triggers currently available to BA for offering AIN-based services in accordance with the applicable 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 Private EAMF Trunk: If MCIm (1) requests the use of this trigger, including the switch locations for its use; (2) pays the cost of this trigger including the software, hardware and installation costs; and (3) negotiates with BA for the specific locations and expected time frames for the implementation of this trigger.

7.2.1.15.6.4 Shared Interoffice Trunk (EAMF, SS7);

7.2.1.15.6.5 Termination Attempt;

7.2.1.15.6.6 3/6/10;

7.2.1.15.6.7 N11;

7.2.1.15.6.8 Feature Code Dialing; and

7.2.1.15.6.9 Custom Dialing Plan(s), including 555 services.

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7.2.1.16 BA shall assign each MCIm subscriber line to the appropriate routing plan designated by MCIm (e.g., using line class codes or other switch specific provisioning methods), and shall route directory assistance calls from MCIm subscribers, where technically feasible, 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 to the extent feasible and as installed in the given switch;

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; and

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

7.2.1.17 BA shall assign each MCIm subscriber line the appropriate routing plan designated by MCIm (e.g., using line class codes or other switch specific provisioning methods) and shall route where technically feasible operator calls from MCIm subscribers as directed by MCIm at MCIm's option. For example, BA may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to an MCIm 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, BA shall redirect incoming calls to the MCIm system based upon presubscribed service arrangements (e.g., busy, don't answer, number of rings). In addition, BA shall provide a SMDI-E interface to the MCIm system in a non-discriminatory manner. BA shall support the IVMS capability wherever feasible and where such switch capability is deployed.

7.2.1.19 Local Switching shall be offered in accordance with the requirements of the technical references listed in Section 18.7 to the extent feasible and compliant AIN is deployed in the BA network.

7.2.2 Interface Requirements:



7.2.2.1 BA shall provide the following interfaces to loops if technically feasible and deployed in the BA Network:

7.2.2.1.1 Standard Tip/Ring interface including loopstart or groundstart, on-hook signaling (e.g., for 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 CCITT Recommendations 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 PRI to PBX adhering to CCITT Recommendations 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 Line ports adhering to Bellcore TR-NWT-08 and TR-NWT-303 specifications to interconnect DLCs.

7.2.2.2 BA shall provide access to the following, but not limited to:

7.2.2.2.1 SS7 Signaling Network or MF trunking if requested by MCIm;

7.2.2.2.2 Interface to MCIm operator services systems or Operator Services, where technically feasible, through appropriate trunk interconnections for the system; and

7.2.2.2.3 Interface, where technically feasible, to MCIm directory assistance services through the MCIm switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other MCIm required access to IEC as requested through appropriate trunk interfaces.

7.3 ISDN

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7.3.1 ISDN is defined in two variations. The first variation is BI. BI consists of two 64Kbps Bearer (B) Channels and one 16 Kbps Data (D) Channel. The second variation is P.I. P.I. consists of 23 B (64Kbps) Channels and one 64Kbps D Channel. Both BI and P.I. B Channels may be used for voice, C.D. or PSD. The BI D Channel may be used for call related signaling or packet switched data. The P.I. D Channel may be used for call related signaling.

7.3.2 Unbundled Switching Requirements - ISDN

7.3.2.3 BA shall offer unbundled Local Switching providing ISDN that at a minimum:

7.3.2.1.1 Provides integrated Packet handling capabilities within the switching entity and access to external packet networks in accordance with MCIm routing requirements;

7.3.2.1.2 Allows for full 2B+D Channel functionality for BI;

7.3.2.1.3 Allows for full 23B+D Channel functionality for P.I.;

7.3.2.1.4 Each B Channel shall allow for voice, 64 Kbps C.D., and PSD of 128 logical channels at nominal speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B Channel;

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

7.3.2.1.6 The BI D Channel shall allow for call associated signaling, noncall 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; and

7.3.2.1.7 The P.I. D Channel shall allow for call associated signaling.

7.3.3 Interface Requirements ISDN

7.3.3.1 BA shall where technically feasible provide the BI 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 BA shall provide the BI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 specifications to interconnect Digital Loop Carriers.

7.3.3.3 BA shall offer where such capabilities are deployed within the BA switch PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore





requirements for use with unbundled switching in parity with BA's retail services.

7.3.3.4 BA shall where such capabilities are technically feasible and deployed within the BA network offer PSD trunk interfaces operating at 56 Kbps.

Section 8 Operator Systems

See Attachment VIII, Section 7.1.2 "Directory Assistance Service" and Section 7.1.3 "Operator Services."

Section 9 Common Transport

9.1 **Definition:**

Common Transport is an interoffice transmission path between BA Network Elements shared by carriers. Where BA Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common Transport. BA shall offer Common Transport as of the Effective Date of the Agreement, at DS0, DS1, DS3, STS-1 or higher transmission bit rates. Common Transport consists of BA inter-office transport rate facilities and is distinct and separate from local switching.

9.2 Technical Requirements

9.2.1 BA shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used when it provides Common Transport.

9.2.2 At a minimum, where technically feasible Common Transport shall meet all of the relevant (for the transport technology being used) and applicable requirements set forth in Section 18.8.

Section 10. Dedicated Transport

10.1 **Definition:**

10.1.1 Dedicated Transport is an interoffice transmission path between designated locations to which a single carrier is granted exclusive use. Such locations may include BA central offices or other locations, MCIm network components, other carrier network components, or subscriber premises. Dedicated Transport can be provided on either a switched or non-switched basis.

10.1.2 BA shall offer unbundled Dedicated Transport wherever technically feasible in each of the following manners:

10.1.2.1 As capacity on a shared facility (i.e., such as providing a DS-1 dedicated transport channel on a DS-3 transmission 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.

10.1.2.4 The ability to provide MCIm with unbundled dedicated transport using any of the models identified in Sections 10.1.2.1 through 10.1.2.3 above is dependent upon the specific deployed transmission facilities available at the BA served location(s) requested by MCIm.

10.1.3 When unbundled Dedicated Transport is provided as a circuit or as capacity on a shared facility, it shall include and be operated in parity with BA's normal operating practices (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 unbundled Dedicated Transport is provided as a system it shall include suitable transmission facilities and equipment, operated in parity with BA's normal operations practice as required, which may include:

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

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 will be provided wherever available with DCS functionality as a further unbundled +option. DCS is described below in Section 10.5.

10.2 Technical Requirements

Section 18.9 sets forth the technical requirements for unbundled Dedicated Transport. In addition, BA shall provide Dedicated Transport as set forth in this Section 10.2.



10.2.1 When BA 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 BA shall, where available, offer Dedicated Transport using currently available technologies as available and deployed in BA's network including, but not limited to, DSI 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, to the extent technically feasible.

10.2.3 To the extent transmission facilities are installed, deployed, and available to effect such diversification, when requested by MCIm, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that minimizes the possibility that a single failure of facilities or equipment will cause a failure on both circuits.

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

10.2.5 BA shall provide, for an appropriate price, real time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, MCIm's traffic, if and when it is technically feasible to partition such data for MCIm.

10.2.6 BA shall offer the following interface transmission rates for unbundled Dedicated Transport at all locations where suitably equipped transmission facilities and equipment are available:

10.2.6.1 DS1 (ESF - 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; and

10.2.6.4 SDH Standard interface rates in accordance with ITU Recommendation G.707 and PDH rates per ITU Recommendation G.704.

10.2.7 BA shall provide technically appropriate cross-office wiring up to a suitable POT between unbundled Dedicated Transport and MCIm designated equipment. BA 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;

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

10.2.7.4 POT bay terminals for DS-0 or voice frequency termination for voice grade 56Kbps and 64Kbps transmission rates.

10.2.8 BA shall provide physical access to the POT for personnel designated by MCIm (for testing, facility interconnection, and other purposes designated by MCIm) 24 hours a day, 7 days a week

10.2.9 For Dedicated Transport provided as a system, BA shall provide the unbundled system (including, but not limited to, facility routing and termination points) according to MCIm specifications wherever technically feasible.

10.2.10 Upon MCIm's request, BA shall provide MCIm with electronic provisioning capabilities for the MCIm specified Dedicated Transport wherever technically feasible.

10.2.11 BA shall offer unbundled Dedicated Transport together with and separately from DCS wherever DCS equipment is available.

10.3 Technical Requirements for Unbundled Dedicated Transport Using SONET Technology.

This Section 10.3 sets forth additional technical requirements for unbundled 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, wherever technically feasible and where deployed in the BA network:

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

10.3.1.2 In recognition that the inter-vendor equipment compatibility is beyond MCIm and BA's individual and collective ability to control (Reference: Reports of the ATIS SIF), 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 element manager mediated secure access to the DCC supporting that particular unbundled system. The unbundled SONET transport system shall be capable of routing DCC messages between MCIm and the unbundled SONET



network components connected to the Dedicated Transport. For example, if MCIm leases an unbundled SONET ring from BA, that ring shall support DCC message routing between MCIm and SONET network components connected to the ring via the network element manager supporting that facility.

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 ten (10) Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 18.9(e)); and

10.3.1.4.2 No more than one (1) Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 18.9(e)).

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 routed" shall be interpreted as the maximum degree of protection feasible by maintaining physical separation between transmission paths, unless otherwise agreed by MCIm. Wherever technically feasible and suitable equipment is deployed in the BA network, unbundled SONET rings/transport will be provided in a manner to:

10.3.2.2 Support dual ring interworking per SONET Standards.

10.3.2.3 Provide the necessary redundancy in optics, electronics, and transmission paths (including intra-office wiring) where technically feasible such that it will minimize the possibility that any 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.

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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 industry norms and as set for similarly deployed equipment in the BA network.

10.3.2.8 Provide revertive protection switching with a settable wait to restore



delay with a default setting of five (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 references set forth in Section 18.9(e).

10.3.2.10.1 No more than 0.25 minutes of unavailability per month; and

10.3.2.10.2 No more than 0.5 minutes of unavailability per year.

10.4 At a minimum, unbundled Dedicated Transport shall meet wherever technically feasible each of the requirements set forth in Sections 18.8 and 18.9. In all cases, unbundled Dedicated Transport will be provided in operational parity with BA's own use of the facilities and equipment similarly utilized in the provision of transport itself.

10.5 DCS

10.5.1 **Definition:**

10.5.1.1 DCS is an optional Network Element that will be made available wherever feasible for use with unbundled transport whose function is to provide automated cross connection of 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 cross-connection typically at the DS0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect STS-1 s or other 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, non-automated cross-connect will be defined as the combination of the functionality provided by a DSX or 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 unbundled transport elements that may be terminated on a DSX or LGX, to a switch, another cross-connect, or other service platform device, is available as part of the unbundled DCS offering to the extent





technically feasible and where suitable equipment and facilities are available.

10.6 DCS Technical Requirements

Section 18.10 sets forth the technical requirements for unbundled access to the DCS. BA shall provide unbundled access to the DCS in accordance with this Section 10.6 to the extent technically feasible and where suitable equipment and facilities are deployed and available in the BA network.

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

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

10.6.3 Unbundled 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 unbundled 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.

10.6.5 BA shall continue to administer and maintain unbundled DCSs, including updates to the control software to current available releases in parity with its ongoing operations.

10.6.6 BA shall provide various types of unbundled DCSs depending on facility and equipment availability and technical feasibility 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 as requested by MCIm.

10.6.7 BA shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (i.e., BA shall establish the processes to implement cross connects on demand or, at MCIm's option, permit MCIm control of such configurations and reconfigurations) in accordance with industry reliability and security standards.



10.6.8 BA shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., BA shall establish the processes to implement cross connects on the schedule designated by MCIm or, at MCIm's option, permit MCIm to control such configurations and reconfigurations) in accordance with industry reliability and security standards.

10.6.9 Wherever technically feasible, unbundled DCS shall continuously monitor protected circuit packs and redundant common equipment.

10.6.10 Wherever technically feasible, unbundled 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 unbundled DCS shall be equipped with a redundant power supply or a battery back-up in parity with BA's own use of DCS facilities and equipment.

10.6.12 BA 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 BA shall provide MCIm with real time performance monitoring and alarm data, for an appropriate price, on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact MCIm's services, if and when it is technically feasible to partition such data for MCIm.

10.6.14 Wherever technically feasible, at MCIm's option, BA shall provide MCIm with the ability to initiate non service-affecting tests on integrated equipment used to test the signals and the underlying equipment used to provide unbundled DCS, as well as other integrated functionality for routine testing and fault isolation.

10.6.15 Wherever technically feasible and suitable equipment is available, unbundled DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS1 or STS-1 to DS3).

10.6.16 Wherever technically feasible, unbundled DCS shall perform optical to electrical conversion where the underlying equipment used to provide unbundled 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 Wherever technically feasible, unbundled 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 Wherever technically feasible, unbundled 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 Unbundled DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by MCIm limited only by technical feasibility and the availability of suitable equipment and facilities.

10.7 Unbundled DCS Interface Requirements

This Section 10.7 sets forth the interface requirements for unbundled DCS to the extent technically feasible and where suitable equipment and facilities are deployed and available in the BA network.

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

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

10.7.3 BA shall provide physical interfaces on STS-1 cross-connect devices at the OC-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI and ITU standards.

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

10.8 Unbundled DCS shall, at a minimum and where technically feasible, meet all the relevant and applicable requirements set forth in Section 18.10.

Section 11 Signaling Link Transport

BA will provide MCIm with unbundled Signaling Link Transport.

11.1 Definition:

Signaling Link Transport is a set of two or four dedicated 56 Kbps transmission paths between MCIm designated SPOI that provide appropriate physical diversity and a cross-connect at mutually agreed BA STP sites.

11.2 Technical Requirements

11.2.1 Section 18.11 sets forth the technical references for Signaling Link Transport.

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

11.2.3 Of the various options available, Signaling Link Transport shall be provisioned with adequate physical diversity to be utilized in either of the following two ways:

11.2.3.1 As an "A-link" which is a connection between a switch and a home. (STPS) pair; or

11.2.3.2 As a "D-link" which is a connection between two STP pairs in different company networks (e.g., between two STP pairs for two CLECs).

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

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

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

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

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

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

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

11.2.6.1 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

11.2.6.2 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).

11.2.7 Signaling link layers shall be ordered by MCIm in sufficient quantity such that the anticipated signaling traffic carried over the links is in keeping with mutually agreed engineering rules. Signaling link traffic will be reviewed on at least a monthly basis and, to the extent necessary, MCIm will place timely orders for additional capacity as indicated by the engineering rules.

11.3 Interface Requirements



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

Section 12 Signaling Transfer Points (STPs)

BA will provide MCIm with unbundled access to its STPs enabling MCIm to activate its own signaling link transport in lieu of BA provided signaling link transport. In addition, STP connections will be provided to MCIm as requested to support interconnection at either or both MCIm's STPs or switches to BA's STPs.

12.1 Definition:

STPs provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and other signaling transfer points asagreed to by BA and MCIm.

12.2 Technical and Interface Requirement

STPs shall be equal to or better than all of the requirements for STPs identified in the technical references set forth in Section 18.11.

12.3 Technical Requirements

12.3.1 STPs shall provide SS7 Signaling access to the other Network Nodes connected to the BA SS7 network mutually agreed by BA and MCIm (and to third Parties as applicable) for the purposes mutually agreed by BA and MCIm (and third Parties as applicable). These may include:

12.3.1.1 BA Local Switching or Tandem Switching;

12.3.1.2 BA Service Control Points/Databases;

12.3.1.3 Third-party local or tandem switching systems; and

12.3.1.4 Third-party-provided STPs.

12.3.2 The connectivity provided by STPs shall fully support the relevant functions of the other Network Nodes connected to BA's SS7 network to the extent mutually agreed by BA, MCIm and third parties as applicable. This includes the use of BA's SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the BA SS7 network (i.e., transit messages such as those that would pass through a BA STP in conjunction with BA tandem transit service used in connection with completion of calls between MCIm and another CLEC's customers). When the BA SS7 network is used to convey transit messages, there shall be no alteration of the ISDNUP or TCAP user data that constitutes the content of the message.

12.3.3 If a BA tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an MCIm local switch and third party local switch, BA's SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback and Automatic Recall) 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 BA's STPs.

12.3.4 STPs shall provide all of the technically feasible functions as supported by the type of equipment and as deployed by BA in its network of the MTP as specified in ANSI T1.111 (Reference Section 18.11). This may include:

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

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

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

12.3.5 Wherever technically feasible and supported by the particular STP type and vintage deployed in the BA network, STPs shall provide all functions of the SCCP as mutually agreed by the Parties, as specified in ANSI T1.112 (Reference Section 18.11).

12.3.6 In cases where the destination signaling point is a BA local or tandem switching system or database, or is an MCIm or third party local or tandem switching system directly connected to BA's SS7 network, BA STPs shall if necessary perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases of services offered to MCIm, STPs shall, if necessary, perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the BA SS7 network, and shall not perform SCCP Subsystem Management of the destination.

12.3.7 When and if the capability to route SCCP messages based on ISNI as specified in ANSI T1.118 (Reference Section 18.11) is deployed on interconnecting BA STPs, BA shall in good faith negotiate the performance of that function with MCIm.

12.3.8 When and if OAM&P capabilities of MRVT and SRVT are deployed on interconnecting BA STPs, BA shall in good faith negotiate the internetwork application of these capabilities with MCIm.

12.3.9 STPs shall be designed to meet the following performance requirements if technically feasible and consistent with the deployed architecture and equipment to provide MCIm with operational parity to BA's own STP performance in the network:

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

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

12.4 Interface Requirements

12.4.1 As requested by MCIm, BA shall provide an A-link interface from MCIm local switching systems to connect MCIm or MCIm-designated local switching systems or STPs to the BA SS7 network.

12.4.2 If requested by MCIm, each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:

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

12.4.3 SPOI for each link shall be located at a cross-connect element, such as a DSX-1, in a mutually agreeable location such as the MCIm central office where MCIm's switch is located or the Central Offices where the BA STPs are 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.

12.4.4 Where technically feasible, BA will, in support of mutually agreed-to services, provide the same capabilities identified in the following requirements (Sections 12.4.4.1 and 12.4.4.2) as it does for itself:

12.4.4.1 Bellcore GR-905-CORE, CCSNIS Supporting Network Interconnection, MTP, and ISDNUP; and

12.4.4.2 Bellcore GR-1432-CORE, CCSNIS Supporting SCCP and TCAP.

12.5 Message Screening

12.5.1 In support of mutually agreed-to services, which agreement will be withheld by BA only in the event of technical infeasibility, BA shall set message screening parameters so as to accept and deliver messages appropriate for those services to and from MCIm local or tandem switching systems destined to and originated from any signaling point in or connected to the BA SS7 network with which the MCIm switching system has a legitimate signaling requirement.

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Section 13 Service Control Points/Databases

13.1 Definition:

13.1.1 Databases as used herein are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to provide 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. It is understood that not all of these databases are deployed in the BA network and that some may not be deployed by BA. Specifically, the number portability database may be provided by an independent administrator which would be accessed by MCIm and BA on an as needed basis.

13.1.2 A SCP is a specific type of Database Network Element functionality deployed in a 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 may also utilize 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 13.2 address storage of information, access to information (e.g., signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance. Signaling access to services provided on the databases described in Section 13.1 are to be considered on a case-by-case basis and the services are offered on an as-is basis using reasonable care. To the extent MCIm utilizes the same switching platforms and software as BA, it is anticipated that the services will work as they do for BA's users. It is expected that under the stated conditions the applicable and relevant requirements should be met, except where any such requirement is superseded by a specific requirement set forth in Sections 13.3 through 13.7; provided that such new requirement will not apply to equipment deployed in the BA network as of the Effective Date.

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

13.2.2 [INTENTIONALLLY LEFT BLANK]

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 III (which applies to SS7).

13.2.4 BA shall provide MCIm access to information contained in BA Operating Support Systems (OSS) to enable MCIm to perform the same functions at the same level of quality as BA personnel. Access to this OSS information will be provided to MCIm



during the same hours that it is available to BA personnel.

13.2.5 BA 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 BA shall provide MCIm access to information contained in BA Operating Support Systems (OSS) to enable MCIm to perform the same functions at the same level of quality as BA personnel. Access to this OSS information will be provided to MCIm during the same hours that it is available to BA personnel.

13.2.7 BA shall provide database maintenance and administration on behalf of MCIm in parity with BA's own database operational performance.

13.3 Number Portability Database

13.3.1 **Definition:**

When deployed, it is expected that a Number Portability (NP) database will store and provide access to routing numbers for calls involving numbers that have been ported from one local service provider to another within the same geographic location. NP functionality may also include GTT for calls involving ported numbers. This Section 13.3 supplements the requirements of Sections 13.2 and 13.7. If BA elects to provide a number portability database for its own use, and at such time as BA deploys the number portability translation function and the Global Title routing service associated with NP, BA will negotiate will MCIm regarding the following:

13.3.1.1 When and if such a database deployment is available or imminent, BA will negotiate with MCIm the necessary details regarding the capability to launch NP queries to the BA NP function. The capabilities to be negotiated will include both NP query - response and GTT routing, and the capability to query numbers regardless of whether they reside within an NPA-NNX open to number portability; and

13.3.1.2 Query responses that may provide such additional information, for example, Service Provider identification, as may be specified in the NP implementation in the relevant regulatory jurisdiction.

13.3.2 Requirements

13.3.2.1 NP facilities, if deployed by BA, shall provide such other functionality as specified in the regulatory jurisdiction in which portability has been implemented; and

13.3.2.2 If BA deploys NP facilities, BA shall make available the NP database query functions and GTT applications at parity with that provided to BA for all



switches querying the same STPs.

13.4 LIDB

This Section 13.4 defines and sets forth additional requirements for the LIDB. This Section 13.4 supplements the requirements of Section 13.2 and 13.7.

13.4.1 Definition:

The LIDB is a transaction-oriented database accessible through CCS networks. It contains records associated with subscriber line numbers and special billing numbers. 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 such as screening billed numbers that provides the ability to accept Collect or Third Number Billing calls and validation of TLN based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the BA 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, BA shall enable MCIm to store in BA's LIDB any subscriber line number or special billing number record, whether ported or not, for which the NPA-NXX or group is supported by that LIDB. BA will not be required to make available to MCIm the use of NXX-0/1XX Group until BA deploys the same capabilities for itself in its network.

13.4.2.2 Prior to the availability of a long-term solution for Number Portability, BA shall enable MCIm to store in BA's LIDB any subscriber line number or special billing number record, and NPA-NXX Group Records, belonging to an NPA-NXX owned by MCIm for which the NPA-NXX is supported by that LIDB. In such case, BA will provide Final GTT for such codes to the BA LIDB. MCIm would be expected to notify companies with which it has business arrangements of the location of such records. MCIm would also be expected to negotiate with BA any restrictions it wishes to place on the access of such records.

13.4.2.4 BA shall perform the following LIDB functions for MCIm's subscriber records in LIDB:

13.4.2.4.1 BNS (provides information such as whether the billed number may accept collect or third number billing calls); and

13.4.2.4.2 Calling Card Validation.



13.4.2.5 BA shall process MCIm's subscriber records in LIDB at least at parity with BA subscriber records, with respect to other LIDB functions.

13.4.2.6 Within thirty (30) days after receiving a request by MCIm, BA 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 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 BA shall provide LIDB systems for which operating deficiencies that would not result in calls being blocked shall not exceed thirty (30) minutes per year.

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13.4.2.9 [INTENTIONALLY LEFT BLANK]

13.4.2.10 BA shall provide MCIm with the capability to provision (e.g., to add, update, and delete) NPA-NXX Group Records, and Line number and special billing number records, associated with MCIm subscribers, into BA's LIDB provisioning process. BA will build the group records.

13.4.2.11 Unless directed otherwise by MCIm, in the event that end user subscribers change their local service provider, BA shall maintain subscriber data so that such subscribers shall not experience any interruption of service due to the lack of such maintenance of subscriber data subject to contractual arrangements with other carriers from whom such subscribers obtain service.

13.4.2.12 All additions, updates and deletions of MCIm data to the LIDB shall be solely at the direction of MCIm subject to contractual arrangements with other carriers from whom such subscribers obtain service.

13.4.2.13 BA shall provide priority updates to LIDB for MCIm data upon MCIm's request (e.g., to support fraud protection) in accordance with BA procedures relative to fraud protection.

13.4.2.14 BA shall provide MCIm the capability to obtain, through an electronic interface, reports as requested and defined by MCIm of all MCIm data in LIDB where such reports are similarly available to BA itself and where the preparation of such reports does not interfere with the processing capacity of the LIDB server.

13.4.2.15 BA 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 BA shall, where such requests do not impair the performance of the LIDB facility, perform backup and recovery of all of MCIm's data in LIDB as frequently as MCIm may reasonably specify, including sending to LIDB all changes made since the date of the most recent backup copy. Where such frequency is greater than that BA provides to itself, MCIm will reimburse BA for the reasonable cost of the effort needed to fulfill the request.

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

13.4.2.18 BA 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 requested by MCIm.

13.4.2.19 BA shall prevent any access to or use of MCIm data in LIDB by BA personnel or by any other party that is not authorized by MCIm in writing unless required to do so by competent legal authority.

13.4.2.21 BA 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 BA shall provide mean processing time and other similar performance criteria at the LIDB under normal conditions as defined in the relevant and applicable requirements listed under Section 18.12 at parity to that which BA provides to itself.

13.4.3 Interface Requirements

BA shall offer LIDB access in accordance with the relevant and applicable requirements of Section 18.12 to the extent such equipment is deployed in the BA network. In addition, Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

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 vertical features during call set-up in response to queries from SSPs. This Section 13.5 supplements the requirements of Sections 13.2 and 13.7. BA shall provide the Toll Free Number Database in accordance with the following requirements:

13.5.1 Technical Requirements



13.5.1.1 BA shall make the BA Toll Free Number Database available for MCIm to query from MCIm's designated switch including BA 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 BA switch.

13.5.1.3 The SCP shall also provide such additional features as described in SR-TSV-002275 (BOC Notes on the BA Networks, SR-TSV-002275, Issue 2, (Bellcore, April 1994)) subject to mutual agreement of the Parties as are available to BA. These features may include, but are not limited to:

13.5.1.3.1 Network Management;

13.5.1.3.2 Subscriber Sample Collection; 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, together with the signaling network interface as specified in the technical reference in Section 18.12.

13.6 SCPs/Databases shall be equal to or better than all of the requirements for SCPs/Databases set forth in Section 18.12.

13.7 AIN Unbundled Access, SCE/SMS AIN Access

13.7.1 BA shall provide unbundled access to all BA service applications resident in BA's SCP which are tariffed by BA. Such access may be from MCIm's switch or BA's unbundled local switch.

13.7.2 Unbundled SCE/SMS AIN access shall provide MCIm the ability to create service applications using the same methods and in the same manner as available to BA in the BA SCE/SMS and deploy those applications via the BA SMS to the BA SCP. This interconnection arrangement shall provide MCIm access to the BA development environment and administrative system in a manner at parity with BA's ability to deliver its own AIN-based services. Unbundled SCE/SMS AIN access provides the capability to develop service applications within the BA service creation environment, and deployment of service applications via the BA service management system.

13.7.3 BA shall make SCE/SMS hardware, software, testing and technical support (e.g., help desk, system administrator) resources available to MCIm. Scheduling of SMS



resources shall allow MCIm equal priority to BA.

13.7.4 The BA SCE/SMS shall allow for multi-user access with proper source code management and other logical security functions as specified by BA.

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

13.7.6 BA shall provide documentation and technical support of MCIm development staff at parity with that provided to BA's own development staff.

13.7.7 When MCIm selects unbundled SCE/SMS AIN access, BA shall provide for a secure, controlled access environment on-site as well as via remote data connections (e.g., dial up, LAN, WAN).

Section 14 Unbundled Tandem Switching

14.1 Definition:

The tandem switch Network Element provides the switching function needed to establish a temporary transmission path between two switching offices including, but not limited to, those end offices in the networks of CLECs, BA, independent telephone companies, IECs and wireless carriers.

14.2 Technical Requirements

14.2.1 Unbundled Tandem Switching shall have the same or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90. The requirements for Tandem Switching include, but are not limited to, the following:

14.2.1.1 Unbundled tandem switching shall provide signaling to establish a tandem connection;

14.2.1.2 Unbundled tandem switching shall provide screening and routing as mutually agreed to by the Parties;

14.2.1.3 Unbundled tandem switching shall provide recording of all billable events as mutually agreed to by the Parties;

14.2.1.4 Unbundled tandem switching shall provide AIN triggers supporting AIN features as deployed within the BA network;

14.2.1.5 Unbundled tandem switching shall, where it is technically feasible for tandems to do so as deployed in the BA network, provide connectivity to Operator



Systems as requested by MCIm. It is understood that at the present time, BA's tandem switches are not equipped to forward some of the protocols required for Operator Services;

14.2.1.6 Unbundled tandem switching shall provide access to toll free number portability database where requested by MCIm;

14.2.1.7 Unbundled tandem switching shall provide all trunk interconnections discussed under the "Network Interconnection" section (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN);

14.2.1.8 Unbundled tandem switching shall provide connectivity to PSAPs where 911 solutions are deployed at those specific switches equipped by BA for that purpose; and

14.2.1.9 Unbundled tandem switching shall provide connectivity to transit traffic to and from other carriers.

14.2.2 Unbundled 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 Unbundled tandem switching shall provide local tandeming functionality between two end offices including two offices belonging to different CLECs (e.g., between an MCIm end office and the end office of another CLEC).

14.2.4 Unbundled tandem switching shall preserve CLASS/LASS features as are available to BA's customers, and Caller ID as traffic is processed.

14.2.5 Unbundled tandem switching shall record billable events as and when available and send them to the area billing centers designated by MCIm. Billing requirements are specified in Attachment VIII.

14.2.6 BA shall perform routine testing and fault isolation on the underlying switch that is providing Unbundled tandem switching and all its interconnections in accordance with BA's standard operating procedures.

14.2.7 As arranged by mutual agreement, BA shall provide performance data regarding traffic characteristics or other measurable elements to MCIm for review.

14.2.8 Unbundled tandem switching shall include BA's network management function in that all necessary controls employed at the discretion of BA's network management personnel will be applied universally to all traffic regardless of carrier. Any specific variances must be prearranged by MCIm under a separate specific agreement.

14.2.9 Unbundled tandem switching shall route calls to BA or MCIm endpoints or



platforms on a per-call basis as designated by MCIm. Detailed primary and overflow routing plans for all interfaces available within the BA switching network shall be mutually agreed by MCIm and BA. Such plans shall meet MCIm requirements for routing calls through the local network.

14.2.10 Unbundled tandem switching shall process originating toll-free traffic received from an MCIm local switch.

14.2.11 In support of AIN triggers and features, unbundled tandem switching shall provide SSP capabilities when these capabilities are not available from the local BA switching Network Element.

14.2.12 The local switching and tandem switching functions may be combined in an office. In such event, both local switching and tandem switching shall provide, where technically feasible, all of the functionality required of each of those unbundled Network Elements in this Agreement.

14.3 Interface Requirements

14.3.1 Unbundled tandem switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

14.3.2 Unbundled tandem switching shall interconnect, with direct trunks, to all carriers with which BA interconnects.

14.3.3 BA shall provide all signaling necessary to provide unbundled tandem switching with no loss of feature functionality.

14.3.4 Unbundled tandem switching shall interconnect with MCIm's switch, using twoway trunks, for traffic that is transiting via the BA network to interLATA or intraLATA carriers. At MCIm's request, unbundled tandem switching shall record and keep records of traffic for billing.

14.3.5 At MCIm's request, unbundled tandem switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology that MCIm designates.

14.4 Unbundled tandem switching shall meet all relevant and applicable standards set forth in Section 18.13, except where it is not technically feasible for such equipment as is deployed in the BA network as of the Effective Date to comply with any such standard.

Section 15 Additional Requirements

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





15.1 Cooperative Testing

15.1.1 Definition:

Cooperative Testing means that each Party shall cooperate with the other upon request or as needed to: (i) ensure that the Network Elements and Ancillary Functions and additional requirements being provided are in compliance with the requirements of this Agreement; (ii) test the overall functionality of various Network Elements and Ancillary Functions; and (iii) 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 forty-five (45) days after the Effective Date of this Agreement, MCIm and BA will mutually agree upon a process to resolve technical issues relating to interconnection of MCIm's network to BA's network and Network Elements and Ancillary Functions. The mutually agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each company's management. If MCIm and BA do not reach agreement on such a process within forty-five (45) 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 16 of this Agreement unless both Parties mutually agree to extend the time to reach agreement on such issues.

15.1.2.1 BA shall provide MCIm access for testing where such unbundled equipment is capable of test access (e.g., unbundled copper loop by itself cannot be tested by BA unless it is connected to a BA switch) between a BA Network Element or combinations and MCIm equipment or facilities. Where test access is provided, BA will provide those test capabilities in parity with what BA provides itself.

15.1.2.2 MCIm may test any unbundled Network Element interface, Network Element or ancillary function.

15.1.2.3 BA shall provide relevant and non-proprietary data as requested by MCIm for the Loop components as set forth in Sections 2, 3 and 4 of this Attachment III which MCIm may desire to test. Such data may include equipment and cable specifications, signaling and transmission path data.

15.1.2.4 [INTENTIONALLY LEFT BLANK]

15.1.2.5 Upon MCIm's request, BA shall report to MCIm the test results relating to BA's testing activities performed pursuant to this Section 15 in a mutually agreed format. Following MCIm's review of such test results, MCIm may notify



BA of any deficiencies that are detected.

15.1.2.6 BA shall, where resources and the capability exist, work cooperatively with MCIm to temporarily provision and test unbundled Local Switching features as ordered by MCIm. MCIm agrees to reimburse BA for all reasonable costs in performing this function. Within sixty (60) days after the Effective Date of this Agreement, MCIm and BA shall mutually agree on the procedures to be established between BA and MCIm to provide such processes for feature testing.

15.1.2.7 [INTENTIONALLY LEFT BLANK]

15.1.2.8 Unbundled Dedicated Transport and unbundled Loop Feeder may experience alarm conditions due to in-progress tests. BA shall maintain and manage its network in an appropriate manner. Where there is an option to do so and the situation permits, BA will make every reasonable effort to not remove such facilities from service without obtaining MCIm's prior approval.

15.1.2.9 Where the situation permits, BA shall obtain acceptance from MCIm prior to conducting tests or maintenance procedures on unbundled Network Elements or on the underlying equipment that may cause a service interruption or degradation of service.

15.1.2.10 BA shall provide a single point of contact to MCIm that is available seven (7) days per week, twenty-four (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 BA shall provide 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 Upon MCIm's request BA shall participate in Cooperative Testing with MCIm to test any operational interface or process used to provide unbundled Network Elements or services to MCIm.

15.1.2.13 MCIm and BA shall endeavor to complete cooperative testing as stated in Attachment VIII.

15.1.2.14 BA shall participate in cooperative testing requested by MCIm whenever it is deemed necessary by MCIm to ensure 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 testing, the tested Network Element does not meet the relevant and applicable requirements stated herein.

15.2 Performance





15.2.1 Scope

This Section 15.2 addresses performance requirements for unbundled Network Elements. It includes requirements for the reliability and availability of unbundled Network Elements, and quality parameters such as transmission quality (analog and digital), and speed (or delay).

15.2.1.1 [INTENTIONALLY LEFT BLANK]

15.2.1.2 BA shall work cooperatively with MCIm to determine appropriate performance allocations for unbundled Network Elements.

15.2.2 BA shall provide, for an appropriate price, real-time data access to performance monitoring and alarm data on events affecting (or potentially affecting) MCIm's traffic, if and when it is technically feasible to partition such data for MCIm.

15.2.3 BA shall provide performance equal to or better than all of the requirements set forth in Section 18.14.

15.2.4 Services and Capabilities

15.2.4.1 MCIm may combine Network Elements in any manner technically feasible. When MCIm combines Network Elements in the same manner as BA, such combinations shall provide MCIm the capability to offer the same retail services BA provides by means of such combination.

15.2.4.2 The following capabilities shall be supported by appropriate unbundled Network Elements as applicable and where such equipment is deployed in the BA network:

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 under tariff from BA.

15.2.4.2.6 Any coin services a BA customer may order.

15.2.4.2.7 Frame Relay and ATM.



15.2.4.2.8 Private Line Services.

15.2.5 Specific Performance Requirements for Unbundled Network Elements

15.2.5.1 The following sections itemize performance parameters for unbundled Network Elements. Where technically feasible, BA shall provide unbundled Network Elements that provide a level of performance equal to that which BA experiences itself for similar configurations of Network Elements. These additional requirements and objectives are given in terms of specific limits. To the extent they mirror the standards and requirements and standards already stated elsewhere (Reference Section 18) all tests (acceptance and ongoing performance) shall meet the limit(s) to satisfy the requirement.

15.2.5.2 Unbundled Loop Combination Architecture Constraints

15.2.5.2.1 The following constraints will limit not only the variety of unbundled Loop Combination architectures that may be considered, but also the architectures BA may consider to deliver any unbundled Network Element. These constraints constitute additional requirements placed by MCIm for its own purposes and it is understood that they may constrain BA's ability to provide unbundled Network Elements in some locations that might have otherwise been provided. To the extent BA's records indicate the following conditions exist, BA will endeavor to provide unbundled Network Elements that conform to these requirements. Where BA incurs additional costs in meeting these requirements, MCIm agrees to fully reimburse BA. These constraints apply to the entire path between the NID portion of Loop Distribution and the BA switch. Any exceptions to these restrictions shall be specifically requested or approved by MCIm in writing.

15.2.5.2.1.1 No more than 1 A-D conversion.

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

15.2.5.2.1.3 No voice compression.

15.2.5.2.1.4 No echo canceled or suppressers.

15.2.5.2.1.5 One digital loss pad per PBX.

15.2.5.2.1.6 No digital gain.

15.2.5.2.1.7 No additional equipment that might significantly increase intermodulation distortion.

15.2.5.3 [INTENTIONALLY LEFT BLANK]

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15.2.5.4 Transmission Impairments

15.2.5.4.1 **Performance Allocation**

15.2.5.4.1.1 Transmission path impairments may be classified as either analog or digital, and will depend on the nature of the signal transmitted across the unbundled Network Element. Analog impairments may be introduced on any analog portion of the Loop. Digital impairments may be 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.

15.2.5.4.2 Analog Impairments

15.2.5.4.2.1 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.

BA agrees to work cooperatively with MCIm to resolve analog transmission impairments for unbundled Network Elements that are provided by BA and that do not meet the relevant and applicable standards set forth in Section 18 for those components BA provides.

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.

BA agrees to work cooperatively with MCIm to resolve digital transmission impairments for unbundled Network Elements that are provided by BA and do not meet the relevant and applicable standards set forth in Section 18 for those components BA provides.

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. BA will provide unbundled Network Elements that provide service availability and reliability at parity to those elements similarly deployed in the BA network. The following parameters are understood to be those MCIm requests to use in determining the criteria of performance.

15.2.5.5.1 Blocked Calls

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

15.2.5.5.3 Dial Tone Delay

15.2.5.5.4 Dial Tone Removal

15.2.5.5 Post Dial Delay

15.2.5.5.5.2.1 PDD 1 - A - Intra LSO

15.2.5.5.5.2.2 PDD 1 - B - LSO to Another Local LSO

15.2.5.5.2.3 PDD 1 - C - MCIm LSO to Other LSO

15.2.5.5.2.4 Impact of Number Portability (NP) If a call forwarding option is used as an interim solution for Number Portability, the delay due to additional switching in the local access shall not be different from that experienced by any LEC served by BA in a similar manner.

15.2.5.5.5.2.6 Partial Dial Timing

15.2.5.5.2.6.1 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.

15.2:5.6 Unbundled local switching post dial delay

15.2.5.7 [INTENTIONALLY LEFT BLANK]

15.2.5.8 Unbundled common transport

Specific requirements for unbundled common transport or ancillary function are set forth in the common transport section.

15.2.5.9 Unbundled Dedicated Transport



Specific requirements for unbundled dedicated transport are set forth in the dedicated transport section.

15.2.5.10 Unbundled STPs

Specific requirements for Unbundled Signaling Transport Points are set forth in the Signaling Transfer Points section.

15.2.5.11 Unbundled signaling link transport

Specific requirements for Unbundled signaling link transport are set forth in the Signaling Link Transport section.

15.2.5.12 Unbundled SCPs/Databases

The performance requirements for databases (Number Portability, LIDB, E911, etc.) vary depending on 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.

15.2.5.13 Unbundled tandem switching

Specific requirements for unbundled tandem switching are set forth in the tandem switching section.

15.2.6 Test and Verification

15.2.6.1 BA shall permit MCIm to confirm the reported performance of any unbundled Network Element.

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

15.2.6.1.2 At MCIm's request, BA will perform tests to confirm acceptable performance and provide MCIm with documentation of test and results.

15.3 Protection, Restoration, and Disaster Recovery

15.3.1 Scope

This Section 15.3 refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration, and disaster recovery as they apply to unbundled Network Elements provided by BA.



15.3.2 Requirements

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

15.3.2.2 BA shall provide unbundled Network Elements and protection, restoration, and disaster recovery at parity with its own facilities and equipment.

15.3.2.3 In connection with the provision of unbundled Network Elements, BA shall provide the use of spare equipment and facilities at parity with its own facilities and equipment.

15.3.2.4 BA shall restore unbundled 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 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 shall apply when BA provides synchronization to equipment that MCIm owns and operates within a BA location. In addition, these requirements apply to synchronous equipment that is owned by BA and is used to provide an unbundled Network Element to MCIm.

15.4.3 Synchronization -- Distribution Requirements

15.4.3.1 To the extent that BA has deployed such equipment for its own network the timing provided by the Central office BITS shall conform to the relevant and applicable standards as specified in ANSI T1.101-1994 and Bellcore TR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.

15.4.3.2 To the extent that BA has deployed such equipment for its own network the timing provided by the Central office BITS shall be powered by primary and



backup power sources.

15.4.3.3 [INTENTIONALLY LEFT BLANK]

15.4.3.4 [INTENTIONALLY LEFT BLANK]

15.4.3.5 [INTENTIONALLY LEFT BLANK]

15.4.3.6 [INTENTIONALLY LEFT BLANK]

15.4.3.7 [INTENTIONALLY LEFT BLANK]

15.4.3.8 [INTENTIONALLY LEFT BLANK]

15.4.3.9 [INTENTIONALLY LEFT BLANK]

15.4.3.10 [INTENTIONALLY LEFT BLANK]

15.4.3.11 [INTENTIONALLY LEFT BLANK]

15.4.3.12 For non-SONET equipment, BA, where it provides such equipment for itself in its network, shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.

15.5 SS7 Network Interconnection

15.5.1.1 Definition:

SS7 Network Interconnection is the interconnection of MCIm local STPs with BA STPs. This interconnection enables the exchange of SS7 messages among BA switching systems and databases, MCIm local or tandem switching systems, and other third-party switching systems directly connected to the BA SS7 network.

15.5.2 Technical Requirements

15.5.2.1 SS7 Network Interconnection shall provide connectivity to all components of the BA SS7 network, including:

15.5.2.1.1 BA local or tandem switching systems to which MCIm has trunks or sends TCAP messages as noted in this document;

15.5.2.1.2 BA databases and subsystems as agreed to in this document; and

15.5.2.1.3 Other third-party local or tandem switching systems provided that valid agreements for such interconnection are in effect among all



parties concerned.

15.5.2.2 The connectivity provided by SS7 Network Interconnection shall fully support the agreed functions of BA switching systems and databases and MCIm or other third-party switching systems with A-link access to the BA SS7 network.

15.5.2.3 If traffic is routed based on dialed or translated digits between an MCIm local switching system and a BA or other third-party local switching system, either directly or via a BA tandem switching system, then the BA SS7 network shall convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback and Automatic Recall) between the MCIm local STPs and the BA or other third-party local switch.

15.5.2.4 When the capability to route messages based on ISNI is generally available on BA STPs, the BA SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the BA switch routes traffic based on a CIC.

15.5.2.5 If and when available, and BA deploys such capability in its own network, the SS7 Network Interconnection shall provide all the mutually agreed functions of the SCCP necessary for Class 0 (basic connectionless) service (Reference Section18.11). In particular, this includes GTT and SCCP Management procedures as necessary.

15.5.2.6 Where the destination signaling point is a BA switching system or DB, or is another third-party local or tandem switching system directly connected to the BA SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.

15.5.2.7 To the extent necessary, 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.

15.5.2.8 If and when Internetwork MRVT and SRVT become available capabilities of BA STPs, BA and MCIm shall discuss provisioning these functions of the OMA&P.

15.5.3 Interface Requirements

15.5.3.1 BA shall offer the following SS7 Network Interconnection options to connect MCIm or MCIm-designated STPs to the BA 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:

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

15.5.3.3 The SPOI for each link shall be located at a cross-connect element, including but not limited to a DSX-1, in the CO where the BA 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. BA shall offer higher rate DS1 signaling links for interconnecting MCIm local switching systems or STPs with BA STPs as soon as such higher rate DS1 signaling links become approved ANSI standards and deployed capabilities of BA STPs.

15.5.3.3.1 In each LATA, there will be at least two signaling points of interconnection SPOIs.

15.5.3.3.2 SPOI locations will be negotiated by both parties and shall be mutually acceptable. A SPOI can be any existing cross connect point in the LATA. Each Party agrees to select reasonable and difficient SPOI locations.

15.5.3.3.3 Each signaling link requires a port on each Party's STP.

15.5.3.4 Both Parties shall provide intraoffice diversity on those facilities they own between the SPOIs and the STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links connecting to a BA STP.

15.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. As applicable, these protocol interfaces shall conform to the following specifications:

15.5.3.5.1 Bellcore GR-905-CORE, (CCSNIS) Supporting Network Interconnection, MTP, and ISDNUP;

15.5.3.5.2 Bellcore GR-1428-CORE, (CCSNIS) Supporting Toll Free Service; and

15.5.3.5.3 Bellcore GR-1432-CORE, CCSNIS SCCP and TCAP.

15.5.3.6 BA shall exchange appropriate messages with MCIm local or tandem switching systems for those services to which both Parties have agreed.

15.5.4 SS7 Network Interconnection shall conform as necessary to the requirements for SS7 Network Interconnection set forth in the technical references set forth in Section 18.15.

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15.6 Network Interconnection

15.6.1 Technical Requirements

15.6.1.1 When requested by MCIm, BA shall provide interconnections between the BA Network Elements provided to MCIm and MCIm's network at transmission rates designated by MCIm and as available from BA.

15.6.1.2 Traffic shall be combined and routed as follows:

15.6.1.2.1 BA shall provide direct trunks for intraLATA traffic (except 911, directory assistance, operator services, IMAS, and other services that may require special routing) and, subject to mutual agreement, BA shall allow MCIm to route such traffic either directly to the BA specified terminating sector BA tandem or directly to a BA end-office. 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, BA shall accept MCIm traffic destined to the BA Operator Systems switches, on trunks from an MCIm end-office or an MCIm tandem. MCIm will be responsible for ensuring that all protocols required to process such traffic are fully supported by its switches for this purpose.

15.6.1.2.3 If and as necessary to provide E911/911 service, BA shall receive MCIm CAMA-ANI traffic destined to the BA 911 PSAPs, or E911 tandems, on trunks from an MCIm end-office.

15.6.1.3 When requested by MCIm and a third party carrier, BA shall provide interconnections between MCIm's network, and the other carrier's network through the BA network at transmission rates mutually agreed to by all parties, including, but not limited to DS1, DS3, and SONET bit rates. BA shall transport traffic to and from other local carriers and interLATA carriers through the BA network, and at MCIm's request, BA shall record and keep records of such traffic for MCIm billing purposes subject to charges for such services.

15.6.1.4 BA shall provide two-way trunk groups for interconnections. At either Party's request, traffic shall be unidirectional on such trunks, in either direction, operating them as if they were one-way trunk groups.

15.6.1.5 Trunks shall be provisioned by mutual agreement in order to ensure the most reliable and efficient interchange of traffic.

15.6.1.6 BA shall engineer its network to a B.01 high day network busy hour blocking standard. BA shall ensure that parity with this standard is maintained for



all interconnecting parties for those trunk routes for which BA has engineering responsibility. For jointly engineered trunk routes, BA will maintain this standard with the cooperation of the interconnecting party.

15.6.1.7 BA shall provide for overflow routing from a given end office trunk group or groups onto the appropriate sector tandem trunk group in accordance with BA's network sectorization plan and as mutually agreed by both Parties: through the joint engineering process.

15.6.1.8 BA and MCIm shall mutually 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.

15.6.1.9 Interconnection shall be made available at mutually agreed upon points of interconnection. Any necessary and agreed upon trunk interconnection shall be provided, including, SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID, CAMA-ANI, and necessary trunking to provide interim Number Portability.

15.6.1.10 Trunk Interface Requirements

15.6.1.10.1 911/E911 Trunks

15.6.1.10.1.1 BA shall allow MCIm to provide direct trunking to each BA 911 switch, or BA E911 tandem, as is appropriate for the applicable serving area. These trunks are to be provided as oneway trunks from a given MCIm end office to the BA 911 switch or tandem.

15.6.1.10.1.2 BA shall provide for overflow 911 traffic to be sent to the BA operator services platform or, at MCIm's request routed directly to MCIm's operator services platform.

15.6.1.10.2 [INTENTIONALLY LEFT BLANK]

15.6.1.10.3 Local Switch and Access Tandem Trunks

15.6.1.10.3.1 BA shall provide trunk groups provisioned exclusively to carry intraLATA traffic upon request by MCIm for such interconnection to its network from unbundled switching elements.

15.6.1.10.3.2 BA shall provide trunk groups provisioned exclusively to carry interLATA traffic upon request by MCIm for such interconnection to its network from unbundled switching elements.

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15.6.1.10.3.3 BA 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 BA shall comply with normal industry standard routing parameters for traffic to both local and interexchange carriers.

15.6.1.10.4 BA Operator Services Trunks

15.6.1.10.4.1 For traffic from the BA network to MCIm for Operator Services, BA shall jointly engineer an efficient interconnection with MCIm to ensure that all offered traffic can terminate to the proper Operator Services switch.

15.6.1.10.4.2 BA shall provide such operator services trunks as one-way trunks from the BA network to the MCIm network if so requested by MCIm for termination to its operator services provider.

Section 16 Basic 911 and E911

The requirements for basic 911 and E911 are set forth in Attachment VIII, Section 7.1.1, "General Requirements" and Section 7.2.1 "Basic 911 and E911 Information Exchanges and Interfaces."

Section 17 Directory Assistance Data

The requirements for Directory Assistance data are set forth in Attachment VIII, Section 7.1.6.

Section 18 Technical & Performance Specifications For Unbundled Elements

The BA telecommunications network is composed of facilities, functions and equipment of various vintages. The standards listed below may or may not have existed at the time that any particular facility, function or equipment was installed. For the purposes of applying the standards listed below, it shall be assumed that only those standards in effect at the time of the purchase and installation of a facility, function or item of equipment shall apply to said facility, function or equipment; except that to the extent a facility, function or item of equipment was engineered shall apply.

18.1 General

a) ANSI-OAM&P (T1.115) -- SS7 Monitoring and Measurements.

b) Bellcore SR-TSV-002275 BOC Notes on the LEC Networks.

c) Committee T1 (ANSI) Standards:

T1.101 Digital Network Synchronization

T1.102 Digital Hierarchy - Electrical Interface

T1.105 SONET Interface Standard

T1.107 Digital Hierarchy Formats Specification

T1.110 SS7, General Information

T1.111 SS7, Message Transfer Part

T1.112 SS7, Signaling Connection Control Part

T1.113 SS7, ISDN User Part

T1.114 SS7, Transaction Capabilities Application Part

T1.115 SS7, Monitoring & Measurements

T1.116 SS7, Operations, Maintenance & Administration Part.

d) FR64 / TR374 -- "Local Switching System Generic Requirements".

e) GR929 -- "Reliability & Quality Measurements for Telecommunications Systems".

f) Network Operations Forum (NOF) -- Issue 229 "OAM&P Issues For Interconnected LEC Networks.

g) TR905 Bellcore Common Channel Signaling (CCS) Network Interface Specification - Interconnection.

h) TR1149 -- Operational Support System Generic Requirements, Section 10 covering TCAP.

i) NOF Reference Document.

18.2 Loops

18.2.1 Loop Concentrator / Multiplexor

a) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).

b) ANSI T1.105-1995, - Synchronous Optical Network (SONET) - Basic Description, Including Multiplex Structure, Rates & Formats.

c) ANSI T1.102-1993, - Digital Hierarchy - Electrical Interfaces.

d) ANSI T1.403-1989, - Carrier to Subscriber Installation, DS1 Metallic Interface Specification.

e) Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET),





Common Generic Criteria.

f) Bellcore GR-303-CORE, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface.

g) Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems.

h) Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface (including Supplement 1).

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

j) Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System.

k) Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch.

1) Bellcore SR-3147, ISDN Basic Loop Qualification Guidelines.

18.3 Loop Feeder

a) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).

b) ANSI T1.105-1995, - Synchronous Optical Network (SONET) - Basic Description, Including Multiplex Structure, Rates & Formats.

c) ANSI T1.102-1993, - Digital Hierarchy - Electrical Interfaces.

d) ANSI T1.403-1989, - Carrier to Subscriber Installation, DS1 Metallic Interface Specification.

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

f) Bellcore GR-303-CORE, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface.

g) Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems.

h) Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface (including Supplement 1).

i) Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital

Subscriber Lines.

j) Bellcore TR-NWT-000499, section 7 for DS1 interfaces.

k) Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System.

1) Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch.

m) Bellcore SR-3147, ISDN Basic Loop Qualification Guidelines.

18.4 NIDs

a) Bellcore Generic Requirement GR-49 CORE, "Generic Requirements for Outdoor Telephone Network Interface Devices."

b) Bellcore TR-NWT-00239 "Indoor Telephone Network Interfaces."

c) Bellcore TR-NWT-0000937 "Generic Requirements for Outdoor & Indoor Building Entrance."

d) Bellcore TR-NWT-000133 "Generic Requirements for Network Inside Wiring."

e) Bellcore TR-NWT-000049 "Generic Requirements for Outdoor Telephone Network Interface Devices."

f) Bellcore Technical Advisory TA-TSY-000120 "Subscriber Premises or Network Ground Wire."

18.5 All Loop Distribution

a) Bellcore TR-TSY-000057 "Functional Criteria for Digital Loop Carrier Systems."

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

18.6 Fiber Distribution

a) Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440).

18.7 Local Switching

a) Bellcore's Local/LATA Switching Systems General Requirements (FR-NWT-000064).

b) Bellcore's standards for: 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).

c) Bellcore GR-1298-CORE, AIN Switching System Generic Requirements.

d) Bellcore GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements.

e) Bellcore TR-NWT-001284, AIN 0.1 Switching System Generic Requirements.

f) SR-NWT-002247, AIN Release 1 Update.

18.8 Common Transport

a) ANSI T1.101-1994, Synchronization Interface Standard Performance and Availability.

b) ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.

c) ANSI T1.102.01-199x, Digital Hierarchy - VT1.5.

d) ANSI T1.105-1995, Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.

e) ANSI T1.105.01-1995, Synchronous Optical Network (SONET) Automatic Protection Switching.

f) ANSI T1.105.02-1995, Synchronous Optical Network (SONET) - Payload Mappings.

g) ANSI T1.105.03-1994, Synchronous Optical Network (SONET) - Jitter at Network Interfaces.

h) ANSI T1.105.03a-1995, SONET-Jitter at Network Interfaces - DS1 Supplement.

i) ANSI T1.105.05-1994, SONET - Tandem Connection.

j) ANSI T1 105.06-199x, SONET Physical Layer Specifications.

k) ANSI T1.105.07-199x, SONET - Sub STS-1 Interface Rates and Formats.

1) ANSI T1.105.09-199x, SONET - Network Element Timing and Synchronization.

m) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).

n) ANSI T1.107-1988, - Digital Hierarchy - Formats Specifications.



o) ANSI T1.107a-1990 - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications).

p) ANSI T1.107b-1991 - Supplement to Formats Specifications.

q) ANSI T1.117-1991, Digital Hierarchy - Optical Interface. Specifications (SONET) (Single Mode - Short Reach).

r) ANSI T1.403-1989, Carrier to Subscriber Installation, DS1 Metallic Interface Specification.

s) ANSI T1.404-1994, Network-to-Subscriber Installation - DS3 Metallic Interface Specification.

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

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

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

w) Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance.

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

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

z) Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

aa) Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations.

bb) Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities.

cc) Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles.

18.9 SONET Systems -- Unbundled Dedicated Transport

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) a) ANSI T1.105.04-1995 Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures.

b) ANSIT1.119-1994, SONET - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications.

c) ANSI T1.119.01-1995, SONET Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment.

d) ANSI T1.119.02-199x, SONET Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment.

e) ANSI T1.231-1993, Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring.

18.10 Unbundled DCS

a) ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.

b) ANSI T1.102.01-199x, Digital Hierarchy - VT1.5.

c) ANSI T1.105-1995, SONET - Basic Description including Multiplex Structure, Rates and Formats.

d) ANSI T1.105.03-1994, SONET - Jitter at Network Interfaces.

e) ANSI T1.105.03a-1995, SONET: Jitter at Network Interfaces - DS1 Supplement.

f) ANSI T1.105.06-199x, SONET - Physical Layer Specifications.

g) ANSI T1.106-1988, - Optical Interface Specifications (Single Mode).

h) ANSI T1.107-1988, Digital Hierarchy - Formats Specifications.

i) ANSI T1.107a-1990, - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications).

j) ANSI T1.107b-1991, - Digital Hierarchy - Supplement to Formats Specifications.

k) ANSI T1.117-1991, - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach).

1) ANSI T1.403-1989, Carrier to Subscriber Installation, DS1 Metallic Interface Specification.

m) ANSI T1.404-1994, Network-to-Subscriber Installation - DS3 Metallic Interface Specification.

n) ITU-T Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH).

o) ITU-T Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels.

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

q) Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance.

r) Bellcore GR-253-CORE, SONET Common Generic Criteria.

s) Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

18.11 Unbundled Signaling Link Transport & STP Requirements

a) ANSI T1.111-1992 - Signaling System Number 7 (SS7) - Message Transfer Part (MTP).

b) ANSI T1.111A-1994 - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement.

c) ANSI T1.112-1992 - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP).

d) ANSI T1.115-1990 - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks.

e) ANSI T1.116-1990 - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP).

f) ANSI T1.118-1992 - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI).

g) 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).

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

(TCAP).

18.12 SCP/Database Access Requirements

a) Bellcore GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7.

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

c) Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service.

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

e) Bellcore GR-1158-CORE, OSSGR Section 22.3: Line Information Database.

f) Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service.

g) Bellcore Special Report SR-TSV-002275, "IBOC Notes on the LEC Networks - Signaling."

18.13 Unbundled Tandem Switching

a) Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement.

b) Bellcore GR-905-CORE covering CCSNIS.

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

d) Bellcore FR-NWT-000064 -- Generic Requirements LATA Switching Systems.

18.14 Unbundled Network Elements -- Additional Performance Requirements and Standards References

a) Bellcore FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR) and associated Technical references.

b) Bellcore TR-NWT-000499 -- Transport Systems Generic Requirements (TSGR): Common Requirements.

c) Bellcore TR-NWT-000418, Generic Reliability Assurance Requirements For Fiber



Optic Transport Systems.

d) Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carriers Systems.

e) Bellcore TR-NWT-000507, LSSGR - Transmission, Section 7.

f) Bellcore GR-303-CORE, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.

g) Bellcore GR-334-CORE, Switched Access Service: Transmission Parameter Limits and Interface Combinations.

h) Bellcore TR-NWT-000335, Voice Grade Special Access Services - Transmission Parameter Limits and Interface Combinations.

i) Bellcore TR-TSY-000529, Public Safety - LSSGR.

j) Bellcore GR-1158-CORE, OSSGR Section 22.3: Line Information Database.

k) Bellcore TR-TSY-000511, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).

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

m) Bellcore TR-NWT-000909, Generic Requirements and Objectives for Fiber In The Loop Systems.

n) Bellcore TR-NWT-000505, LSSGR Section 5, Call Processing.

o) Bellcore FR-NWT-000271, Operator Services Systems Generic Requirements (OSSGR).

p) Bellcore TR-NWT-001156, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.

q) Bellcore SR-TSY-001 171, Methods and Procedures for System Reliability Analysis.

r) Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.

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

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

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

v) ANSI T1.101-1994, Digital Synchronization Network Plan.

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

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

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

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

18.15 SS7 Interfaces

a) ANSI T1.110-1992, Signaling System Number 7 (SS7) - General Information.

b) ANSI T1.111-1992 - Signaling System Number 7 (SS7) - Message Transfer Part (MTP).

c) ANSI T1.111A-1994 - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement.

d) ANSI T1.112-1992 - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP).

e) ANSI T1.113-1995 - Signaling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part.

f) ANSI T1.114-1992 - Signaling System Number 7 (SS7) - Transaction Capabilities Application Part (TCAP).

g) ANSI T1.115-1990 - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks.

h) ANSI T1.116-1990 - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP).

i) ANSI T1.118-1992 - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI).

j) 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).

k) Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service.

 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service.

m) Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services.

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

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1)



ANNEX 1

Schedule for Implementation

Implementation Activity

Timetable for Elements Required by FCC

Local Loop Loop Distribution Loop Feeder Loop Concentrator/Multiplexer NID Local Switching Tandem Switching Interoffice Transmission Facilities (Common) Signaling Network & Call-Related Database **Operations Support System Functions** Operating Services & Directory Assistance Unbundling Requested by MCI Subloop Unbundling Multiplexing / Digital Cross Connects Service Management Systems Extended Link Service Database Access

* Unless Parties agree to a different date.

<u>Deadline</u>

Effective Date of the Agreement

To Be Determined Pursuant to BFR To Be Determined Pursuant to BFR To Be Determined Pursuant to BFR

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Schedule for Implementation

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ATTACHMENT IV

INTERCONNECTION

Section 1 Local Interconnection Trunk Arrangement

1.1 The Parties shall reciprocally terminate local exchange traffic and intraLATA toll calls originating on each other's networks as follows:

1.1.1 The Parties shall make available to each other two-way trunks for the reciprocal exchange of combined local traffic, non-equal access intraLATA toll traffic, and local transit traffic to other LECs. Traffic may be routed in a one-way manner on these two way trunks by mutual agreement.

1.1.2 The Parties shall make available to each other separate two-way trunks for the exchange of equal-access interLATA or intraLATA interexchange traffic that transits BA's network.

1.1.3 MCIm shall use or order from BA, and BA shall make available, separate trunks connecting MCIm's switch to each 911/E911 tandem.

1.1.4 MCIm shall use or order from BA, and BA shall make available, separate trunk groups connecting MCIm's switch to BA's operator service center. MCIm, at its option, may establish trunks from its own operator services platform directly to BA's operator service center.

1.1.5 MCIm shall use or order from BA, and BA shall make available, separate trunk groups connecting MCIm's switch to BA's directory assistance center in instances where MCIm purchases BA's unbundled directory assistance service.

1.1.6 The Parties recognize that there is no technical requirement to segregate local and interexchange traffic. Further, it shall be incumbent upon BA to prove that a request for a revised traffic combination is technically infeasible.

1.1.7 Separate trunk groups from MCIm's switch or switches to each of BA's sector tandems will be provisioned to enable the completion of traffic to/from BA's end offices subtending each sector tandem and MCIm's switch or switches. In all LATAs except for LATA 132, this will require trunk provisioning to the single BA sector tandem. In LATA 132 where BA has deployed multiple sector tandems, trunk groups to each sector tandem will be logically provisioned with physical interconnection actually occurring at the designated interconnection point or points in the LATA as defined in Section 1.2 below.

1.2.1 IP means the physical point that establishes the technical interface, which may include a test point, and the operational responsibility associated with the physical transmission facility hand-off between MCIm and BA for the local interconnection of their networks.

1.2.2 MCIm and BA shall designate at least one IP in the LATA in which MCIm originates local traffic and interconnects with BA. MCIm will be responsible for engineering and maintaining its network on its side of the IP. BA will be responsible for engineering and maintaining its network on its side of the IP. If and when the Parties choose to interconnect at a mid-span meet, MCIm and BA will develop a mutually acceptable joint provisioning plan for the fiber optic or other suitable facilities that will then connect the two networks and each shall bear the financial and other responsibilities for its portion of that facility. In LATA 132, MCIm and BA already have established interconnection arrangements. These interconnection points will be physically maintained in place until it is mutually agreed by the Parties to establish other IP arrangements. The exchange of traffic at these initial IPs will comply with the general terms and conditions, including those related to price, embodied in this Agreement between the Parties.

1.2.2.1 Upon MCIm's request for additional points of interconnection, BA will interconnect with MCIm at any technically feasible point. Such interconnection shall be implemented using the same technical configuration currently deployed by the Parties for existing interconnections or by using other mutually agreeable arrangements including but not limited to mid-span fiber meets, entrance facilities, telco closets, and collocation. The Parties will not withhold agreement except for reasons of technical infeasibility and the refusing Party will be required to prove that a requested IP is not technically feasible if it should so ascertain.

1.2.2.2 Within three (3) business days of becoming aware of an environmental or hazardous condition that would impact upon the establishment of a requested MCIm interconnection point, BA will notify MCIm of the condition. BA and MCIm will work cooperatively to implement a joint planning process that will facilitate establishment and maintenance of current and future IPs, interconnection transmission facilities and trunking arrangements between the Parties' respective networks. Upon an MCIm request to BA for establishment of a new interconnection point on the BA network, BA will make a good faith effort to provide an environmentally sound and hazard free location on its network for the IP. If, upon assessment, it is determined that a hazardous condition exists, in addition to providing notification as described above, BA will promptly propose an alternative IP comparable to the requested IP in question or promptly act to ameliorate such hazardous condition so as to enable the IP to be established in a

safe and timely manner.

1.2.2.3 BA will work cooperatively with MCIm to perform promptly any environmental site investigations, including, but not limited to, asbestos surveys, MCIm deems to be necessary in support of its collocation needs. MCIm will bear the reasonable cost for all such surveys it requests.

Section 2 Compensation Mechanisms

2.1 **IP**

2.1.1 Each Party is responsible for bringing its facilities to the IP and for all aspects of its network on its side of the IP.

2.2 Compensation for the Transport and Termination of Local Calls

2.2.2 The IP determines the point at which the originating carrier shall pay the terminating carrier for the termination of local calls. The following compensation elements shall apply:

2.2.2.1 "Transport," which includes the transmission and any necessary tandem switching of local telecommunications traffic from the interconnection point between the two carriers to the terminating carrier's end-office switch that serves the called end-user.

2.2.2.2 "Termination," which includes the switching of local telecommunications traffic at the terminating carrier's end office switch.

2.3 When an MCIm subscriber places a local call to a BA subscriber, MCIm will hand off that call to BA at the IP. Conversely, when BA hands over local traffic to MCIm for MCIm to transport and terminate, BA will hand off that call to MCIm at the established IP.

2.4 MCIm may request and BA will jointly provide an IP at any technically feasible point including but not limited to any electronic or manual cross-connect points, collocation nodes, telco closets, entrance facilities, and mid-span meets. The transport and termination charges for local traffic flowing through an IP shall be in accordance with either of the two alternatives that follow:

2.4.1 When calls from MCIm are terminated on BA's network through the BA tandem, MCIm will pay to BA transport charges from the IP to the tandem for direct or common transport. MCIm shall also pay a charge for the actual elements used by MCIm, such as tandem switching, direct or common transport to the end office (with mileage calculated as the weighted average of all end offices subtending that tandem), and end-office

termination.

2.4.2 When BA terminates calls to MCIm's subscribers using MCIm's switch, BA shall pay to MCIm the tandem interconnection charge set forth in Attachment I of this Agreement; provided, that MCIm offers to BA more efficient interconnection options at alternative points on MCIm's network.

2.4.3 MCIm may choose to establish direct trunking to any given end office. If MCIm leases trunks from BA, it shall pay charges for direct or common transport. For calls terminating from MCIm to subscribers served by these directly-trunked end offices, MCIm shall also pay an end-office termination. For BA traffic terminating to MCIm over the direct end office trunking, compensation payable by BA shall be the same as that detailed in Section 2.4.4 below.

2.4.4 BA may choose to establish direct trunking to any given MCIm end office. If BA leases trunks from MCIm, it shall pay charges for direct or common transport. For calls terminating from BA to subscribers served by these directly-trunked end offices, BA shall also pay an end-office termination. For MCIm traffic terminating to BA over the direct end office trunking, compensation payable by MCI shall be the same as that detailed in Section 2.4.3 above.

2.4.5 [INTENTIONALLY LEFT BLANK]

2.4.6 In the alternative to the reciprocal compensation arrangement described in Sections 2.4.1 through 2.4.4 above, BA and MCIm may mutually agree to compensate each other for all local calls at a unitary, equal and symmetrical rate irrespective of the use of end office or tandem trunking and without regard for the mileage calculation that is associated with the direct and common transport actually utilized on a given call by call basis.

Section 3 Signaling

3.1 Signaling Protocol. The Parties will interconnect their networks using out-of-band signaling wherever possible (Common Channel Signaling System 7 ("CCS" or "SS7") provides out-of-band signaling for the trunking between switches in telecommunications carriers' networks) as defined in GR-317 and GR-394, including ISUP for trunk signaling and TCAP for CCS-based features in the interconnection of their networks. The Parties shall adhere to all NOF adopted guidelines to the greatest extent possible.

3.2 The Parties will provide CCS to each other in conjunction with all one-way and two-way trunk groups supporting local, transit, and toll traffic. The Parties will cooperate on the exchange of TCAP messages to facilitate full inter-operability of CCS-based features between their respective networks, including all CLASS features and functions deployed in the Parties' respective networks. All CCS signaling parameters will be provided including ANI, OLI, calling

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party category, charge number, etc. All privacy indicators will be honored. In connection with meet-point billing arrangements using terminating Feature Group D protocol, BA will pass CPN if it receives CPN from the interexchange carriers. All privacy indicators will be honored. Where available, network signaling information such as TNS parameter (CCS platform) and CIC/OZZ information (non-CCS environment) will be provided by MCIm wherever such information is needed for call routing or billing. The Parties will follow all OBF adopted guidelines pertaining to TNS and CIC/OZZ codes to the greatest extent possible.

3.3 The requirements for SS7 Network Interconnection are set forth in Section 15.5 of Attachment III.

3.4 Standard interconnection facilities shall be equipped to accommodate ESF with B8ZS line code. MCIm and BA will work cooperatively to establish suitable routing arrangements sufficient to mark properly individual calls requiring end-to-end digital transport with ESF B8ZS capability, which capability is deployed as an overlay and not ubiquitously in BA's network. Where ESF/B8ZS is not available, MCIm will agree to using other interconnection protocols on an interim basis until the standard ESF/B8ZS is available. BA will provide anticipated dates of availability for those areas not currently ESF/B8ZS compatible.

3.4.1 Where MCIm is unwilling to utilize an alternate interconnection protocol, MCIm, at its option, will provide BA with an initial forecast of 64 Kbps Clear Channel Capability ("64K CCC") trunk quantities within thirty (30) days after executing this Agreement consistent with the forecasting agreements between the Parties or consistent with the requirements that the Parties may mutually agree upon as part of their ongoing joint planning efforts. Upon receipt of this forecast, or in a different time frame as may be mutually agreed by the Parties as part of their joint planning efforts, the Parties will begin planning for the engineering, procurement, and installation of the suitable 64K CCC Local Interconnection Trunks, and the associated B8ZS ESF facilities, for the purpose of supporting the completion of 64K CCC data calls between MCIm and BA subscribers. Where additional equipment is required in the BA network to support this capability, such equipment would be obtained, engineered, and installed in parity with the comparable installations for traditional growth jobs for IECs, CLECs, or BA internal trunking requirements. Where technically feasible, these trunks will be established as two-way.

3.5 The Parties initially will interconnect to 911/E911 utilizing in-band MF signaling and will work cooperatively to migrate these arrangements to SS7 based signaling when appropriate to do so.

3.6 If MCIm elects to utilize SS7 signaling in connection with meet point billing arrangements utilizing a BA access tandem for calls to/from interexchange carriers that utilize Feature Group B or D service with MF signaling, BA shall have no liability for the end-to-end performance, including post dial delay performance, that MCIm's customers may receive.

Section 4 Network Servicing

4.1 Trunk Forecasting

4.1.1 The Parties shall work toward the development of joint forecasting responsibilities for traffic utilization over trunk groups as part of their ongoing joint planning activities. Orders for trunks that exceed forecasted quantities for forecasted locations will be accommodated as facilities and or equipment are available. The Parties shall make all reasonable efforts and cooperate in good faith to develop alternative solutions to accommodate orders when facilities are not available. Intercompany forecast information must be provided by the Parties to each other twice a year. The semi-annual forecasts shall include:

4.1.1.1 Yearly forecasted trunk quantities (which include measurements that reflect actual tandem and end office Local Interconnection and meet point trunks and tandem-subtending Local Interconnection end office equivalent trunk requirements for no more than two years (current plus one year));

4.1.1.2 The use of Common Language Location Identifier (CLLI-MSG), which are described in Bellcore documents BR 795-100-100 and BR 795-400-100; and

4.1.1.3 Description of major network projects that affect the other Party. Major network projects include, but are not limited to, trunking or network rearrangements, shifts in anticipated traffic patterns, or other activities by either Party that are reflected by a significant increase or decrease in trunking demand for the following forecasting period.

4.1.2 The Parties shall meet to review their forecasts on a scheduled basis and work cooperatively to reconcile their forecasts if these forecasts vary significantly, either with each other or from period to period.

4.1.2.1 If the Parties are unable to reach such a reconciliation, the Local Interconnection Trunk Groups shall be provisioned to the quantities specified in the higher of the two (2) forecasts. The Parties will monitor the utilization of the Local Interconnection Trunk Groups and review the average CCS utilization for the next busy season if known or for the next three (3) months if the busy season has yet to be or cannot be determined. If volume during the next busy season or by the third month, if the busy season is not known, is under seventy-five percent (75%) of design engineering capacity, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty-five percent (25%) excess capacity, except as otherwise mutually agreed by the Parties. Maintaining this level of excess capacity will provide an operating margin sufficient to meet the higher of the two expected load requirements. A general description of the trunk traffic engineering practices to be utilized by the Parties is described herein and may be amended by mutual agreement of the Parties as part of their ongoing joint planning activities.

4.1.2.2 If the Parties mutually agree on the original forecast and then it is determined that a trunk group is under seventy-five percent (75%) of design engineering capacity on a monthly-average basis for each month of any six-month period or the next busy season, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty-five percent (25%) excess capacity.

4.1.3 In order to mutually engineer efficient network interconnection arrangements, each Party shall provide a specified point of contact for planning, forecasting and trunk servicing purposes. The Parties may mutually agree to additional details or changes to the details specified herein as a result of their ongoing planning activities.

4.1.4 Trunking can be established to tandems or end offices, or a combination of both, via either one-way or two-way trunks. Initial trunk termination will be at the DS-0 level and/or DS-1 level as appropriate. Higher level trunk termination (such as at the DS3 or OC3 levels) will be provided as such technology is deployed in the BA network. The Parties will work cooperatively to determine the appropriate trunk termination level as part of their ongoing joint planning activities. Initial trunking will be established between the MCIm switching centers and BA's sector tandem(s). MCIm and BA will utilize direct end office trunking under the conditions set forth below, unless the Parties mutually agree to utilize different criteria as a result of their ongoing joint planning activities:

4.1.4.1 Tandem exhaust - If a tandem through which the Parties are interconnected is unable to, or is forecasted to be unable to, support additional traffic loads for any period of time, the Parties will mutually agree on an end office trunking plan that will alleviate the tandem capacity shortage and ensure completion of traffic between MCIm and BA subscribers. The Parties will rely on the trunk engineering principles embodied in this Agreement or as may be mutually agreed to as part of their ongoing planning activities to address a tandem exhaust situation should such a condition arise.

4.1.4.2 Traffic volume - The Parties shall install and maintain direct end office trunking sufficient to handle actual or reasonably forecast traffic volumes, whichever is greater, between an MCIm switching center and a BA end office where the offered traffic load exceeds or is forecast to exceed 220,000 minutes of local traffic use per month. The Parties will install additional capacity between such points when overflow traffic between the MCIm switching center and BA access tandem exceeds or is forecast to exceed an offered load of 220,000 minutes of use per month.

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4.1.4.3 Mutual agreement - The Parties may install direct end office trunking upon mutual agreement in the absence of the conditions set forth in Sections 4.1.4.1 and 4.1.4.2 above and agreement will not unreasonably be withheld. The specific trunk traffic engineering design criteria to be applied cooperatively by MCIm and BA are described herein and may be amended by mutual agreement of the Parties as part of their ongoing joint planning activities.

4.2 Grade of Service

4.2.1 It is the intent of the Parties to manage their respective networks to meet a trunk traffic engineering design framework that embodies the principles of modular sizing of trunk groups, a minimum size for direct trunk groups (other than special requirements such as 911/E911) of a full DS1, Network Cluster Busy Hour/Busy Season Erlang B and B.01 traffic engineering design parameters which will accommodate day-to-day variation and peakedness of overflow load characteristics. This will allow adoption of a blocking standard of one percent (.01) during the average busy hour, as defined by the Parties, for final trunk groups between an MCIm end office and a BA local tandem or a BA access tandem carrying meet-point traffic to be maintained. All other final trunk groups are to be engineered with a blocking standard of one percent (.01). Direct end office trunk groups are to be engineered as high usage trunks with an overflow to a tandem route with the final group designed to a blocking standard of one percent (.01), or if sufficient point to point load warrants, engineered as direct final trunk groups also designed to a one percent (.01) blocking standard. The Parties may mutually agree to changes in the trunk traffic engineering criteria that are described herein as part of their ongoing joint planning activities.

4.3 Trunk Servicing

4.3.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by use of an ASR, or the industry standard adopted to replace the ASR for local service ordering.

4.3.2 As discussed in this Agreement, both Parties will jointly manage the capacity of Local Interconnection Trunk Groups. BA's Trunk Servicing Group will send a TGSR to MCIm to trigger changes BA desires to the Local Interconnection Trunk Groups based on BA's capacity assessment. The Parties may, upon mutual agreement as a result of their ongoing joint planning activities, elect to have one of the two Parties serve in an "in charge" capacity for trunk servicing and forecasting matters involving two-way trunking arrangements. MCIm will issue an AS to BA: (i) within ten (10) business days after receipt of the TGSR upon review of and in response to BA's TGSR; or (ii) at any time as a result of MCIm's own capacity management assessment, to begin the provisioning process.

4.3.3 The standard interval used for the provisioning of Local Interconnection Trunk

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Groups shall be determined in accordance with the intervals specified in the applicable tariff. These intervals will be implemented in parity with the intervals provided to other carriers in connection with comparable trunking augments and new group installations.

4.3.4 Orders that comprise a major project that directly impacts the other Party may be submitted at the same time, and their implementation shall be jointly planned and coordinated. Major projects are those that require the coordination and execution of multiple orders or related activities between and among BA and MCIm work groups, including, but not limited to, the initial establishment of Local Interconnection or Meet Point trunk groups and service in an area, NXX code moves (understood to be a transfer of an entire NXX code from one switching unit to another switching unit, either on one of the Party's network or between the two Parties' networks), re-homes, facility grooming, or network rearrangements.

4.3.5 MCIm and BA agree to exchange escalation lists which reflect contact personnel including vice president-level officers. These lists shall include name, department, title, phone number, and fax number for each person. MCIm and BA agree to exchange an up-to-date list on a quarterly basis.

4.4 Joint Planning Activities: MCIm and BA shall work cooperatively to implement the interconnection related processes that are described throughout this Attachment IV. The Parties will continue to cooperate in connection with various joint planning activities and may by mutual agreement change existing or establish new processes.

4.4.1 The Parties will mutually agree on the physical interconnection architecture that will be utilized between the Parties' respective networks, consistent with Sections 1 and 4 of this Attachment IV. The Parties will work cooperatively to provide each other with sufficient advance notification of planned or contemplated changes that may affect the existing interconnection architecture arrangements as well as plans for the deployment of new interconnection architecture arrangements.

4.4.2 The Parties will cooperate on joint trunk traffic engineering planning to assure that, on an ongoing basis, the interconnection trunk groups between MCIm's network and BA's network shall experience a grade of service, availability and quality which is comparable to that achieved on interoffice trunk groups within BA's network and in accord with all relevant industry norms for quality, reliability and availability.

4.4.3 The Parties will cooperate on assessing the effectiveness of the agreed upon delineation of their respective duties and responsibilities for the ongoing administration and maintenance of the interconnection facilities and trunk groups, including, but not limited to, the practices and procedures to be followed related to the timely notification of desired facility and trunk additions, rearrangements and disconnects. The Parties may mutually agree to implement changes to existing interconnection processes that are defined herein and may establish new processes as a result of their joint activities related

to interconnection.

4.4.4 The Parties may mutually agree to changes to and modifications in the procedures and provisions to be followed in connection with disaster recovery operations, including provisions that will accommodate intercompany escalation as may be needed.

4.4.5 By mutual agreement, the Parties may establish other such interconnection related processes that were not anticipated in advance of the execution of this Agreement.

4.4.6 Both Parties will make good faith efforts to assure that existing interconnection facilities and trunking arrangements and other interconnection facilities and trunking arrangements that are, and will be deployed, as a result of this Agreement will be provisioned, operated and maintained consistent with the terms embodied herein. The Parties will establish a schedule for ongoing planning meetings at which they can discuss changes to and additions to the interconnection related processes that will be put in place as a result of this Agreement.

Section 5 Network Management

5.1 **Protective Protocols**

5.1.1 Either Party may use protective network traffic management controls such as 7digit and 10-digit code gaps on traffic toward each others network, when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload. MCIm and BA will notify each other as soon as possible of any protective control action planned or executed.

5.2 Expansive Protocols

5.2.1 Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. The Parties will work cooperatively in implementing emergency processes that will support the interconnection arrangements between their respective networks. The Parties will identify in advance of abnormal conditions pre-approved reroutes that can be implemented without securing approval from the other Party. Absent pre-approval, the Party requesting the reroute will secure approval from the terminating Party in accordance with normal network management practices. Such approval will not be withheld except for good and valid network management reasons. (For instance, a reroute will be authorized if the receiving party has some available capacity to accommodate increased call volumes while a reroute would be denied if the receiving party was unable to complete any of the additional calls that it received via the reroute.) Reroutes will not be used to circumvent normal trunk servicing. Expansive controls will only be used when mutually agreed to by the Parties.

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5.3 Mass Calling

5.3.1 MCIm and BA shall cooperate and share pre-planning information, where available, regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network.

Section 6 Busy Line Verify and Interrupt

6.1 Description: Each Party shall establish procedures whereby its operator bureau will coordinate with the operator bureau of the other Party in order to provide BLV and BLVI services on calls between their respective end users on or before the Effective Date of this Agreement.

6.2 Compensation: Each Party shall charge the other Party for BLV and BLVI at the rates specified in the applicable tariff.

Section 7 Usage Measurement

7.1 Each Party shall calculate terminating interconnection minutes of use based on standard AMA recordings made within each Party's network, these recordings being necessary for each Party to generate bills to the other Party.

7.2 Measurement of minutes of use over Local Interconnection Trunk groups shall be in actual conversation seconds. The total conversation seconds over each individual Local Interconnection Trunk Group will be totaled for the entire monthly bill-round and then rounded to the next whole minute.

7.3 Each Party shall provide to the other, within twenty (20) calendar days unless another interval is mutually agreed by the Parties as a result of their ongoing planning activities, after the end of each quarter (commencing with the first full quarter after the Effective Date of this Agreement), or on a semi-annual basis if mutually agreeable to the Parties, a usage report with the following information regarding traffic terminated over the Local Interconnection Trunk Groups:

7.3.1 Total traffic volume described in terms of minutes and messages and by call type (local, toll, and other) terminated to each other over the Local Interconnection Trunk Groups.

7.3.2 [INTENTIONALLY LEFT BLANK]

Section 8 Responsibilities of the Parties

8.1 BA and MCIm agree to treat each other fairly, nondiscriminatorily, and equally for all items included in this Agreement, or related to the support of items included in this Agreement.

8.2 MCIm and BA agree to exchange such reports and/or data as provided in Section 7 of this Attachment IV, to facilitate the proper billing of traffic. Either Party may request an audit of such usage reports on no fewer than ten (10) business days' written notice and any audit shall be accomplished during normal business hours at the office of the Party being audited. Such audit must be performed by a mutually agreed-to independent auditor paid for by the Party requesting the audit and may include review of the data described in Section 7 above. Such audits shall be requested within six (6) months of having received the PLU factor and usage reports from the other Party.

8.3 MCIm and BA will review engineering requirements on a semi-annual basis and establish forecasts for trunk and facilities utilization provided under this Agreement. BA and MCIm will work together to begin providing these forecasts within thirty (30) days from the Effective Date of this Agreement. New trunk groups will be implemented as dictated by engineering requirements for either BA or MCIm. The Parties may mutually agree to modify these procedures as part of their ongoing joint planning activities.

8.4 MCIm and BA shall share responsibility for all Control Office functions for Local Interconnection Trunks and Trunk Groups, and both Parties shall share the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups. In the case of two-way trunks, the Parties may by mutual agreement assign primary control office responsibility to one of the Parties.

8.5 MCIm and BA will cooperate to establish responsibility for all Control Office functions for the meet point trunking arrangement trunks and trunk groups and will do so in parity with the industry standard arrangements that are defined in the MECABS/MECOD guidelines. The Party designated as control office shall be responsible for the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.

8.6 MCIm and BA shall:

8.6.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.

8.6.2 Notify each other when there is any change affecting the service requested, including the due date.

8.6.3 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its interconnection trunks/trunk groups are installed per the

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interconnection order, meet agreed-upon acceptance test requirements, and are placed in service by the due date.

8.6.4 Perform sectionalization to determine if a trouble is located in its facility or its portion of the interconnection trunks prior to referring the trouble to each other.

8.6.5 Advise each other's Control Office if there is an equipment failure which may affect the interconnection trunks.

8.6.6 Provide each other with an automated interface for trouble reporting/repair that is readily accessible and available 24 hours a day/7 days a week. An escalation contact will be available on a 24 hours a day/7 days a week basis to accommodate trouble reporting in the event the automated interface is not available. Any change to this escalation contact arrangement must be provided to the other Party in advance of implementation except for unavoidable emergency conditions for which notification will be made as soon as possible thereafter.

8.6.7 Provide to each other test-line numbers and access to test lines.

8.6.8 Cooperatively plan and implement coordinated repair procedures for the meet point and Local Interconnection Trunks and facilities to ensure trouble reports are resolved in a timely and appropriate manner.

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ATTACHMENT V

COLLOCATION

Section 1 Introduction

This Attachment V sets forth the terms and conditions under which MCIm may obtain Collocation from BA.

Section 2 Definitions

As used in this Agreement, the following terms shall have the meanings specified below.

2.1 "Application Fee" means the amount specified in Attachment I to be paid by MCIm to BA in connection with the submission of a Short Form Collocation Agreement, which amount shall cover, among other things, the cost of the Pre-Construction Survey.

2.2 "Cable Space" means any passage or opening in, on, under/over or through the Central Office cable support structure (e.g., cable risers, cable racks, cable vault or alternate splicing chamber) required to bring fire retardant fiber optic riser cable from the Partitioned Space to the location where the riser cable and the feeder cable meet and are spliced and the spaces between the splice and the Conduit Space, as well as the space between the Partitioned Space required to bring other fire retardant communications cable from one Partitioned Space of MCIm to another Partitioned Space of MCIm.

2.3 "Collocation" means the right of MCIm to obtain dedicated Partitioned Space, Cable Space, Conduit Space, power and other associated resources related thereto in a Collocation Premises and to place equipment in such space to interconnect with the BA network, services and/or unbundled Network Elements, and/or interconnect with any other Telecommunications Carrier located in such Collocation Premises through the use of BA facilities.

2.4 "Collocation Premises" or "BA Premises" means a BA LSO, serving wire centers and tandem offices as specified in NECA 4, as well as all other BA premises required

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under the Act, made available to MCIm for purposes of Collocation hereunder.

2.5 "Collocation Space" means the Partitioned Space, Cable Space, and Conduit Space that is made available to MCIm in a Collocation Premises for purposes of providing MCIm Collocation hereunder.

2.6 "Conduit Space" means any reinforced passage or opening in, on, under/over or through the ground between the feeder route conduit system (manhole "O") and cable vault location that is capable of containing communications facilities, including; cable entrance facilities; main conduit; ducts; inner ducts; gas traps; underground dips such as short sections of conduit under roadway, driveways, parking lots and similar conduit installations, and that is required to bring MCIm-provided fiber optic feeder cable into the Collocation Premises.

2.7 "Design and Construction Completion Notice" means the notice form upon which MCIm indicates to BA MCIm's acceptance of the Collocation Space, a form of which is attached hereto as Exhibit I of Appendix A.

2.8 "Occupancy Date" means the date on which MCIm accepts the Collocation Space as specified in a Design and Construction Completion Notice.

2.9 "Partitioned Space" means an enclosed area within the Collocation Premises that is made available to MCIm by BA in accordance with this Attachment V and a Short Form Collocation Agreement for purposes of Collocation.

2.10 "Power" means any electrical power source supplied by BA for MCIm equipment in connection with any Collocation established hereunder, including all superstructure, infrastructure, and overhead facilities, including but not limited to, cable, cable racks and bus bars.

2.11 "Pre-Construction Survey" means the work activities performed by BA in order to process an MCIm Short Form Collocation Agreement to the point just prior to performing any necessary Design and Construction Work. A Pre-Construction Survey is comprised of the following three elements:

A. Engineering record search and review to determine availability of MCIm requested Partitioned Space, Cable Space and/or Conduit Space;
B. Inspection of Collocation Premises and conduit to verify available space and determine the requirements of the Design and Construction Work; and
C. Administrative activities required to process the Short Form Collocation

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2.12 "Renewal Period" shall have the meaning set forth in Section 6.5.

2.13 "Reserved Space" shall have the meaning set forth in Section 4.4.

2.14 "Short Form Collocation Agreement" means the agreement under which MCIm contracts for Collocation Space, Power and other associated resources related thereto under this Agreement, a form of which is attached hereto as Appendix A.

Section 3 General

3.1 BA shall provide, upon MCIm's request, a license to occupy Partitioned Space, Cable Space and Conduit Space to meet MCIm's needs for placement of equipment, interconnection, or provision of service pursuant to this Agreement and a license to occupy any premises or rack space which contain collocated equipment, including all necessary ingress, egress, and reasonable use of BA's property, for the Term of the Agreement.

3.2 [INTENTIONALLY LEFT BLANK]

3.3 BA shall provide virtual Collocation where physical Collocation is not practical for technical reasons or because of space limitations. BA shall take collocator demand into account when renovating existing Collocation Premises and constructing or leasing new Collocation Premises.

3.4 BA shall participate in and adhere to negotiated service guarantees and Performance Standards.

3.5 BA shall permit a collocating Telecommunications Carrier to interconnect its network with that of another collocating Telecommunications Carrier at the Collocation Premises. Such collocated carrier to collocated carrier interconnection shall be accomplished via BA transmission facilities, the price for which shall be established by applicable tariffs, if available, and otherwise on an individual case basis (ICB).

3.6 MCIm may choose to lease unbundled transport from BA, or from a third carrier, rather than to build to the Collocation Premises where equipment will be collocated.

3.7 This Agreement does not convey to MCIm any right, title or interest in the BA

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Collocation Premises other than expressly provided in this Agreement.

Section 4 Collocation

4.1 Short Form Collocation Agreement

4.1.1 To apply for Collocation Space, power and other associated resources related thereto in a Collocation Premises, MCIm shall submit to BA a Short Form Collocation Agreement in the form of Appendix A attached hereto, together with the Application Fee. Such Short Form Collocation Agreement shall be completed by MCIm. If MCIm submits a Short Form Collocation Agreement which does not contain information BA reasonably believes is necessary to permit BA to respond, BA will promptly inform MCIm of the information BA believes is missing, and the parties will cooperate to provide or develop such information. A short Form Collocation Agreement shall be deemed to be binding upon MCIm and BA on the Start Date, as defined in Paragraph 4.1.3.

4.1.2 BA will process Short Form Collocation Agreements for occupancy in a Collocation Premises on a first-come, first-served basis. Standard intervals for occupancy in physical Collocation shall be seventy-six (76) business days following the date on which BA receives a service request for such premises, except as otherwise permitted by the ACC Collocation Guideline. In the event that MCIm should change its Collocation design characteristics, the interval for completion of construction shall reflect such changes. In such case, additional charges incurred would also be the responsibility of MCIm.

4.1.3 Within ten (10) business days of receipt by BA of MCIm's Short Form Collocation Agreement, BA shall respond in writing to such Agreement by indicating either that MCIm may not be accommodated via physical Collocation or by providing MCIm with a cost estimate which shall set forth recurring charges and estimated design and construction costs and a time commitment for completion of such construction.

Within ten (10) business days after receipt by MCIm of such cost estimates, MCIm shall, in writing, accept or decline BA's proposal. If MCIm accepts BA's proposal, the date of receipt by BA of such acceptance shall be the Start Date.

4.1.4 In the event BA cannot fulfill MCIm's request for Collocation under a Short Form Collocation Agreement or MCIm cancels its request thereunder, BA will

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refund the Application Fee less its reasonable incurred costs of processing the request.

4.1.5 Within five (5) business days after the Start Date, upon MCIm's reasonable request, the Parties shall meet to set proposed dates for milestone events such as initial space and cable route walk through, provision of power cabling details, and cage acceptance walk through.

4.1.6 Each Party will provide the other Party a single point of contact and telephone number as designated on the Short Form Collocation Agreement. Thereafter, each Party shall provide the other Party with additional or other contact names and telephone numbers to the extent requested and necessary.

4.1.7 BA shall be permitted to conduct inspections at irregular intervals of all or portions of the Collocation Space, to determine that the occupancies are authorized and that equipment or facilities located therein are installed and maintained in accordance with the required standards set forth in this Agreement. BA will provide MCIm with five (5) business days' advance notice of any such inspection and MCIm's representatives will have the right to be present at the time of inspection.

4.2 Pre-Construction Survey and Design and Construction Work

4.2.1 At a minimum, BA shall provide MCIm a basic drawing of the Collocation Space. Such drawing shall include: (i) dimensions of such space; (ii) location and proximity of such space to any walls or other structures; (iii) location of doors, ground bars and AC convenience outlets; (iv) location of BA Point of Termination Bays (POT Bays); and (v) to the best of BA's knowledge, any physical obstructions which might have a materially adverse effect upon the construction of the requested cage. In addition, where readily available, BA shall also provide detailed Telephone Equipment drawings depicting the exact location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for BA Point of Termination Bay(s). Such drawings shall be provided by BA at a time to be mutually agreed by the Parties and in accordance with the ACC Collocation Guideline. Within twenty (20) business days of the Start Date, the Parties shall agree on the final drawings.

4.2.2 BA shall provide detailed power cabling connectivity information including the sizes and number of power feeders to MCIm within five (5) days of BA's acceptance of any separate power provisioning bid.

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT (LAST REVISED 12/17/98: Amendment Number 1) 4.2.3 After acceptance of MCIm's request for Collocation Space, the Parties shall mutually agree on a date for BA to conduct a walk through of the cable routes to be held prior to the commencement of collocation space construction.

4.2.4 BA shall construct the Collocation Space in accordance with the Parties' Mutually Agreed design configuration of the cage as shown in the agreed final drawings required under Paragraph 4.2.1.

4.2.5 BA shall permit MCIm to contract or subcontract the construction of physical Collocation arrangements with contractors approved by BA; provided, however, that BA shall not unreasonably withhold its approval of contractors. Approval of an MCIm contractor by BA shall be based on the same criteria it uses in approving contractors for its own purposes.

4.2.5.1 MCIm may select its own vendors for all required engineering and installation services associated with its collocated equipment (e.g., BA shall not require MCIm to utilize BA's internal engineering or installation work forces for the engineering and installation of MCIm's collocated equipment). MCIm's vendors must be: (i) on the current BA-approved vendors list which will be provided by BA to MCIm upon the Effective Date of this Agreement and updated as required, or (ii) considered by BA for inclusion for such list, upon MCIm's request.

4.2.6 MCIm shall have the right to use a portion of the Collocation Premises in addition to the Partitioned Space and loading areas, if available, on a temporary basis during MCIm's equipment installation work in the Partitioned Space. MCIm is responsible for protecting BA's equipment and Collocation Premises flooring within the staging area and along the staging route. MCIm will store equipment and materials within the Partitioned Space when work is not in progress (e.g., overnight). No storing of equipment and materials overnight will be permitted in the staging area(s). MCIm will meet all of BA's fire, safety and housekeeping requirements. This temporary staging area will be vacated and delivered to BA in a broom-clean condition upon completion of MCIm's installation work ordinary wear and tear excepted.

4.2.7 BA shall provide written positive confirmation to MCIm when in the reasonable judgment of BA fifty percent (50%) of the physical construction of MCIm's Collocation Space is complete. BA's confirmation shall also include written confirmation of the scheduled completion date and Occupancy Date.

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4.3 Acceptance and Turnover of Space

4.3.1 The Parties will complete an acceptance walk-through of Collocation Space within ten (10) days of completion. Exceptions will be noted during this acceptance walk-through in the Short Form Collocation Agreement and shall be corrected by BA within ten (10) business days after the walk-through, unless otherwise Mutually Agreed. The correction of these noted in the original Short Form Collocation Agreement shall be at BA's expense. Turnover of the Collocation Space to MCIm shall be deemed to occur upon execution and delivery by the parties of a Design and Construction Completion Notice for such Collocation Space in the form attached hereto as Appendix A, Exhibit I (the "Occupancy Date").

4.3.2 BA will use its best efforts to provide occupancy of the space(s) on time and will keep MCIm advised of any delays. MCIm shall be compensated by BA in accordance with Attachment X for any delays in the negotiated completion and turnover dates which create expenditures or delays to MCIm.

4.4 Reservation and Efficient Use of Partitioned Space

4.4.1 The initial license granted to MCIm for Partitioned Space is subject to a minimum requirement of one hundred (100) square feet and a maximum of four hundred (400) square feet of assignable space. Additional space will be provided on an as needed basis where feasible if MCIm's existing space is being "efficiently used" as defined in Section 4.4.3. MCIm can request additional Partitioned Space in increments of one hundred (100) square feet, unless otherwise agreed by BA, by completing a new Short Form Collocation Agreement following the procedures described in Section 4.1.

4.4.2 In connection with an existing license for a minimum of one hundred (100) square feet, MCIm has the option to reserve either one hundred (100) square feet, or two hundred (200) square feet, of space in the same Collocation . Premises which will be partitioned at some future date ("Reserved Space"): BA will use best efforts to assign the Reserved Space so that it is contiguous with the Partitioned Space. However, BA makes no guarantee to that effect. Reservation of space pertains only to floor space. MCIm may not reserve any Cable Space or Conduit Space.

4.4.3 For purposes of this Agreement, "efficiently used" shall mean that

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substantially all of the floor space (no more than fifty percent (50%)used for storage cabinets and work surfaces) is taken up by the equipment specified in BA's relevant state tariffs and any comparable interstate tariff which may be filed and approved, placed no more than twenty percent (20%) above the minimum distances permitted by NEBS.

4.4.4 If Partitioned Space is needed to accommodate another interconnector or BA's service to its end user customers, BA may take back from MCIm Partitioned Space that is not being "efficiently used" (except for one hundred (100) square feet of such Partionioned space), upon ninety (90) days advance written notice to MCIm during which notice period MCIm shall have the opportunity to place equipment in the Partitioned Space so that it is "efficiently used" and not subject to be taken back by BA. However, MCIm must have placed some equipment within that 100 sq. ft. which is interconnected to BA's network.

4.5 General Collocation Requirements

4.5.1 MCIm shall be responsible to ensure all persons under its authority and control working in the Collocation Premises are compliant with the requirements of this Attachment V.

4.5.2 BA shall ensure protection of MCIm's proprietary subscriber information. Any Collocation arrangement shall include provisions for BA protecting MCIm's Proprietary Information.

4.5.3 BA to the extent it does so for its own employees, shall provide access to eyewash stations, shower stations, bathrooms, and drinking water within the Collocation Premises on a twenty-four (24) hours per day, seven (7) days per week basis for MCIm personnel and its designated agents.

4.5.4 MCIm will provide emergency access to its Partitioned Space at all times to allow BA to react to emergencies, to maintain the space (where applicable) and to ensure compliance with the regulations and standards related to fire, safety, health, and environmental safeguards set forth in this Attachment V. If conditions during any such emergency reasonably permit, BA will provide prior notification of access in order to provide MCIm the option to be present at the time of BA's access.

4.5.5 The reasonable use of shared building facilities (e.g., elevators, unrestricted corridors, designated restrooms, etc.) will be permitted by BA. If

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MCIm requires access to cable risers and racking for maintenance purposes, a BA escort will be provided unless BA deems such escort unnecessary.

4.5.6 Upon request by MCIm, BA shall provide documentation submitted to and received from contractors for any contractor bids for any work being done on behalf of MCIm (this includes, but is not limited to, power supplies and cage construction);

4.6 Collocation Technical Requirements

4.6.1 Upon the Effective Date of this Agreement, BA shall provide intra-office facilities (e.g., DS0, DS1 and DS3 terminations) permitting electrical hand-offs as requested by MCIm to meet MCIm's need for placement of equipment, interconnection, or provision of service. At such time that OC3, OC12, OC48 and STS-1 intra-office facility terminations become available in the Collocation Premises, they shall be made available to MCIm for its fiber hand-offs.

4.6.2 Subject to availability at the Collocation Premises and technical feasibility, BA shall provide all ingress and egress of fiber and power cabling to MCIm Collocation Space in compliance with MCIm's cable diversity requirements. The specific level of diversity required for each Collocation Space or Network Element will be specified in the Short Form Collocation Agreement and if compliance will result in added expense, MCIm will be advised and given an opportunity to decide whether or not it wishes to pay such additional expense.

4.6.3 MCIm may collocate the amount and type of equipment it deems necessary in its Collocation Space in accordance with FCC Rules and Regulations, and any applicable Department Order or Regulation. BA shall not restrict the type of equipment or vendors of equipment to be installed.

4.6.4 MCIm shall be allowed to install transmission equipment of its choice, provided that such equipment meets all applicable specifications referenced in Section 10 of this Attachment V and is from manufactured by a BA-approved vendor. Approved vendors will, at minimum, be vendors BA currently approves for its own use. BA will approve additional vendors, provided they meet Bellcore and BA standards.

4.6.5 BA will maintain MCIm's virtual Collocation equipment in parity with or better than, how it maintains its own equipment. Maintenance includes the change out of electronic cards provided by MCIm and per MCIm's request.

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4.6.6 In the event that MCIm occupies more than one Partitioned Space location within the same Collocation Premises, MCIm will be permitted to interconnect its equipment contained in such Partitioned Spaces. At these Collocation Premises, for noncontiguous Partitioned Spaces BA will provide MCIm, at MCIm's expense, (i) cable racking between MCIm's Partitioned Spaces using BA designated supporting structures, and (ii) connecting cable installation. BA will provide the most direct Partitioned Space connection route possible. For contiguous Partitioned Spaces, MCIm will be responsible for supplying and installing the cabling and cable racking between such Partitioned Spaces using BA designated support structures. Power cables will not be placed in such arrangements.

4.6.7 BA will designate point(s) of termination on cross connect frames or similar devices as the point(s) of physical demarcation between MCIm facilities and BA facilities.

4.6.8 BA agrees that any Collocation Space furnished to MCIm will be in compliance with OSHA requirements. In the event that MCIm becomes aware of any violation or noncompliance with OSHA requirements in any such Collocation Space, MCIm will so notify BA and BA shall remedy such situation as promptly as possible.

4.6.9 BA shall provide adequate lighting, ventilation, power, heat, air conditioning, and other environmental conditions for MCIm's space and equipment. These environmental conditions shall adhere to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063 and applicable OSHA standards.

4.6.10 MCIm shall be permitted to place storage cabinets, cross-connect frames and work surfaces (e.g., tables) in the Partitioned Space. However, in no event shall MCIm place flammable or hazardous materials in the Partitioned Space. To help ensure the availability of efficient space for other Interconnectors, such storage cabinets and work surfaces shall not take up more than fifty percent (50%) of the Partitioned Space and must meet BA Central Office environmental standards (NIP 74165 NYT Central Office Environmental Requirements ("NIP 74165")), in effect at the time of MCIm's equipment installation and as may be modified from time to time, copies of which will be provided (including all updates), to MCIm at cost. MCIm shall be provided with a reasonable period of time after receipt of NIP 74165 updates to comply with their terms. MCIm shall

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provide, install and maintain in the Partitioned Space any repeaters which may be necessary as a result of the physical distance between the Partitioned Space and the Collocation Premises terminations of the BA network. BA will employ the same procedures aimed at minimizing this physical distance as BA does in conjunction with its own equipment.

4.6.11 Upon MCIm's request, BA shall provide basic telephone service at the partitioned space within the same timeframe in which BA provides its own customers serviced from the same end office, with a connection jack from BA for the Partitioned Space.

4.7 Collocation Power Requirements

4.7.1 At MCIm's expense, BA shall provide power as requested by MCIm to meet MCIm's needs for placement of equipment, interconnection, or provision of service. Any fee for power charged to MCIm by BA shall be set forth in the Short Form Collocation Agreement and shall reflect the amounts listed in Attachment I to this Agreement.

4.7.2 BA will supply power to support MCIm equipment at equipment specific DC and AC voltages. At a minimum, BA shall supply power to MCIm at parity with that provided by BA to itself for similar equipment requirements or to any third party. If BA performance, availability, or restoration falls below industry standards, BA shall bring itself into compliance with such industry standards as soon as technically feasible.

4.7.3 Collocation Premises power supplied by BA into the MCIm Partitioned Space shall be supplied in the form of power feeders (cables) on cable racking into the designated MCIm Partition Space. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of MCIm equipment. The termination location shall be as requested by MCIm.

4.7.4 BA power equipment supporting MCIm's equipment shall:

4.7.4.1 Comply with applicable industry standards (e.g., Bellcore, NEBS and IEEE) or the manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;

4.7.4.2 Have redundant power feeds with physical diversity furnished at

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additional cost to MCIm, and three (3) hour battery back-up, at minimum, or at parity with that provided for similar BA equipment;

4.7.4.3 Upon MCIm's request, to the extent technically feasible, and subject to reimbursement by MCIm of any reasonable costs incurred by BA in connection with its provisioning of such requests, provide the capability for real time access to alarm data that affects MCIm equipment in the Collocation Space, including, but not limited to, power plant alarms specific to BA power plants providing capacity to the batteries, distribution, fuses and bays within the Collocation Space and environment alarms;

4.7.4.4 Provide Collocation Premises ground, connected to a ground electrode located at or on the Collocation Space. MCIm may affix a connection to the BA-provided ground bar in order to provide ground to MCIm's own ground bar within its Collocation Space; and

4.7.4.5 At MCIm's expense and where technically feasible, provide feeder capacity and quantity to support the ultimate equipment layout for MCIm equipment in accordance with MCIm's Short Form Collocation Agreement. Any fee for feeder capacity and quantity charged to MCIm by BA shall be set forth in the Short Form Collocation Agreement and shall reflect the amounts listed in Attachment I to this Agreement.

4.7.5 BA shall, within ten (10) days of MCIm's request that power be provided:

4.7.5.1 Pursuant to mutual agreement by the Parties, provide an installation sequence and access that reflects individual power requirements for each Collocation Space specifically with the understanding that MCIm typically will desire that power be available before beginning installation of equipment. BA agrees that when MCIm installs its own Battery Distribution Fuse Body (BDFB) in the Collocation Space this BDFB may be powered prior to the installation of other equipment;

4.7.5.2 [INTENTIONALLY LEFT BLANK]

4.7.5.3 Provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063; and

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4.7.5.4 Provide lock out-tag out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines.

4.7.6 BA will provide MCIm with at least five (5) business days notification prior to any scheduled AC or DC power work or related activity in the Collocation Premises that will or might cause an outage or any type of power disruption to MCIm equipment located in the Collocation Premises.

4.7.7 BA will provide 110V AC power for convenience outlets, lighting for frames, and lighting in the Collocation Space (as per Bellcore NEBS document TR-EOP-000053). BA will also provide 48 volt battery-backed DC power for MCIm's equipment. Any fee for such power charged to MCIm by BA shall be set forth in the Short Form Collocation Agreement and shall reflect the amounts listed in Attachment I to this Agreement.

4.8 Equipment and Cable Installation and Maintenance

4.8.1 The standard hours for MCIm equipment and cable installation in the Collocation Space shall be 9 a.m. to 5 p.m. In those instances where MCIm may reasonably require expanded installation hours, it shall make such request not less than two (2) business days prior to the requested date of access which shall be promptly reviewed and reasonably responded to by BA. Any such out of hours request for equipment installation within the Collocation Space may require MCIm's payment of costs incurred by BA including, but not limited to, security and or escort service. MCIm will be given written security rules and regulations prior to MCIm's commencement of installation at the Collocation Space. All rules and regulations shall be followed without exception. In no case shall any reasonable security restrictions placed on MCIm be more restrictive than those BA places on its own personnel.

4.8.2 For purposes of rectifying service-affecting conditions, BA agrees to allow MCIm's employees and designated agents unrestricted access to Collocation Space in manned Collocation Premises twenty-four (24) hours per day, seven (7) days a week. BA may place reasonable security restrictions on access by MCIm's employees and designated agents to Collocation Space in unmanned Collocation Premises. Notwithstanding the foregoing, BA agrees that with respect to such unmanned Collocation Premises, the Collocation Space shall be available to MCIm's employees and designated agents twenty-four (24) hours per day, seven (7) days per week.

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4.8.3 MCIm's facilities shall be placed, maintained, relocated or removed in accordance with the applicable requirements and specifications of the current editions of the National Electrical Code (NEC), the National Electrical Safety Code (NESC) and rules and regulations of the Occupational Safety and Health Act (OSHA), and any governing authority having jurisdiction in effect at the time of installation and as they may be modified from time to time. All MCIm entrance facilities and splices must comply with Bellcore Generic Specification for Optical Fiber and Optical Fiber Cable (TR-TSY-00020), Cable Placing Handbook (NX620020912NY), Cable Splicing Handbook (NX620020911NY), Cable Maintenance Handbook (NX620020913NY), and General Information Tools and Safety (NY620020910NY) in effect at the time of installation and as they may be modified from time to time, as they relate to fire, safety, health, environmental safeguards or interference with BA services or facilities. Copies of BA documents will be provided (including all updates), to MCIm at cost. The MCIm Collocation Space equipment must also comply with BA's Collocation Premises engineering, environmental and transmission standards in effect at the time of installation as they may be modified from time to time, as they relate to fire, safety, health, environmental safeguards or interference with BA services or facilities. Where a difference in specification may exist, the more stringent standards shall apply. MCIm shall have the right to exceed any of the foregoing standards or technical requirements. If MCIm is provided with updated BA standards documents MCIm shall be provided with a reasonable period of time after receipt of such updates to comply with the modified terms. Insofar as the NEC, NESC and OSHA requirements are concerned, MCIm shall be provided with a reasonable period of time after updates to those requirements to comply with their modified terms. MCIm's Collocation Space shall not physically, electronically, or inductively interfere with BA's or other interconnectors' or tenants' facilities.

4.8.4 BA reserves the right to prohibit all equipment and facilities, other than cable, from occupying its entrance manholes. No splicing will be permitted in Manhole "O". MCIm must provide a length of underground fiber optic cable in Manhole "O" of sufficient length to be pulled through the BA Conduit Space and into the Collocation Premises cable vault splice location. MCIm is responsible for placement of the cable facility within Manhole "O". MCIm is responsible for the maintenance of the cable(s). BA is responsible for maintaining the manholes.

4.8.5 MCIm will be responsible for installing MCIm feeder cable in the Conduit

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Space. BA may provide shared Conduit Space with dedicated inner duct. MCIm will not be permitted to reserve space in the Conduit Space. If new Conduit Space is required, BA will negotiate with MCIm to determine the terms under which such Conduit Space is provided.

4.8.6 BA reserves the right to manage the Conduit Space and to reserve vacant Conduit Space for BA facility additions planned within three (3) years of its primary use.

4.8.7 MCIm is responsible for installing and maintaining a splice where its feeder cable meets its fire retardant inside riser cable within the Collocation Premises Cable Space. The splice in the Cable Space must be a mechanical splice to avoid safety hazards. No fusion splicing will be permitted. BA will provide space and racking for the placement of an approved secured fire retardant splice enclosure. MCIm shall tag all entrance facilities to indicate ownership.

4.8.8 To avoid unnecessary reinforcements or arrangements, MCIm agrees to size the Collocation Space to meet three (3) year forecasted demand, where feasible. MCIm will be accompanied by qualified BA representatives in all manhole and cable vault locations on a time and materials basis. MCIm will have access to all manhole and cable vault locations as required for installation and emergency maintenance repairs.

4.8.9 MCIm is responsible for placing its fire retardant riser cable from the Cable Space to the Collocation Space. MCIm shall provide fire retardant riser cables which must comply with BA practices and safety requirements for office premises cabling (TR-NTW000409 and National Electrical Code) in effect at the time of installation and as they may be modified from time to time, as they relate to fire, safety, health and environmental safeguards, copies of which will be provided (including all updates), to MCIm at cost. MCIm shall be provided with a reasonable period of time after receipt of updates of the foregoing requirements documents to become compliant with their modified terms. Within ten (10) days after BA's confirmation of Collocation Space availability, the Parties will jointly determine the length of fire retardant cable needed to reach from the splice in the cable vault to the Collocation Space. Special arrangements will be agreed upon to meet unusual conditions such as midspan splicing requirements. BA will allocate common riser ducts and common racking where possible. Added or special racking rearrangements requested by MCIm will result in time and materials charges. MCIm is responsible for all maintenance of the communication cables. Where diverse cable vaults permit diverse entrances

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into the Collocation Premises by MCIm's cable, and where space in such diverse entrances may be available, diverse Cable Space shall be provided by BA upon request by MCIm.

4.8.10 Upon MCIm's request and where Technically Feasible and space permits, BA shall provide two (2) points of entry to the Collocation Premises.

4.8.11 MCIm may not construct substantial improvements or make material alterations or repairs to the Collocation Space without the prior written approval of BA, which approval BA shall not unreasonably withhold or delay. Nothing herein shall prevent MCIm from making minor improvements and/or non-material alterations or repairs to the Collocation Space without notice to and approval from BA.

4.8.12 The cross-connect frames where the point(s) of termination is located will be provided at or near the Collocation Space. MCIm shall provide and be responsible for installing and maintaining the connection cabling and associated cross-connections between the Collocation Space and the point of termination. BA will provide and be responsible for installing and maintaining all facilities on the BA side of the point of termination. MCIm will pay a maintenance of service charge as specified in BA's applicable Tariffs whenever BA personnel are required to identify a trouble as being on MCIm's side of the point of termination (e.g., in the connection cabling or associated cross connections).

4.8.13 If at any time BA determines that either MCIm's equipment or its installation does not substantially meet the requirements outlined in this Agreement, MCIm will be responsible for the costs associated with the removal of equipment or modification of the equipment or installation to render it compliant. If MCIm fails to correct any material non-compliance with these standards within sixty (60) days' written notice to MCIm, BA may have the equipment removed or the condition corrected at MCIm's expense. If during the installation phase, BA reasonably determines any MCIm activities or equipment are unsafe or in violation of any applicable laws or regulations specified in this Agreement, BA has the right to immediately stop the work or place it on hold. However, when such conditions pose an immediate threat to the safety of BA's employees, interfere with the performance of BA's service obligations, or pose an immediate threat to the physical integrity of the Conduit System or the cable facilities of BA, BA may perform such work and/or take such reasonable action that BA deems necessary without prior notice to MCIm. The cost of such work and/or action shall be borne by MCIm.

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4.8.14 BA shall provide the following information to MCIm within five (5) business days of receipt of a written request and MCIm's payment of the Application Fee:

4.8.14.1 Work restriction guidelines;

4.8.14.2 BA or industry technical publication guidelines, if any, that affect the design of BA collocated equipment; and

4.8.14.3 Escalation process for the BA employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise in connection with MCIm's Collocation.

4.8.15 BA shall provide MCIm with written notice five (5) business days prior to those instances where BA or its subcontractors may be performing work in the general area of the Collocation Space occupied by MCIm, or in the general area of the AC and DC power plants which support MCIm equipment. BA will make best efforts to inform MCIm by telephone of any emergency-related activity that BA or its subcontractors may be performing in the general area of the Collocation Space occupied by MCIm, or in the general area of the Collocation Space occupied by MCIm, or in the general area of the Collocation Space occupied by MCIm, or in the general area of the Collocation Space occupied by MCIm, or in the general area of the AC and DC power plants which support MCIm equipment. Subject to safety concerns or other exigencies of the emergency, notification of any emergency-related activity shall be made immediately prior to the start of the activity so that MCIm can take any action required to monitor or protect its service. MCIm shall attach to its Collocation Space cage in a clearly visible and easily accessible location a copy of the MCIm notification methods and procedures (e.g., name and contact telephone numbers for 24-hour contacts to be made by BA to MCIm under this Section 4.8.15).

Section 5 Removals, Relocations and Rearrangements

5.1 Upon termination of MCIm's license for any Partitioned Space or any one hundred (100) square feet portion thereof, MCIm must remove its equipment from such space within sixty (60) days. Upon removal by MCIm of all its equipment from the Partitioned Space or portion thereof, MCIm must restore that Partitioned Space to a broom clean condition, with ordinary wear and tear excepted. Due to physical and technical constraints, removal of cable shall be at BA's option.

5.2 If it becomes necessary in BA's reasonable judgment in order to fulfill its obligations under the public service law and there are no other reasonable alternatives,

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BA may require MCIm to move from its Partitioned Space to Partitioned Space in another location within the same Collocation Premises. BA will negotiate a schedule with MCIm under which such relocations will be effected. BA will bear only the costs of relocating the Partitioned Space enclosure, point of termination and associated BA cabling. MCIm will be responsible for relocating its equipment and facilities. The Parties will work together in good faith to minimize any disruption of MCIm's services as a result of such relocation.

5.3 Should MCIm wish to move equipment from one location to another, MCIm will be responsible for removing and transporting its equipment to the new site and installing it.

5.4 Should BA need to install additional facilities in any conduit system in which MCIm occupies Conduit Space for the purpose of meeting BA's own service requirements or for providing for another interconnector, BA will, after notifying MCIm of the additional occupancy, use its best efforts to avoid rearrangement of MCIm facilities; however, if such rearrangement cannot be reasonably avoided, BA shall rearrange MCIm's facilities in the conduit system as reasonably determined to be necessary by BA so that the additional facilities of BA or the other Interconnector may be accommodated. MCIm shall have the right to be present during such activity.

5.5 In the event of an emergency involving MCIm's facilities occupying Conduit Space or Cable Space, BA will use reasonable efforts to notify MCIm prior to rearranging such facilities, but nevertheless may take such action without prior notification if the circumstances warrant. Such rearrangement will be at MCIm's expense if such emergency is a direct result of MCIm's occupancy of space(s) under a Short Form Collocation Agreement or results from any negligent act or omission on the part of MCIm, its employees or agents. Otherwise, MCIm will not be liable for the expense.

5.6 Where MCIm intends to modify, move, replace or add to equipment or facilities within or about the Partitioned Space and requires special consideration (e.g., use of freight elevators, loading dock, staging area, etc.), MCIm must obtain BA's prior consent, which consent will not be unreasonably withheld or delayed.

Section 6 Term, Termination and Renewal

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6.1 MCIm may occupy the Collocation Space(s) set forth in a Short Form Collocation Agreement for a period of three (3) years from the Occupancy Date set forth in the Design and Construction Work Completion Notice. Occupancy for all Collocation Spaces will be granted upon completion of the design and construction work including

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"cut down" of BA cabling at the Point of Termination based on the requested interconnections identified by MCIm in the Short Form Collocation Agreement. In the event that BA is delayed in providing occupancy to MCIm for any reason other than the acts or omissions of MCIm which proximately give rise to the delay, MCIm shall not be obligated to pay the occupancy/power fees for such Collocated Space under the Short Form Collocation Agreement until the date BA provides occupancy/power to MCIm.

6.2 BA shall have the right, for good cause shown, and upon six (6) months notice, to reclaim any Partitioned Space, Cable Space or Conduit Space, in order to fulfill its obligations under applicable public service law. In such cases, BA will reimburse MCIm for reasonable direct costs and expenses in connection with such reclamation.

6.3 BA shall have the right to terminate a Short Form Collocation Agreement at any time with respect to any Partitioned Space and associated Cable Space and Conduit Space where the Collocation Premises become the subject of a taking by eminent authority having such power. BA shall notify MCIm of such termination and identify the schedule by which MCIm must proceed to have MCIm's equipment or property removed from the Partitioned Space and associated Cable Space and Conduit Space. MCIm shall have no claim against BA for any relocation expenses, any part of any award that may be made for such taking or value of any unexpired initial term or renewal periods that result from a termination by BA under this provision, or any loss of business from full or partial interruption or interference due to any termination. However, nothing herein shall be construed as preventing MCIm from making a claim in any condemnation proceedings for MCIm's relocation expenses, or other related damages including but not limited to attorneys' fees.

6.4 MCIm may, without cause and for its convenience, terminate a Short Form Collocation Agreement for any Partitioned Space or portion thereof (in 100 square feet decrements), Cable Space and Conduit Space and DC power described in such Short Form License Agreement by giving sixty (60) days' prior written notice to BA. However, any remaining Partitioned Space licensed under a Short Form Collocation Agreement may not be less than one hundred (100) square feet. MCIm is responsible for the direct reasonable costs, if any, of any partial termination, which cost may include, but is not limited to, any required cage modifications and cable relocation.

6.5 MCIm shall have the option to renew its license to occupy any of its Collocation Space for one or more additional periods of three (3) years. (the "Renewal Period"). The Renewal Period will become the new term of the Short Form Collocation Agreement at the time of execution of an amendment thereto extending the initial term. MCIm has the option to renew at the end of each term unless it is found to be in

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breach of such Short Form Collocation Agreement. Renewal of a Short Form Collocation Agreement by the Parties shall be automatic unless written notice is provided by either party to the other 60 days prior to the expiration of the term of the Short Form Collocation Agreement. In the event new fees shall apply during such Renewal Period, such fees shall be set forth in an amendment to the Short Form Collocation Agreement and shall reflect the then current fees set forth in Attachment I, or, in the event this Agreement has terminated, the then current fees set forth in the applicable BA tariff.

Section 7 Fees, Taxes and Payment Terms

7.1 MCIm shall pay BA the fees set forth in each Short Form Collocation Agreement.

7.2 BA shall commence billing for the fee(s), other than design and construction work charges, as of the Occupancy date.

7.3 The design and construction work fees delineated in Attachment I and set forth in the Short Form Collocation Agreement shall be paid by MCIm in accordance with the following milestones:

Payment FIRST INSTALLMENT:

(50% of total estimate)

FINAL BILL:

(Reconciliation of fees)

Milestone/Event

First installment will be paid on the Start Date, prior to commencement of design and construction work

Final bill will be rendered based upon actual costs and charges and is payable within thirty (30) days of receipt of bill, but no sooner than BA's completion of Design and Construction Work as specified in the Short Form Collocation Agreement.

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Section 8 Other Obligations of MCIm

8.1 Insurance

8.1.1 MCIm shall, at its sole cost and expense procure, maintain, pay for and keep in force insurance as specified in Section 8.1.2 and underwritten by insurance companies licensed to do business in State of Connecticut having a Best insurance rating of at least AA-12. BA shall be named as an additional insured on all applicable policies as an additional insured specified in Sections 8.1.2.1-8.1.2.2. BA shall be named as loss payee (as its interest may appear) on all applicable policies specified in Section 8.1.2.3. MCIm's agreement to provide the certificate of insurance under this Attachment V shall not modify or expand the liability limitations set forth in Part A of this Agreement, nor shall such agreement to insure be construed as a pre-indemnification for any BA claim or demand.

8.1.2 Such coverage shall include:

8.1.2.1 Comprehensive general liability coverage on an occurrence basis in an amount of \$2 million combined single limit for bodily injury and property damage, with a policy aggregate of \$2 million. Said coverage shall include the contractual, independent contractors products/completed operations, broad form property and personal injury endorsements;

8.1.2.2 Umbrella/excess liability coverage in an amount of \$5 million in excess of the coverage as specified in Section 8.1.2.1 above;

8.1.2.3 All risk property coverage on a full replacement cost basis insuring all of MCIm's personal property situated on or within BA's location(s); and

8.1.2.4 (a) Statutory workers compensation coverage; and (b) Employers liability coverage in an amount of \$2 million.

8.1.3 The limits set forth in Sections 8.1.2.1-8.1.2.2 may be increased by BA from time to time during the term of this Agreement, upon prior written notice, to at least such minimum limits as shall then be customary in respect of comparable situations within the existing BA buildings.

8.1.4 All policies purchased by MCIm shall be deemed to be primary and not

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contributing to or in excess of any similar coverage purchased by BA.

8.1.5 All insurance must be in effect as of the Occupancy Date and shall remain in force as long as MCIm's facilities remain within any spaces governed by a Short Form Collocation Agreement. If MCIm fails to maintain the coverage, BA may pay the premiums thereon and seek reimbursement of same from MCIm.

8.1.6 MCIm shall submit certificates of insurance reflecting the coverages specified in Section 8.1.2 prior to the commencement of the work called for in a License Agreement. MCIm shall arrange for BA to receive thirty (30) days' notice with respect to the applicable Collocation Space advance notice of cancellation of any insurance covering Collocation Space from MCIm's insurance company. Notice of cancellation should be forwarded to BA, 1095 Avenue of the Americas, Room 3532, New York, New York 10036, Attention: Risk Management.

8.1.7 MCIm must also conform to the recommendation(s) made by BA's fire insurance company which BA has already agreed to or to such recommendations it shall hereafter agree to. Any such recommendation must be immediately furnished to MCIm in writing, with any and all written updates promptly provided by BA to MCIm from time to time. MCIm shall be given a reasonable amount of time to comply with the foregoing recommendations.

8.2 Mechanic's Liens

8.2.1 Any mechanic's lien filed against the Collocation Premises or the real property of which the Collocation Premises are a part for work claimed to have been done for MCIm or materials claimed to have been furnished to MCIm shall be discharged of record by MCIm within sixty (60) days after MCIm receives notice thereof, at MCIm's expense, by payment, deposit, bond, court order or otherwise.

Section 9 Damage to Collocation Space

9.1 If the Partitioned Space or any part thereof shall be damaged by fire or other casualty, MCIm shall give immediate notice thereof to BA and the applicable Short Form Collocation Agreement shall continue in full force and effect except as hereinafter set forth.

9.2 If the Partitioned Space is partially damaged or rendered partially unusable by fire or other casualty not caused by MCIm, the damages thereto shall be promptly repaired

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by and at the expense of BA. The occupancy fee, until such repair shall be substantially completed, shall be apportioned from the day following the casualty according to the part of the Partitioned Space and/or associated Cable and Conduit Spaces which are usable.

9.3 If any Partitioned Space, Cable Space, or Conduit Space is totally damaged or rendered wholly unusable by fire or other casualty not caused by MCIm, then the occupancy/power fees for such space shall be paid up to the time of the casualty and thenceforth shall cease until the date when the space shall have been repaired and restored by BA.

9.4 If the Partitioned Space, Cable Space, or Conduit Space is rendered wholly unusable through no fault of MCIm, or (whether or not the demised premises are damaged in whole or in part) if the building shall be so damaged that BA shall decide to demolish it or to rebuild it, then, in any of such events, BA may elect to terminate any affected Short Form Collocation Agreements by written notice to MCIm given within ninety (90) days after such fire or casualty specifying a date for the expiration of any such Short Form Collocation Agreement, which expiration date shall not be more than sixty (60) days after the giving of such notice, and upon the date specified in such notice the term of any such Short Form Collocation Agreement shall expire as fully and completely as if such date were the date set forth in Section 6 for the termination of any such Short Form Collocation Agreement and MCIm shall forthwith guit, surrender and vacate the premises, without prejudice however, to each Party's rights and remedies under any such Short Form Collocation Agreement provisions in effect prior to such termination, and any occupancy fee owing shall be paid up to such date and any payments of occupancy fee made by MCIm which were on account of any period subsequent to such date shall be returned to MCIm. Unless either Party shall serve a termination notice as provided for herein, BA shall make the repairs and restorations under the conditions of Sections 9.2-9.3 hereof, with all reasonable expedition subject to delays due to adjustment of insurance claims, labor troubles and causes beyond BA's reasonable control. After any such casualty, MCIm shall cooperate with BA's restoration by removing from the Partitioned Space as promptly as reasonably possible, all of MCIm's salvageable inventory and movable equipment, furniture and other property. MCIm's liability for occupancy fees shall resume either upon occupancy by MCIm of the Partitioned Space, Cable Space, or Conduit Space as restored to a condition comparable to that existing prior to such casualty.

Section 10 Technical References

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BA and MCIm shall comply with the following standards:

10.1 Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electric Cables, Field Splices, and Connections for Nuclear Power Generating Stations.

10.2 National Electrical Code (NEC) use latest issue.

10.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2, (Bellcore, January 1989).

10.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988.

10.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140- Volt Central Office Power Plant Rectifiers, Issue 1, (Bellcore, May 1985).

10.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985).

10.7 TR-NWT-000154, Generic Requirements for 24-, 48-, 130, and 140- Volt Central Office Power Plant Control and Distribution Equipment, Issue 2, (Bellcore, January 1992).

10.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2, (Bellcore, July 1992).

10.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1, (Bellcore, December 1991).

10.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993.

10.11 Underwriters Laboratories Standard, UL 94.

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ATTACHMENT V -- APPENDIX A

APPENDIX A

FORM OF SHORT FORM COLLOCATION AGREEMENT

THIS SHORT FORM COLLOCATION AGREEMENT ("COLLOCATION AGREEMENT") BETWEEN NEW YORK TELEPHONE COMPANY, d/b/a Bell Atlantic-CT ("BA") AND MCImetro ACCESS TRANSMISSION SERVICES LLC ("MCIm" OR "LICENSEE"), SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN ATTACHMENT V TO THE AGREEMENT BETWEEN THE PARTIES DATED _____, 1997 ("INTERCONNECTION AGREEMENT").

A. Term

The term of this Collocation Agreement shall commence as of the Occupancy Date set forth on the Design and Construction Completion Notice, a form of which is attached hereto as Exhibit 1, and shall terminate three (3) years from the Occupancy Date unless otherwise terminated in accordance with Attachment V.

B. Collocation Premises Address:

C. MCIm Collocation Space Requirements:

1. Partitioned Space: (Include number of square feet, floor, location)

2. Cable Space: (Include description of Cable Riser, Cable Rack Support Structure and Cable Vault)

3. Conduit Space: (Describe route(s) from manhole(s) into building)

4. Special Collocation Space Requests/Revisions

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ATTACHMENT V - APPENDIX A

D. Design and Construction Work:

(BA to provide description of make-ready work required at the Collocation Premises and schedule of anticipated completion dates)

E. Turnover of Collocation Space:

Collocation Space will be ready for occupancy on _____.

F. Schedule of Fees:

- 1. Non Recurring Charges.
 - a. Charge \$_____.

b. Estimate for Non-Recurring Charges Associated with Cable Pull and Splice.

| | Hours | Rate | Total | |
|------------|-------|------|-------|--|
| Technician | | | ÷ : | |

2. Collocation Space Monthly Licensing Fees:

| Rates and Fees-Spaces: | A <u>Monthly</u> <u>Rate*1</u> | <u>B</u> <u>Area</u> | (A x B = C) <u>Monthly License</u> <u>Fee</u> |
|---|--------------------------------------|-------------------------|---|
| Partitioned Space Cable Space^{**10} | | | |
| 2. Cable Space | | | |
| (Per cable linear ft) | <u>.</u> | · | ······ |
| Cable 2 (Alternate) | · | · · | |

¹⁰ **The linear footage is computed as the sum of the lengths as follows:

1. Horizontally - from the manhole entrance wall as run to the riser leading to the higher floors in the building.

 2. Vertically - from the entrance height in the vault, as run, to the physical termination at the Point of Termination.

3. Horizontally - from the riser on the collocated Licensee's floor, as run, to the Point of Termination.

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ATTACHMENT V – APPENDIX A

(Per cable linear ft) 3. Conduit Rates and Description Rate Distance Annual Mthly Lic Fee Conduit Space Primary Route Alternate Route 4. D.C. Power (48 Volt with Battery Back up)

5. Monthly space and facilities rates represent the total monthly license and power fees described above.

\$_____ Total per Month

G. Penalty Fees Payable to Interconnector:

H. Points of Contact:

ΒA

Attn: ______ Fax: _____

MCImetro Access Transmission Services LLC

Attn: ______ Fax: _____

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ATTACHMENT V - APPENDIX A

<u>EXHIBIT I</u>

DESIGN AND CONSTRUCTION COMPLETION NOTICE

| MCIm: | | | |
|---------------------------------------|---|------|------|
| Collocation Premises Address: | | | |
| | | | |
| Partition Space No.: | | | |
| Post Installation Inspection Date: | - | | |

As of the signature date indicated below (Occupancy Date), the Design and Construction work has been completed and accepted, except for any minor exceptions listed in the "Exceptions" section below. Such exceptions, to the extent they are caused by BA actions, shall be completed by BA pursuant to the schedule below. In accordance with MCIm's acceptance of the work and MCIm's intent to take occupancy, the Collocation Space(s) has been turned over to MCIm for occupancy and an authorized MCIm representative has been provided access to the Partitioned Space as of this date.

Exceptions to work performed for MCIm:

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| Schedule for BA completion of Exce | ptions: |
|--|--|
| ACCEPTED BY: | |
| MCImetro Access Transmission Services LLC | NEW YORK TELEPHONE COMPANY d/b/a Bell Atlantic-CT |
| By: Name: Title: | By: Name: Title: |
| Occupancy Date | |

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ATTACHMENT VI RIGHTS of WAY (ROW), CONDUITS, POLE ATTACHMENTS

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ATTACHMENT VI

RIGHTS of WAY (ROW), CONDUITS, POLE ATTACHMENTS

Section 1 Introduction

This Attachment VI sets forth the requirements for Rights of Way, Conduits and Pole Attachments.

Section 2 Definitions

2.1 "Poles, Ducts, Conduits and ROW" refers to all the physical facilities and assignable legal rights which provide for access to pathways across public and private property. These include poles, pole attachments, ducts, innerducts, conduits, building entrance facilities, building entrance links, equipment rooms, remote terminals, cable vaults, telephone closets, building risers, rights of way, or any other requirements needed to create pathways. These pathways may run over, under, across or through streets, traverse private property, or enter multi-unit buildings. A ROW is the right to use the land or other property owned, leased, or controlled by any means by BA to place Poles, Ducts, Conduits and ROW or to provide passage to access such Poles, Ducts, Conduits and ROW. A ROW may run under, on, or above public or private property.

Section 3 Requirements

3.1 Each Party shall provide the other Party access to its Poles, Ducts, Rights-of-way and Conduits it owns or controls, to the extent permitted by law and as required by Section 224 of the Act or by Department Order, on terms, conditions and prices comparable to those offered to any other entity pursuant to the attached.

Each Party, to the extent legally permissible, shall make Poles, Ducts, Conduits and ROW available upon receipt of a bona-fide request for use within the time periods provided in this Attachment VI, and provide all information necessary to implement such a use containing rates, terms and conditions, including, but not limited to, maintenance and use in accordance with this Agreement. Access shall be on a non-discriminatory basis in accordance with all regulations prescribed by the Department.

3.2 [INTENTIONALLY LEFT BLANK]

3.3 Neither Party shall prevent or delay any third party assignment of ROW.

3.4 Both Parties shall offer, to each other the use of such Poles, Ducts, Conduits and ROW it has obtained from a third party, to the extent such agreement does not prohibit granting such rights. They shall be offered to MCIm on the same terms and conditions as BA offers to all similarly situated carriers and BA shall receive the same consideration from MCIm.

3.5 Both Parties shall provide to each other non-discriminatory access to Poles, Ducts, Conduits and ROW and any other pathways on terms and conditions equal to that provided to any other Party.

3.6 [INTENTIONALLY LEFT BLANK]

3.7 [INTENTIONALLY LEFT BLANK]

3.8 Both Parties shall provide a SPOC (by area-RTU agent) for negotiating all structure lease and ROW agreements.

3.9 BA shall provide information regarding the availability and condition of Poles, Ducts, Conduits and ROW within five (5) business days after MCIm's request if the information then exists in BA's records (a records-based answer) and ten (10) business days after MCIm's request if BA must physically examine the Poles, Ducts, Conduits and ROW (a field-based answer) (Request). MCIm shall have the option to be present at the field based survey and BA shall provide MCIm at least twenty-four (24) hours notice prior to the start of such field survey. During and after this period, BA shall allow MCIm personnel to enter manholes and equipment spaces and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure. BA shall send MCIm a written notice confirming availability pursuant to the Request within such twenty (20) day period (Confirmation).

3.10 [INTENTIONALLY LEFT BLANK]

3.11 [INTENTIONALLY LEFT BLANK]

3.12 BA shall relocate and/or make ready existing Poles, Ducts, Conduits and ROW where necessary and feasible to provide space for MCIm's requirements. Subject to the requirements above, the Parties shall endeavor to mutually agree upon the time frame for the completion of such work within ten (10) days following MCIm's requests of this work; however, any such work required to be performed by BA shall be completed

within forty (40) days (based upon the size of the job), unless otherwise agreed by MCIm in writing.

3.13 Either Party may, at its option, install its facilities on Poles, Ducts, Conduits and ROW and use its own qualified personnel or agents to attach its equipment to such Poles, Ducts, Conduits and ROW.

3.14 To the extent possible, both Parties shall provide space in manholes for racking and storage of cable and other materials as requested and paid for.

3.15 [INTENTIONALLY LEFT BLANK]

3.16 Where either Party has spare innerducts which are not, at that time, being used for providing its services, it shall offer such ducts for use.

3.17 Where a spare inner duct does not exist, either Party shall allow the installation of an innerduct.

3.18 Where either Party has any ownership or other assignable rights to ROW, to buildings or building complexes, or within buildings or building complexes, it shall be made available to the other Party:

3.18.1 The right to use any spare metallic and fiber optic cabling within the building or building complex;

3.18.2 The right to use any spare metallic and fiber optic cable from the property boundary into the building or building complex;

3.18.3 To the extent legally possible, the right to use any available space owned or controlled by either Party in the building or building complex to install equipment and facilities;

3.18.4 The right of ingress and egress to such space; and

3.18.5 The right to receive electrical power.

3.19 Alterations and modifications of poles, ducts or right of ways shall be performed and paid for in accordance with the Department regulations.

3.20 [INTENTIONALLY LEFT BLANK]

3.21 [INTENTIONALLY LEFT BLANK]

3.22 [INTENTIONALLY LEFT BLANK]

Section 4 Unused Transmission Media

4.1 **Definitions:**

4.1.1 Unused Transmission Media is physical inter-office transmission media (e.g., optical fiber, copper twisted pairs, coaxial cable) which have no lightwave or electronic transmission equipment terminated to such media to operationalize transmission capabilities.

4.2 [INTENTIONALLY LEFT BLANK]

ATTACHMENT VII NUMBER PORTABILITY

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MCIM-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT

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ATTACHMENT VII

NUMBER PORTABILITY

Section 1 Provision of Number Portability

The Parties shall provide number portability on a reciprocal basis to the extent technically feasible, and in accordance with rules and regulations as from time to time adopted by the FCC or the Department. Until Number Portability is implemented by the industry pursuant to regulations issued by the FCC or the Department, the Parties agree to provide Interim Number Portability ("INP") to each other through remote call forwarding, route indexing, and full NXX code migration. Charges for INP are as set forth in Attachment I. Currently available INP shall be provided by BA to MCIm in accordance with FCC Rules and Regulations.

Section 2 Interim Number Portability (INP)

The Party providing the INP will have control of the methodology utilized in the provision of INP on a per line basis. INP will generally be provisioned on a RCF basis in each end office. Transition to the RI method of INP provision will be based upon the volume of INP traffic from the providing Party's end office to the other Party. Implementation of RI will be based on the mutual agreement of the Parties. Where either Party has activated an entire NXX code for a single end user, or activated a substantial portion of an NXX code for a single end user with the remaining numbers in the NXX either reserved for future use or otherwise unused, the full NXX code will be migrated from one Party's network to the other Party's network.

2.1 RCF: RCF is an INP method that provides subscribers with service-provider portability by redirecting calls within the telephone network. When RCF is used to provide INP, calls to the ported number will first route to the porting Party's switch to which the ported number was previously assigned. That Party's switch will then forward the call to a number associated with the other Party's designated switch to which the number is ported. The receiving Party will indicate the number of paths that should be provisioned by the porting Party's switch.

2.2 [INTENTIONALLY LEFT BLANK]

2.2.1 [INTENTIONALLY LEFT BLANK]

2.2.2 [INTENTIONALLY LEFT BLANK]

2.2.3 RI: RI will be provisioned directly from the porting Party's switch to the receiving Party's switch. The direct trunks installed between the switches will utilize SS7 signaling which will enable the delivery of caller identification of the receiving Party's switch. Both Parties will mutually agree to utilize the RI method of INP. The porting Party will arrange for the installation of the necessary end office trunking and signaling between the switches involved prior to the porting of any number between the switches.

2.3.1 [INTENTIONALLY LEFT BLANK]

2.3.2 [INTENTIONALLY LEFT BLANK]

2.3.3 [INTENTIONALLY LEFT BLANK]

2.3.4 [INTENTIONALLY LEFT BLANK]

2.4 Full NXX Code Reassignment: Portability for an entire NXX code shall be implemented by reassigning the NXX code from one Party's network to the other Party's network in the Local Exchange Routing Guide. Such a transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry lead-times for movement of NXX codes from one switch to another switch.

2.5 Other Currently Available Number Portability Options. MCIm may also request Direct Inward Dial Trunks pursuant to applicable tariffs. If interim number portability is made available to any other party for information services traffic (e.g., 976), it will be made available at the same time to MCIm.

2.6 Other Currently Available Number Portability Provisions:

2.6.1 The Parties shall exchange SS7 TCAP messages as required for the implementation of CLASS or other SS7 TCAP-based features.

2.6.2 The Parties shall disclose to each other any technical or capacity limitations that would prevent use of a requested INP method in a particular switching office. Parties shall cooperate in the process of porting numbers to minimize subscriber out-of-service time, including updating switch translations. If MCIm has ordered INP with the installation of a loop(link), BA will coordinate the implementation of INP with the loop(link) conversion windows established in Attachment VIII.

2.6.3 For INP, MCIm shall have the right to use the existing BA 911 infrastructure for all 911 capabilities. When RCF is used for MCIm subscribers, both the ported numbers and shadow numbers shall be stored in PSAP databases. MCIm shall have the right to verify the accuracy of the information in the PSAP databases.

2.6.4 When RCF is used to port a subscriber, the donor provider must maintain the LIDB record for that number to reflect appropriate conditions as reported to it by the porting service provider. The donor must outclear call records to MCIm for billing and collection from the subscriber. MCIm shall receive revenue for LIDB look-ups.

2.6.5 BA shall send a CARE transaction 2231 to notify MCIm that access is now provided by a new CLEC for that number.

Section 3 Number Portability (NP)

3.1 The Parties shall provide Number Portability on a reciprocal basis to each other to the extent technically feasible, in accordance with the rules and regulations adopted from time to time by the FCC or the Department. Once Number Portability is implemented pursuant to FCC or Department regulation, either Party may withdraw, at any time and at its sole discretion, its INP offerings, subject to advance notice to the other Party and coordination to allow seamless and transparent conversion of INP end users to Number Portability. Upon implementation of Number Portability pursuant to FCC regulations, both Parties agree to conform and provide Number Portability.

3.1.1 [INTENTIONALLY LEFT BLANK]

3.1.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC Rules and Regulations.

3.1.3 The NP network architecture shall not subject local exchange carriers to any degradation of service compared to BA in any relevant measure, including transmission quality, switching and transport costs, increased call set-up time and post-dial delay.

3.1.4 When an office is equipped with NP, all NXXs in the office will be capable of porting. Upon the first request to port a telephone number within an LNP-capable end office, translations will be changed in all service provided NP-capable end offices to open the NXX for database queries within five (5) days.

3.1.5 [INTENTIONALLY LEFT BLANK]

3.1.6 [INTENTIONALLY LEFT BLANK]

3.1.7 [INTENTIONALLY LEFT BLANK]

3.1.8 When a subscriber ports to another service provider, the donor provider and the porting provider shall input the information to the 911 system to update the 911 tandem switch routing tables and the 911/ALI database to correctly route and provide accurate information to PSAP call centers.

3.1.9 When a subscriber ports to another service provider and has reserved, under tariff or other legally enforceable agreement, line numbers from the donor provider for possible activation at some future points, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber in order to ensure that the end office user subscriber will be permitted to expand its service using the same number range it could have used if it had remained with the donor provider.

3.1.10 During the process of porting a subscriber, the donor service provider shall implement the 10-Digit trigger feature. When the donor provider receives the porting request, the 10-Digit trigger shall be applied to the subscriber's line the day prior to the order due date in order to overcome donor network time delays in the disconnection of the subscriber.

3.2 Joint Cooperation

Both Parties shall:

3.2.1 Support all emergency and operator services;

3.2.2 Use scarce numbering resources efficiently and administer such resources in a competitively neutral manner;

3.2.3 Jointly cooperate with each other to ensure that both Parties shall be able to rate and bill all types of calls; and

3.2.4 Jointly cooperate with each other to apply NP consistently on a nationwide basis and in accordance with all FCC Rules and Regulations.

Section 4 Requirements for INP and NP

4.1 White and Yellow Page Listings. BA shall provide and maintain for MCIm one

(1) white page and one (1) yellow page (if applicable) listing for each MCIm subscriber that has ported its number from BA, consistent with the provisions of Section 7 of Attachment VIII. The listing and handling of listed and nonlisted telephone numbers will be at least at parity with that provided by BA to its own subscribers.

4.2 Cut-Over Process

The Parties shall cooperate in the process of porting numbers from one carrier to another so as to limit service outage for the ported subscriber. This shall include, but not be limited to, completing the physical work within five (5) minutes and completing line translations within sixty (60) minutes.

4.3 **Testing.** The Parties shall cooperate in conducting testing to ensure interconnectivity between systems. Parties shall inform each other of any system updates that may affect each other's network and shall perform tests to validate the operation of the network. Additional testing requirements may apply as specified by this Agreement.

4.4 Engineering and Maintenance. The Parties will cooperate to ensure that performance of trunking and signaling capacity is engineered and managed at levels which are at least at parity with that provided by BA to its subscribers and to ensure effective maintenance testing through activities such as routine testing practices, network trouble isolation processes and review of operational elements for translations, routing and network fault isolation. Additional specific engineering and maintenance requirements shall apply as specified in this Agreement.

4.5 **Recording and Billing.** The Parties shall provide each other with accurate billing and Subscriber Account Record Exchange data for subscribers whose numbers have been ported.

4.5.1 [INTENTIONALLY LEFT BLANK]

4.5.2 BA shall provide MCIm call detail records identifying each IEC that are sufficient to allow MCIm to render bills to IECs for calls IECs place to ported numbers in the BA network which BA forwards to MCIm for termination.

4.6 **Operator Services and Directory Assistance.** With respect to operator services and directory assistance associated with NP, the Parties shall provide the following:

6

4.6.1 [INTENTIONALLY LEFT BLANK]

4.6.1.1 [INTENTIONALLY LEFT BLANK]

4.6.1.2 [INTENTIONALLY LEFT BLANK]

4.6.1.3 The Parties shall allow each other to order provisioning of TLN calling cards and BNS in each other's LIDB for ported numbers and shall allow each other to access each other's LIDB. MCIm's obligations under this Section 4.6.1.3 shall commence if and when MCIm deploys LIDB.

4.6.1.4 Where BA has control of directory listings for NXX codes containing ported numbers, BA shall maintain entries for ported numbers as specified by MCIm.

4.6.2 [INTENTIONALLY LEFT BLANK]

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ATTACHMENT VIII

BUSINESS PROCESS REQUIREMENTS

Section 1. General Business Requirements

1.1 Procedures

1.1.1 BA Contact with Subscribers

1.1.1.1 MCIm at all times shall be the primary contact and account control for all interactions with its subscribers, except as specified by MCIm. MCIm subscribers include active MCIm subscribers as well as those for whom service orders are pending.

1.1.1.2 BA shall ensure that any BA personnel who may receive subscriber inquiries, or otherwise have opportunity for subscriber contact: (I) provide appropriate referrals and telephone numbers to subscribers who inquire about MCIm services or products; (ii) do not in any way disparage or discriminate against MCIm, or its products or services; and (iii) do not initiate discussion about BA products or services during that same inquiry or subscriber contact.

1.1.1.3 BA shall not use MCIm's request for subscriber information, order submission, or any other aspect of MCIm's processes or services to aid BA's marketing or sales efforts. BA retail reserves the right to use the notice of disconnection of its own subscribers as an opportunity to remarket to end users.

1.1.2 Expedite, Escalation, and Disaster Procedures

1.1.2.1 No later than thirty (30) days after the Effective Date of this Agreement, BA and MCIm shall develop mutually acceptable escalation and expedite procedures which may be invoked as required to correct servicing failures associated with the Pre-Ordering, Ordering, Provisioning, Maintenance, Repair and Subscriber Usage Data transfer processes and Billing. In addition, BA and MCIm will establish

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intercompany escalation lists for purposes of handling subscriber and other matters which require attention/resolution outside of normal business procedures. These escalation lists shall be provided by BA to MCIm and by MCIm to BA prior to the Effective Date of this Agreement. Any permanent change to the escalation contact list by either Party shall be provided to the other Party at least one (1) week before such changes become effective. Temporary changes to the list, as the result of illness, vacation or other similar short term event, shall be communicated as early as practical.

1.1.2.2 If an electronic interface used to exchange information and gain access to functionality for necessary Pre-Ordering, Service Ordering, Provisioning, Maintenance, Billing, and Repair is rendered inoperable for any of these functions, the Parties agree to (i) work cooperatively to expeditiously correct this situation and (ii) invoke interim interface methodologies required to support the affected function. These interim methodologies will be mutually agreed upon and documented in a reciprocal intercompany operations guide to be completed by the Parties within ninety (90) days of the Effective Date of this Agreement.

1.1.2.3 BA shall provide MCIm access to BA OSS functionality during the same hours of operation that BA representatives have access to these systems.

1.1.3 Operational and Technological Changes

1.1.3.1 BA shall notify MCIm of any operational or technological (e.g., network, systems interfaces) changes that affect the manner in which MCIm obtains Per-Ordering, Ordering, Provisioning, Maintenance, Billing, and Repair and other functions or affects the physical or logical interconnect methodologies or functionality of Network Elements purchased by MCIm no less than six (6) months before BA plans to implement such change. The Parties may mutually agree to shorter notice periods.

1.1.4 Subscriber of Record

1.1.4.1 BA shall recognize MCIm as the Subscriber of Record for all

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Network Elements or services for resale ordered by MCIm and shall send all notices, invoices, and information which pertain to such ordered services directly to MCIm. MCIm will provide BA with addresses to which BA shall send all such notices, invoices, and information.

1.1.5 Work Center Interface Procedures

1.1.5.1 BA and MCIm shall, within sixty (60) days of the Effective Date of this Agreement, develop and implement Work Center Interface Procedures for each function/business process.

1.2 Service Offerings

1.2.1 Changes in Service Offerings

1.2.1.1 BA shall notify MCIm of any proposed changes in the terms and conditions under which BA offers unbundled Network Elements or interconnections, including but not limited to, the introduction or discontinuance of any features, functions or services at least one hundred twenty (120) days prior to the effective date of said changes.

1.2.1.2 BA initiated changes to unbundled Network Elements provided under this Agreement will be made with the consent of MCIm. Notification to MCIm of introduction of new Network Elements features or functionality by BA will be made in accordance will appropriate state jurisdiction regulations for new tariff filings.

1.2.2 Essential Services

1.2.2.1 BA shall designate an access line as subject to priority restoration upon MCIm's request in accordance with BA's existing procedures for such restoration and consistent with industry, state and federal standards and regulations.

1.2.3 [INTENTIONALLY LEFT BLANK]

1.2.4 TTY/TDD

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1.2.4.1 BA shall cooperate with MCIm to provide services and equipment necessary to serve TTY/TDD subscribers.

1.2.5 Blocking Services

Upon request from MCIm, BA shall provide blocking of 700, 900, and 976 services, or other services of similar type as may now exist or be developed in the future. This BA provided blocking option will be available on resold services and line ports associated with unbundled local switching elements. BA shall also provide BNS, including required LIDB updates for blocking completion of bill -to-third party and collect calls, on resold services and unbundled local switching elements on a nondiscriminatory basis in parity to which BA provides the same options to itself.

1.2.6 Training Support

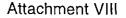
1.2.6.1 BA's methods, procedures and training supplied to customer contact personnel will require it to provide parity service for all work including that performed in conjunction with a BA service provided to MCIm for resale, unbundled Network Elements provided to MCIm, or services provided by BA to its end user customers. BA technicians and all other customer contact personnel will receive training developed by BA based upon BA's requirement to serve all carriers and customers in a non-discriminatory basis.

1.2.6.2 BA shall provide user guides and training to a reasonable number of MCIm employees on the use of the mechanized interface gateway to the BA operating support systems used by MCIm in the Pre-Ordering, Ordering, Provisioning, Maintenance, Repair, and Billing of resold services and unbundled Network Elements. This training will also include information on the use and completion of the various forms and system screens needed to complete the aforementioned business functions.

1.2.7 CICs

When MCIm subscribes to services under Attachment IV, BA shall provide MCIm a list of those IECs with access service at each of the BA access tandems that MCIm's end office switch subtends and of the CICs the IECs are using in those

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tandems. To the extent BA knows which IEC services are utilizing specific CICs, BA will provide MCIm with a list of these services and associated CICs. The Parties will develop mutually agreed upon methods to keep this list current.

1.3 Systems Interfaces

BA shall provide MCIm with the ability to access BA's operational support systems via electronic interfaces for transferring and receiving information and executing transactions for business functions related to Pre-Ordering, Service Ordering, Provisioning, Maintenance and Repair, and Billing for Local Resale, unbundled Network Elements, interconnection, and other BA services obtained by MCIm pursuant to this Agreement. Unless otherwise required by law, BA shall modify these interfaces or provide additional interfaces which support the applicable industry standards when technically feasible. The implementation schedule for these interfaces will be Mutually Agreed to by the Parties.

Section 2. Pre-Ordering

2.1 General Business Requirements

2.1.1 SAG

2.1.1.1 MCIm may access address verification information, to verify premise address, through either the GUI or EIF interface.

2.1.2 CLASS and Custom Features

2.1.2.1 MCIm may, for services purchased for resale, order the entire set of CLASS and Custom Calling Features and functions or a subset of any one or any combination of such features available in each separate BA end office switch. MCIm, when purchasing unbundled Network Elements from BA, may equip these elements with these same features and functions to the extent available in BA end office switches. BA shall provide MCIm a list of features and functions available, for use with unbundled elements, on an end office by end office basis. In addition, BA shall provide MCIm with a system interface allowing it to verify availability of these services, features and functions for resale. MCIm may access product and service availability information on an end office by end office basis through either the GUI or

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EIF interface.

2.1.3 Subscriber Payment History

2.1.3.1 The Parties shall make available to a mutually agreed upon thirdparty credit reporting agency, on a timely basis, such subscriber payment history information that the Parties mutually agree is sufficient to allow each Party to determine the creditworthiness of a person or entity that applies for that Party's local service or intraLATA toll Telecommunications Service(s). At a minimum such information shall include:

2.1.3.1.1 Applicant's name;

2.1.3.1.2 Applicant's address;

2.1.3.1.3 Applicant's previous phone number, if any;

2.1.3.1.4 Amount, if any, of unpaid balance in applicant's name in excess of \$25.00

2.1.3.1.5 Whether applicant is delinguent on payments;

2.1.3.1.6 Length of service with prior local provider;

2.1.3.1.7 Whether applicant had local service terminated or suspended within the last six months with an explanation of the reason therefor; and

2.1.3.1.8 Whether applicant was required by prior local provider to pay a deposit or make an advance payment, including the amount of each.

2.1.3.2 Such information shall be provided on the condition that the credit reporting agency only make such information available to the carrier to which the person or entity in question has applied for Telecommunication Service.

2.1.3.3 BA shall not refuse service to MCIm for any potential MCIm subscriber on the basis of that subscriber's past payment history with BA.

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2.1.4 Number Administration/Number Reservations

2.1.4.1 MCIm will obtain NXX codes from the NXX Code Administrator for the State of Connecticut. Further, BA shall provide MCIm with access to abbreviated dialing codes, access arrangements for 555 line numbers, and the ability to obtain telephone numbers, including vanity numbers, while a subscriber is on the phone with MCIm. BA shall provide the same range of number choices to MCIm, including choice of exchange number, as BA provides its own subscribers. Reservation and aging of numbers shall remain BA's responsibility.

2.1.4.2 BA shall load MCIm's NXX on the same basis as BA loads them for itself or its Affiliates.

2.1.4.2.1 [INTENTIONALLY LEFT BLANK]

2.1.4.3 BA will provide MCIm services purchased for resale using NXX codes and numbers assigned to BA and available in the BA switch on a non-discriminatory basis equal to that BA assigns numbers to itself and other telecommunications service providers.

2.1.4.4 MCIm may request that BA install MCIm NXX codes in BA switches. BA will comply with this request based on the Parties jointly cooperating to ensure all appropriate mechanisms are in place to satisfy all billing requirements. MCIm agrees to compensate BA for all reasonable expenses, including but not limited to additional switch memory and support system inventory, associated with opening MCIm's code. [MCIm agrees that this code will be used solely for the provision of local exchange services to end user customers within the normal serving area of the switching entity.]

2.1.4.5 BA shall accept MCIm orders for vanity numbers and blocks of numbers for use with complex services including, but not limited to, DID, CENTREX, and Hunting arrangements, on an equal basis BA provides such numbers to itself and other similarly situated local exchange carriers.

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2.1.4.6 For simple services number reservations, BA shall provide realtime confirmation of the number reservation. For number reservations associated with complex services, BA shall provide confirmation of the number reservation under the same terms as BA processes these requests for itself.

2.2 Service Order Process Requirements

2.2.1 **DDD**

2.2.1.1 BA shall supply MCIm with due date intervals, and or access to systems through either the GUI or the EIF interface which contain current available due dates.

2.2.2 Specific Unbundling Requirements

2.2.2.1 When ordering a combination of unbundled Network Elements, MCIm shall have the option of ordering all features, functions and capabilities of each Network Element.

2.2.2.2 When MCIm orders unbundled Network Elements, BA shall provision all features, functions, and capabilities of the Network Elements as specified by MCIm on each order which include, but are not limited to:

2.2.2.2.1 The basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to BA's subscribers, such as telephone number, white page listing, and dial tone; and

2.2.2.2.2 All other features that the switch is capable of providing, including, but not limited to, Custom Calling, custom local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch.

2.3 Systems Interfaces and Information Exchanges

2.3.1 General Requirements

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2.3.1.1 BA shall provide to MCIm, through either the GUI or EIF interface, a list by end office of all CLASS and Custom features and functions.

2.3.2 Pre-Ordering and Provisioning for Resale Services

2.3.2.1 BA will make available to MCI or MCIm the ability to check the availability of interLATA carriers for subscriber selection on an end office by end office basis through either the GUI or EIF interface.

2.3.2.2 [INTENTIONALLY LEFT BLANK]

2.3.2.3 BA shall provide MCIm with access to a CSR without requiring MCIm to produce a signed LOA based on MCIm's blanket representation that the subscriber has authorized MCIm to obtain such CPNI. MCIm must positively indicate (in the appropriate field on the interface) that it has subscriber authorization for each CSR requested. BA reserves the right to conduct periodic audits to ensure compliance with applicable CPNI requirements.

2.3.2.3.1 BA will provide MCIm the ability to retrieve BA CSR information which will allow MCIm to obtain the subscriber profile, including subscriber name, billing and service addresses, billed telephone number(s), and identification of features and services on the subscriber account(s). BA will make available to MCIm the ability to obtain information on all features and services available in the end office where the subscriber's services are currently provisioned.

2.3.3 Pre-Ordering and Provisioning for Unbundling

2.3.3.1 BA shall provide MCIm, upon its request, a list of all technically available functionalities for unbundled Network Elements.

2.3.3.2 For the purpose of determining feasible points of interconnection, BA shall provide to MCIm, upon MCIm's request, current engineering and plant records and drawings regarding, but not limited to, conduit, fiber, switch port, loop feeder, and distribution. Through its operations or

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support systems, BA also shall provide to MCIm data necessary for MCIm to determine feasible points of interconnection; provided that, where such systems contain confidential data, MCIm must demonstrate to BA that MCIm has received appropriate authorization from the relevant customer as a precondition to MCIm's access to the system.

2.3.3.3 BA shall provide MCIm, upon its request, advance information of the details and requirements for planning and implementation of NPA splits at least six (6) months prior to implementation of such splits.

Section 3. Ordering and Provisioning

3.1 General Business Requirements

3.1.1 Ordering and Provisioning Parity

3.1.1.1 During the term of this Agreement, BA shall provide necessary ordering and provisioning business process support as well as those technical and systems interfaces as may be required to enable MCIm to provide at least the same level and quality of service for all resale services, and unbundled Network Elements as BA provides itself in the provisioning of local exchange services, and all other similarly situated local exchange carriers. BA shall provide MCIm with the same level of ordering and provisioning support as BA provides itself in accordance with standards and performance measurements of applicable law or regulation.

3.1.2 SPOC

3.1.2.1 **Unbundled Network Elements.** BA shall provide a Local Carrier Service Center or equivalent which shall serve as MCIm's SPOC for all activities involved in the ordering and provisioning of BA's unbundled Network Elements and associated features, and functions. BA will provide a separate center for resale services. The SPOC shall accept orders through an electronic interface for MCIm according to the same schedule BA processes end user service requests for itself and other similarly situated local exchange carriers. The SPOC servicing MCIm for

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unbundled Network Elements will provide MCIm telephone numbers as appropriate to answer questions and resolve problems associated with the ordering and provisioning of unbundled elements. These numbers will be available as needed to support MCIm during normal business hours for BA service centers.

3.1.2.1.1 **Unbundled Network Elements.** BA shall provide, as requested by MCIm, through the SPOC, provisioning and premises visit installation support in the form of coordinated scheduling, status, and dispatch capabilities during the same hours and subject to the same conditions under which BA provides dispatch for itself and other similarly situated local exchange carriers.

3.1.2.2 **Resale.** MCIm will have access to the BA Resale Services Operations Center Help Desk for trouble administration for resold services seven (7) days a week twenty-four (24) hours per day. Resellers may submit orders through the electronic interface twenty-four (24) hours per day seven (7) days a week, with the exception of times when the system may be down for normal maintenance. Orders input by resellers out of the hours the BA Operations Center is open will be placed in queue until the center reopens. The BA Resale Services Operations Center Help Desk will be staffed by competent, knowledgeable personnel trained to answer questions and resolve problems in connection with the ordering and provisioning of resale services.

3.1.2.2.1 **Resale.** MCIm shall be able to contact the BA Services Operations Center Help Desk from 8:00 a.m. to 6:00 p.m. Monday through Friday to arrange provisioning and premises visit installation support in the form of coordinated scheduling, status, and dispatch capabilities.

3.1.3 Carrier Selection

3.1.3.1 For services for resale or unbundled Network Elements, BA shall provide MCIm the capability to order local service, intraLATA, interLATA, and international toll services by entering the MCIm subscriber's choice of carrier on a single order. BA shall provide MCIm with the capability to order separate interLATA and intraLATA carriers on a line or trunk basis.

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3.1.3.2 [INTENTIONALLY LEFT BLANK]

3.1.4 Notification to Long Distance Carrier

3.1.4.1 BA agrees to notify MCI using OBF approved Customer Account Record Exchange (CARE) transactions whenever an MCI subscriber is provided local service through resale. BA will accept / process end user PIC selections for MCIm subscribers only from MCIm. Any IEC submitted PIC changes associated with MCIm subscribers must be directed to MCIm in a timely manner. INP telephone numbers will be marked as ineligible for presubscription in BA systems.

3.1.4.2 BA shall support and implement new TCSIs)defined by OBF in support of local resale to enable MCIm to provide seamless subscriber service.

3.1.4.2.1 BA shall implement TCSIs used in conjunction with the new LSP Identification Code for handling Account Maintenance, Subscriber Service, and Trouble Administration issues. These TCSIs include 4001, 4201, 4203, 4204, 4301, 2618, and 3148.

3.1.4.2.2 [INTENTIONALLY LEFT BLANK]

3.1.4.3 [INTENTIONALLY LEFT BLANK]

3.1.4.4 BA shall provide the PTN on purchased CARE lists of MCI PIC'd and non-MCI PIC'd subscribers.

3.2 Service Order Process Requirements

3.2.1 **OBF Compliance**

3.2.1.1 BA and MCIm agree to work cooperatively to follow the OBFdeveloped ordering and provisioning process guidelines. These processes include pre-order service inquiry, pre-order service inquiry response, firm order, acknowledgment/ rejection, firm order confirmation, OEC, and completion notification. BA agrees to work cooperatively to

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implement future OBF-developed processes related to ordering and provisioning. The Parties acknowledge and agree that use of BA terminology instead of OBF terminology in this Attachment VIII does not affect the Parties' obligations under this Attachment VIII.

3.2.2 Service Migrations and New Subscriber Additions

3.2.2.1 For resale services, BA shall not require a disconnect order from a subscriber, another local service provider, or any other entity, to process an MCIm order to establish MCIm Local Service and/or migrate a subscriber to MCIm local service.

3.2.2.2 BA shall not disconnect any subscriber service or existing features at any time during the migration of that subscriber to MCIm service without prior MCIm agreement.

3.2.2.3 For services provided through unbundled Network Elements, BA shall recognize MCIm as an agent for the subscriber in coordinating the disconnection of services provided by BA. In addition, BA shall not disconnect any BA services provided to the BA subscriber prior to the due date and time requested by MCIm and committed to by BA. In the event MCIm has not completed its installation of Network Elements, by this requested and committed to time, BA will delay its disconnect of the end users' service on request by MCIm.

3.2.2.4 Unless otherwise directed by MCIm, when MCIm orders resale services all trunk or telephone numbers currently associated with existing services shall be retained without loss of feature capability and without loss of associated ancillary services including, but not limited to, Directory Assistance and 911/E911 capability. MCIm will specify the features, functions, capabilities and call routing to be provided in the connection of unbundled Network Elements. BA will not assume when reconnecting the elements that were part of a bundled retail service that BA provided to the end user that MCIm will retain the same features.

3.2.2.5 For subscriber conversions requiring coordinated cut-over activities, on a per order basis, BA and MCIm will Mutually Agree on a scheduled conversion time, which will be a designated two-hour time period within a designated date.

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3.2.2.5.1 BA and MCIm will coordinate activities of all work groups involved with the conversion. This coordination will include, but not be limited to, work centers charged with manual cross-connects, electronic cross-connect mapping, and switch translations (including but not limited to, implementation of interim local number portability translations).

3.2.2.5.2 BA will notify MCIm when conversion is complete.

3.2.2.5.3 End user service interruptions will be kept to the minimal time necessary to complete the conversion and be scheduled jointly by BA and MCIm for a time designed to minimize customer impact.

3.2.3 Intercept Treatment and Transfer of Service Announcements

3.2.3.1 BA shall provide unbranded intercept treatment and transfer of service announcements to MCIm's subscribers who have chosen to change to MCIm-provided local exchange service without porting their number or when MCIm requests a disconnect of a number ported under an INP arrangement. BA shall provide such treatment and transfer of service announcement for a period equal to that which BA provides its own similarly situated customers.

3.2.4 DDD

3.2.4.1 MCIm shall specify on each order the DDD. This due date will, where appropriate for unbundled Network Elements or resold services, reflect either the first available due date for the type and quantity of services requested in the specific location as obtained from the electronic interface for schedules provided by BA or at a longer interval. BA shall not complete the disconnect order prior to the DDD.

3.2.4.2 If the DDD falls after the standard order completion interval BA shall complete the order on the DDD.

3.2.4.3 On resold service requests, subsequent to an initial order

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submission, MCIm may request a new/revised due date that is earlier than the minimum defined interval. BA will make reasonable efforts to comply with MCIm's request.

3.2.4.4.1 With respect to resale and unbundled Network Elements, any special or preferred scheduling options available, internally or externally to BA, for ordering and provisioning services shall also be available to MCIm.

3.2.5 Subscriber Premises Inspections and Installations

3.2.5.1 MCIm shall perform or contract for all needs assessments, including equipment and installation requirements, at the subscriber premises.

3.2.5.2 BA shall provide MCIm with the ability to schedule subscriber premises installations.

3.2.5.3 BA shall provide MCIm access to intrabuilding riser and lateral cabling beyond the NID, at MCIm's request, subject to the same terms and conditions as BA provides such access to third parties.

3.2.6 Order Confirmation

3.2.6.1.1 Unbundled Network Elements. BA shall provide to MCIm, via an electronic interface, a FOC for each MCIm order. The FOC shall contain on a per order basis the Committed Due Date for order completion, BA service order number, telephone number(s) or circuit ID(s).

3.2.6.1.2 **Resale.** BA shall provide MCIm, via an electronic interface, a SOC for each MCIm order. BA shall provide MCIm a SOC indicating the order was received and processed by BA, the PON, the BA service order number and the Committed Due Date.

3.2.6.2 Unbundled Network Elements

For a revised FOC, on the electronic interface, BA shall provide MCIm's

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purchase order number and MCIm's version number and the appropriate
BA service order number. BA shall provide comparable information, to the extent feasible, where revised FOC's are provided in a manual mode.

3.2.7 Order Rejections

3.2.7.1 [INTENTIONALLY LEFT BLANK]

3.2.7.1.1 Unbundled Network Elements. BA shall reject and return to MCIm any order that BA cannot provision, because of technical reasons, missing information, or jeopardy conditions. When an order is rejected, BA shall, in its reject notice, specifically describe all of the reasons for which the order was rejected.

3.2.7.1.2 BA agrees to accept from MCIm verbal correction of order entry errors for unbundled Network Elements in those cases in which the electronic interface provided to support the ordering process is not properly functioning or is otherwise not available.

3.2.7.2 **Resale.** BA may reject any order received by BA that does not meet mutually agreed order entry guidelines. If BA receives a correctly formatted order with missing or incorrect information, BA will query MCIm for the correct information.

3.2.8 Service Order Changes

3.2.8.1 When an installation or other MCIm ordered work requires a change from the original MCIm service order, BA shall obtain MCIm's authorization in advance of performing the installation or other work if the change in scope of work will: (i) subject MCIm to an additional charge, and/or (ii) alter the manner in which MCIm will receive the service. In any such cases, BA shall provide MCIm an estimate of additional labor hours, of additional materials and of how the service is to be provisioned, as applicable. After any such installation or other work is completed, BA shall notify MCIm, within the next bill date for that service, of the actual labor hours, materials and/or service provisioning in accordance with regular service order completion schedules. Notwithstanding the above, in cases of special construction, or cases where BA is awaiting a bill from

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an outside vendor, additional billing cycles may be required prior to providing hours and materials costs.

3.2.8.2 If an MCIm subscriber requests a service change at the time of installation or other work being performed by BA on behalf of MCIm, BA, while at the subscriber premises, shall direct the MCIm subscriber to contact MCIm.

3.2.9 Jeopardy Situations

3.2.9.1 BA will to the extent it has knowledge provide MCIm notification of any jeopardy situations prior to the committed Due Date or appointments, and any other delay or problem in completing work specified on MCIm's service order as detailed on the FOC or SOC.

3.2.10 Cooperative Testing

3.2.10.1 Network Testing

3.2.10.1.1 BA shall perform all pre-service testing prior to the scheduled completion of the order, including testing on local service facilities and switch translations, including, but not limited to, verification of features, functions, and services ordered by MCIm.

3.2.10.1.2 As soon as practicable after MCIm's request for scheduled cooperative testing, BA shall perform said testing with MCIm (including trouble shooting to isolate any problems) to test Network Elements purchased by MCIm in order to identify any problems.

3.2.10.2 Systems and Process Testing

3.2.10.2.1 BA shall cooperate with MCIm upon its request to ensure that all operational interfaces and processes are in place and functioning properly and efficiently. Testing criteria will be defined jointly by the Parties and should simulate actual operational procedures and systems interfaces to the greatest extent possible.

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The Parties will Mutually Agree on the time frames and locations where such tests may be scheduled so as to provide a controlled environment without excessive disruption of live work flow and center operations.

3.2.11 Service Suspensions/Restorations

3.2.11.1 Upon MCIm's request through a Suspend/Restore Order, BA shall suspend or restore the functionality of any Network Element, feature, function, or resale service. BA shall provide MCIm restoration priority on a per Network Element or combination basis in a manner that provides parity between BA end users and the end users of all other Telecommunications Carriers.

3.2.12 Disconnects

3.2.12.1 BA shall provide database access to MCIm that will enable MCIm to confirm service disconnections.

3.2.13 Order Completion Notification

3.2.13.1 With respect to orders for resale and unbundled Network Elements upon completion of a service order in its system(s), BA will update the status of this order, to reflect completion, MCIm can access this service order status via an electronic interface.

3.2.14 Fulfillment Process

3.2.14.1 MCIm shall conduct all activities associated with the account fulfillment process for all MCIm subscribers.

3.2.15 Specific Unbundling Requirements

3.2.15.1 MCIm may order and BA shall provision unbundled Network Elements either individually or in combinations on a single order unless BA demonstrates technical infeasibility.

3.2.15.2 Prior to providing service in a specific geographic area or when

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MCIm requires a change of network configuration, MCIm may elect to place order with BA requiring BA to prepare Network Elements and switch translations in advance of MCIm's submission of orders for such additional Network Elements. If such a preparation order is placed, MCIm shall, if necessary, participate in joint planning with BA.

3.2.15.3 When MCIm orders Network Elements that are currently connected to each other, BA shall ensure such Network Elements remain so connected and functional.

3.2.15.5 Network Elements shall be identified and ordered by MCIm so that they can be provisioned together. Orders for Network Elements to be used in combinations must reflect those combinations where the Elements are provisioned in a logical contiguous manner. MCIm shall be responsible for identifying any available options or features normally associated with each Network Element or combinations thereof ordered. Network Elements that are not provisioned in a logical contiguous manner must be ordered as separate Network Elements.

3.2.15.6 BA will provide the Network Elements as ordered by MCIm. MCIm will ensure that such Network Elements are technically compatible. When MCIm orders Network Elements, BA shall provide technical assistance to ensure compatibility.

3.2.15.7 Each order for Network Elements will contain administration, bill, contact, and subscriber information, as required on the order forms or system templates that support ordering of unbundled Network Elements.

3.3 Systems Interfaces and Information Exchanges

3.3.1 General Requirements

3.3.1.1 BA shall provide MCIm electronic interface(s) for transferring and receiving information and executing transactions for business functions directly related to Pre-Ordering, Ordering, Provisioning, Maintenance, Repair and Billing of Telecommunications Services features, and functions. The interfaces will provide MCIm customer-facing personnel with a level of information and systems functionality that BA provides its

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corresponding personnel in service centers and repair bureaus.

3.3.1.1.2 [INTENTIONALLY LEFT BLANK]

3.3.1.2 BA interfaces shall provide MCIm with the same process and system capabilities for both residence and business ordering and provisioning. MCIm shall not be required to develop distinct processes or interfaces by class of service.

3.3.1.3 BA provided interfaces shall enable MCIm to access information contained in BA OSS to perform the same functions that BA personnel perform using this information. Access to this OSS information will be provided to MCIm during the same hours that it is available to BA personnel.

3.3.1.4 Interim interfaces or processes may be modified, if so agreed by MCIm and BA, during the interim period.

3.3.1.5 Until the real-time, electronic interface is available, BA agrees that the CATC or similar function will accept MCIm orders. Orders will be transmitted to the CATC via an interface or method agreed upon by MCIm and BA.

3.3.1.6 BA shall provide, in conjunction with MCIm, "electronic bonding" between BA and MCIm for those interfaces where real-time, transparent access to data and systems transactions are required in order for BA to support MCIm, and for MCIm to provide features and services to subscribers, as defined by MCIm's operational requirements. Electronic bonding shall be provided, if and when technically feasible, or at such time as industry standards are available for bonding of ordering and provisioning systems.

3.3.2 Ordering and Provisioning for Resale Services

3.3.2.1 BA shall provide MCIm an, electronic interface that allows MCIm to assign telephone number(s).

3.3.2.2 BA shall provide MCIm an, electronic interface to schedule

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dispatch and installation appointments

3.3.2.3 [INTENTIONALLY LEFT BLANK]

3.3.2.4 BA shall provide MCIm an electronic interface that allows MCIm to provide service availability dates.

3.3.2.5 BA shall provide MCIm an electronic interface that transmits status information on service orders. Until a real-time electronic interface is available, BA agrees to provide proactive status on service orders at the following intervals: acknowledgment, order entry confirmation, and completion.

3.3.3 Ordering and Provisioning for Unbundling

3.3.3.1 BA shall provide MCIm an electronic interface that will allow MCIm to determine service Due Date intervals, schedule appointments, and adjust pending order Due Dates in the same time frames used by BA.

3.3.3.2 BA shall provide MCIm information on charges associated with special construction. BA will identify and notify MCIm as soon as possible of the requirement for special construction and any charges associated with necessary construction. BA will not initiate such special construction without MCIm's prior agreement to the charges.

3.3.3.3 BA shall provide MCIm with the capability to initiate and obtain results of mechanized loop tests.

3.3.3.4 BA shall provide MCIm with confirmation of circuit assignments.

3.4 Standards

3.4.1 General Requirements

3.4.1.1 MCIm and BA shall mutually agree upon the appropriate ordering and provisioning codes to be used for Network Elements. These codes shall apply to all aspects of the unbundling of that Network Element or combination of Network Elements and shall be known as data elements as defined by the TCIF-EDI-SOSC.

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3.5 Performance Measurements and Reporting

3.5.1 Cycle Time Measurements

3.5.1.1.1 **Resale.** BA will provide resale service that is at least equal in quality to that provided by BA to any other party to which BA provides the service. BA will measure the quality of service by utilizing the existing New York Public Service Commission service standards that measure retail service where applicable. BA will agree to work cooperatively with MCIm to develop and implement carrier to carrier service standards based on data collected during the initial year of this Agreement.

3.5.1.1.2 Excepting expedited Due Date requests, the following order intervals shall constitute the basis for measuring BA service order performance under this Agreement. MCIm may, at its discretion, modify such measurements from time to time.

3.5.1.2 BA shall provide and acknowledge each and every MCIm service order within one (1) hour of receipt by BA.

3.5.1.3 BA shall process MCIm service orders and provide either (FOC/SOC) of a correct service order or notification of a rejected order, and the detail of the errors, within four (4) hours of receipt of service order from MCIm.

3.5.1.4 BA shall complete any suspend/block/restore order in the same interval it completes suspend/block/restore orders for itself and other similarly situated Telecommunication Carriers.

3.5.1.5 When MCIm specifies a DDD that is greater than the standard intervals defined in this Agreement, BA shall complete ordering and provisioning activities no later or earlier than that date.

3.5.1.6 For expedited Due Date requests, BA shall confirm to MCIm within two (2) business hours after BA receipt of such request from MCIm whether BA can complete an initially-submitted order within the expedited

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3.5.1.7 Subsequent to an order which has been initially submitted by MCIm, MCIm may require a new/revised due date that is earlier than the minimum defined interval.

3.5.1.7.1 For such requests, BA shall confirm to MCIm, as soon as possible, after checking all appropriate organizations required to fulfill the request, whether BA can complete the order within the expedited interval requested by MCIm. Confirmation may be provided by BA via telephone call with follow up confirmation to be provided by BA according to normal procedures and measurement intervals.

3.5.1.8 Cycle time intervals for ordering and provisioning of all resold services and unbundled Network Elements are set forth in 3.5.1.8.2. In the event an order is rejected for any reason mutually agreed upon by BA and MCIm, this interval timeframe will restart when MCIm resubmits an - order to BA.

3.5.1.8.1 [INTENTIONALLY LEFT BLANK]

3.5.1.8.2 Cycle time intervals for ordering and provisioning of resale services and unbundled Network Elements are described below:

PRODUCT OR SERVICE

INTERVAL

| Service Orders With No Dispatch: Business Basic Links/POTS | |
|---|------------------|
| Services | |
| 1-20 lines | 2 businėss days |
| 21-40 lines | 7 business days |
| 41-60 lines | 12 business days |

To be negotiated Over 60 lines W/in 24 hrs of Service **Residential Basic Links/POTS** Order receipt by BA

Services

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| Carrying Ordens With Discretals | |
|--|---------------------------------------|
| Service Orders With Dispatch: Business Basic Links/POTS | |
| Services | |
| 1-9 lines | 5 business days |
| 10-40 lines | |
| | 10 business days |
| 41-60 lines | 14 business days |
| Over 60 lines | Individual case basis |
| Residential Basic Links/POTS | W/in 5 days of Service |
| Services | Order receipt by BA |
| Business Lines/trunks; plant or other | Individual case basis |
| facilities not available | • |
| Centrex Station lines | · · · · · · · · · · · · · · · · · · · |
| 1-9 lines | 5 business days |
| 10-50 lines | 10 business days |
| Over 50 lines | Individual case basis |
| Business/Residential Premium Links | |
| 1-12 links | 8 business days |
| Over 12 links | To be negotiated |
| Extended Links/Private Lines | · · |
| 1-12 Circuits | 9 business days |
| 13-24 Circuits | 14 business days |
| 25-38 Circuits | 18 business days |
| 39-50 Circuits | 22 business days |
| Over 50 Circuits | To be negotiated |

| PRODUCT OR SERVICE | |
|--------------------|--|
| | |

INTERVAL

| With no dispatch Business or Residential | Within 4 hours after Service Order receipt by BA | |
|--|---|----|
| Unbundled switching elements Business or Residential | Within 4 hours | ** |
| Line Port/Analog Private Line 1-12 circuits 13-24 circuits 25-38 circuits | 9 business days 14 business days 18 business days | |

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| 39-50 circuits | 22 business days | <u> </u> |
|----------------------------------|------------------|----------|
| Over 50 circuits | To be negotiated | |
| Basic Rate Interface-ISDN Port | | |
| Local 1-12 lines | 8 business days | |
| virtual 1-12 lines | 12 business days | |
| Primary Rate Interface-ISDN Port | | |
| 1-12 lines | 12 business days | |
| T1-Flexpath equivalent | 15 business days | |
| Other unbundled elements with no | | |
| dispatch | Within 24 hours | |
| Business or Residential | | |

3.5.1.9 [INTENTIONALLY LEFT BLANK]

3.5.1.10 [INTENTIONALLY LEFT BLANK]

3.5.1.11 BA shall provide MCIm's appointment times within a four (4) hour block of time.

3.5.2 Quality Measurements

3.5.2.1 BA ordering and provisioning functions performed for MCIm shall meet the following Performance Quality Measurements unless otherwise negotiated with MCIm or otherwise determined by the New York Public Service Commission's industry-wide service quality proceeding, Case 97C-0139, based on BA's provision of documentation related to its own Quality Measurements:

| Provisioning Function Performance Quality Measurement | |
|--|---------------------------------|
| Resale Installation Provisioned Correctly in less than five (5) days | Residence: 85% Business: 85% |
| Unbundling Installation Provisioned Correctly in less than five (5) days | Residence: 85% Business: 85% |

| Provisioning Function | Performance Quality Measurement |
|----------------------------|------------------------------------|
| Missed Appointments for | Residence: <u><</u> 3% |
| Resale Services | Business: <u><</u> 3% |
| Missed Appointments for | Residence: <u><</u> 3% |
| Unbundled Network Elements | Business: <u><</u> 3% |

3.5.2.2 BA shall maintain provisioning service that results in no more than 3.5% of orders resulting in one or more trouble reports within thirty (30) days of installation.

3.5.2.3 BA shall maintain provisioning service that results in less than 3.5% of orders resulting in one or more dispatches within thirty (30) days of installation.

3.5.2.4 BA shall maintain provisioning service that results in less than 3.5% of orders resulting in one or more subscriber calls within thirty (30) days of installation.

3.5.3 Reporting

3.5.3.1 BA shall provide, at a minimum, the following comparative reports to MCIm, both for MCIm orders and for BA orders, presented by State, Area Code, Central Office, Product Feature, and issue such reports on a monthly basis:

3.5.3.1.1 Total number and percent of jeopardies

3.5.3.1.2 Total number and percent of missed appointments

3.5.3.1.3 Total number and percent of missed firm order confirmation dates

3.5.3.1.4 Total number and percent of rejected orders

3.5.3.1.5 Total number and percent of late rejection notifications

MCIm-BELL ATLANTIC CONNECTICUT INTERCONNECTION AGREEMENT VIII - 26 (LAST REVISED 12/17/98: Amendment Number 1) 3.5.3.2 MCIm may, at its discretion, further request additional and/or modified reporting as business needs demand.

Section 4. Billing and Recording

4.1 Procedures

4.1.1 The Parties shall comply with industry, OBF and other guidelines, as applicable, referred to throughout this Agreement. When new or changed guidelines are introduced into the industry, the Parties agree to negotiate an implementation date for new or changed guidelines.

4.1.2 BA shall record and bill in accordance with this Agreement those charges. MCIm incurs as a result of MCIm purchases of BA services, as set forth in this Agreement.

4.1.3 [INTENTIONALLY LEFT BLANK]

4.1.4 Each service purchased by MCIm shall be assigned a separate and unique billing service identifying code (e.g., USOC) to be utilized in the ordering and billing process. Each such billing code shall enable MCIm to identify the service.

4.1.5 Each bill shall set forth the quantity and description, including jurisdictional nature, of each such service provided and billed to MCIm.

4.1.6 The Parties shall bill each other for each service supplied pursuant to this Agreement at the rates forth in this Agreement or in applicable tariffs as approved by the appropriate state or federal regulatory agency.

4.1.7 The Parties shall bill each other for the charges incurred; provided that, for those usage based charges where actual charge information is not determinable because the jurisdiction (i.e., interstate, interstate/interLATA, intrastate, intrastate/ intraLATA, local) of the traffic is unidentifiable, or for other reason, the Parties shall jointly develop a process to determine the appropriate charges.

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4.1.8 Measurement of unbundled Network Elements usage-based charges shall be in actual access measurements as defined in the Carrier Access Tariffs. The measurement per chargeable traffic types shall be totaled for the entire monthly bill cycle and then rounded to the next whole minute. Resale usage shall be measured as defined in the applicable tariff.

4.1.9 The Parties shall provide to each other at no additional charge a SPOC for handling any billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement. The Parties may establish a separate point of contact for unbundled Network Elements and for Resale Services.

4.1.10 The Parties shall provide each other a single point contact for handling any data exchange questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.

4.1.11 As soon as possible after completion of this Agreement, each Party shall provide the other Party written notice of which form of the monthly bill shall be the official bill to assist the Parties in resolving any conflicts that may arise between the official bill and another form of bill received via a different media which purportedly contains the same charges as are on the official bill.

4.1.12 If either Party requests an additional copy(ies) of a bill, such Party shall pay the other Party a reasonable fee per additional bill copy, unless such copy was requested due to errors, omissions, or corrections or the failure of the transmission to comply with the specifications set forth in this Agreement.

4.1.13 When sending bills via electronic transmission, to avoid transmission failures or the receipt of billing information that cannot be processed, the Parties shall provide each other process specifications. Each Party shall comply with the other Party's processing specifications when transmitting billing data. In the event that a billing transmission is received that does not meet the receiving Party's specifications or that such Party cannot process, such transmission shall be corrected and resubmitted to the sending Party, at the sending Party's expense, in a form that can be processed. The payment due date for such resubmitted transmissions shall be thirty (30) days from the date that the transmission is received in a form that can be processed and that meets the specifications set forth in this Attachment VIII.

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4.1.14 Each Party shall deliver to a location specified by the other Party, billing information via CONNECT: Direct, magnetic tape or paper, or as otherwise, agreed by the Parties. In the event of an emergency, system failure or other such condition which prevents transmitting via CONNECT: Direct, the transmitting Party shall notify the receiving Party of such difficulties within two hours of detection and the transmitting Party shall deliver to a location specified by the receiving Party billing information via magnetic tape or paper, as agreed by the Parties. The Parties acknowledge that all tapes transmitted to the other Party via U.S. Mail or Overnight Delivery and which contain billing data shall not be returned to the sending Party.

4.1.15 Subject to the terms of this Agreement, including without limitation Sections 4.1.16 and 4.1.18 of this Attachment VIII, the Parties shall pay each other within thirty-one (31) calendar days from the Bill Date, or twenty (20) calendar days from the receipt of the bill, whichever is later. If the payment due date is a Saturday, Sunday or has been designated a bank holiday payment shall be made the next business day.

4.1.16 Billed amounts which are being investigated, queried, or for which claims have been filed are not due for payment until such investigations, claims or queries have been fully resolved by both MCIm and BA. Upon resolution of the claim, late payment charges shall apply to MCIm on those portions of the claim not upheld.

4.1.17 [INTENTIONALLY LEFT BLANK]

4.1.18 Billing and Payment

In consideration of the services provided under this Agreement, each Party shall pay the charges set forth in Attachment I. The billing and payment procedures for all charges incurred by the Parties hereunder, except for such charges as are subject to Section 4 of this Attachment, are as follows:

4.1.18.1 Payment Arrangements

Each Party shall bill on a current basis all charges incurred by the other Party under this Agreement for services of whatever kind, including the provision of unbundled Network Elements, established, discontinued or

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performed during the preceding billing period. In addition, each Party may bill in advance for all such services to be provided during the ensuing billing period, except for charges associated with service usage which will be billed in arrears. Each Party also may backbill for prior billing periods for charges or credits arising out of inaccurate local usage percentages. The bill day, the period of service each bill covers, and the payment date will be as follows:

4.1.18.1.1 Each Party shall establish a bill day each month for the other Party's accounts. The bill will cover non-usage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled non-usage sensitive charges for prior periods and unbilled usage charges for the period beginning with the last bill day and extending up to, but not including, the current bill day. Any known unbilled usage charges for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is due as set forth in Section 4.1.18.1.2 following. If payment is not received by the payment date, as set forth in Section 4.1.18.1.2 following, in immediately available funds, a late payment penalty shall apply as set forth in Section 4.1.18.1.2 following;

4.1.18.1.2 All bills dated as set forth in Section 4.1.18.1.1 above shall be due thirty-one (31) calendar days after the bill day (payment date), unless the billed Party is able to establish that the bill was not timely received (i.e., at least twenty (20) calendar days prior to the payment date), in which case the payment date shall be twenty (20) calendar days from the date of the receipt of the bill. All bills shall be paid in immediately available funds. If such payment date will cause payment to be due on a Saturday, Sunday or legal holiday, payment for such bills will be due as follows:

4.1.18.1.2.1 If such payment date falls on a Sunday or on a legal holiday that is observed on a Monday, the payment date shall be the first non-holiday day following such Sunday or legal holiday.

4.1.18.1.2.2 If such payment date falls on a Saturday or on a legal holiday that is observed on Tuesday, Wednesday,

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Thursday or Friday, the payment date shall be the last nonholiday day preceding such Saturday or legal holiday.

4.1.18.1.2.3 Further, if any portion of the payment due is received after the payment date, or if any portion of the said payment is received in funds that are not immediately available, then a late payment penalty shall be due. The late payment penalty shall be the portion of the payment not received by the payment date times a late factor. The late factor shall be the lesser of:

4.1.18.1.2.3.1 The highest interest rate (in decimal value) that may be lawfully levied for commercial transactions times the number of days from the payment date to, and including, the date that the payment is actually made; or

4.1.18.1.2.3.2 0.0005 per day, simple interest times the number of days from the payment date to, and including, the date that payment is actually made.

4.1.18.2 Payments of Disputed Amounts

In the event that a Party disputes any charges billed to it, the following provisions shall apply:

4.1.18.2.1 The first day of the dispute shall be the date on which the disputing Party furnishes the non-disputing Party, in writing, with the account number under which the bill has been rendered, the date of the bill and the specific items on the bill being disputed.

4.1.18.2.2 If the Parties are unable to resolve the issues related to the disputed amounts in the normal course of business within ninety (90) days after delivery by the disputing Party of notice of the disputed amounts, each of the Parties shall appoint a designated representative who has authority to settle the dispute and who is at a higher level of management than the persons with direct responsibility for administration of billing generally. The designated representatives shall meet as often as they reasonably deem

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necessary in order to discuss the dispute and negotiate in good faith in an effort to resolve the dispute. The specific format for such discussions will be left to the discretion of the designated representatives; however, all reasonable requests for relevant information made by one Party to the other Party shall be honored.

4.1.18.2.3 If the Parties are unable to resolve issues related to the disputed amounts within forty-five (45) days after the Parties' appointment of designated representatives pursuant to Section 4.1.18.2.2 above, then the matter shall be referred to arbitration to the Department.

4.1.18.2.4 The Parties agree that all negotiations pursuant to this Section with respect to disputed amounts shall remain confidential and shall be treated as compromise and settlement negotiations for purposes of the Federal Rules of Evidence and state rules of evidence.

4.1.18.2.5 If a billing dispute is resolved in favor of the nondisputing Party, any payments withheld pending resolution of the dispute shall be subject to the late payment penalty as set forth in Section 4.1.18.1.2.3 above. Further, the disputing Party shall not receive a disputed amount penalty credit.

4.1.18.2.6 If the disputing Party disputes a bill within three (3) months of the payment date and pays the total billed amount on or before the payment date, and the billing dispute is resolved in favor of the disputing Party, the disputing Party shall receive a credit for a disputed amount penalty from the non-disputing Party for the period starting with the date of payment and ending on the date of resolution. The credit for a disputed amount penalty shall be the following:

4.1.18.2.6.1 The disputed amount penalty shall be the disputed amount resolved in the disputing Party's favor times a factor that shall be the lesser of:

4.1.18.2.6.1.1 The highest interest rate (in decimal value) which may be levied by law for commercial

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transactions, for the number of days from the first date to and including the last date of the period involved; or

4.1.18.2.6.1.2 0.0005 per day simple interest times the number of days from the first date to and including the last date of the period involved.

4.1.18.2.7 If the disputing Party disputes a bill within three (3) months of the payment date and pays the total billed amount after the payment date, and the billing dispute is resolved in favor of the disputing Party, the disputing Party shall receive a credit for a disputed amount penalty from the non-disputing Party for the period starting with the date payment was received by the non-disputing Party and ending on the date of the disputed amount resolved in the disputing Party's favor. The credit for a disputed amount penalty shall be as set forth in Section 4.1.18.2.6.1 above. In addition, the late payment penalty applied to the disputed amount resolved in the disputing Party's favor as set forth in Section 4.1.18.1.2.3 above shall be credited to the disputing Party.

4.1.18.2.8 If the disputing Party disputes a bill within three (3) months of the payment date and does not pay the disputed amount or does not pay the non-disputing Party the non-disputed and disputed amount, and the billing dispute is resolved in favor of the disputing Party, the disputing Party shall not receive a credit for a disputed amount penalty from the non-disputing Party. The late payment penalty applied to the disputed amount resolved in the non-disputing Party's favor as set forth in Section 4.1.18.1.2.3 above shall not be credited to the disputing Party.

4.1.18.2.9 If the disputing Party disputes a bill after three (3) months or more after the payment date and pays the total billed amount on or before the dispute date or after the dispute date but prior to the date of resolution and the billing dispute is resolved in favor of the disputing Party, the disputing Party shall receive a credit for a disputed amount penalty from the non-disputing Party for the period starting with the date of dispute (if the payment was received before or on the dispute date) and ending on the date of

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resolution. The disputing Party also shall receive a credit for the late payment penalty applied to the disputed amount resolved in the disputing Party's favor, if the payment was received on or before the dispute date. If the payment was received after the dispute date but prior to the date of resolution, the disputing Party shall receive a credit for a late payment penalty applied to the disputed amount resolved in the disputing Party's favor for the period starting with the date of dispute and ending on the date of payment.

4.1.18.3 Miscellaneous Billing Provisions

4.1.18.3.1 Adjustments for the quantities of services established or discontinued in any billing period will be prorated to the number of days or major fraction of days based on a thirty (30) day month.

4.1.18.3.2 The non-disputing Party shall, upon request and if available, furnish to the disputing Party such detailed information as may reasonably be required for verification of any bill.

4.1.18.3.3 When a rate as set forth in these terms and conditions is shown to more than two (2) decimal places, the charge shall be determined using the rate shown. The resulting amount will then be rounded to the nearest penny (i.e., rounded to two (2) decimal places).

4.1.18.3.4 When credit adjustments apply, credit adjustments will be computed by apportioning the total intrastate usage associated with the honored claim into day, evening and night periods using the Time of Day distribution applicable to the disputing Party. The usage is then multiplied by the appropriate day, evening and night rates.

4.1.19 The Parties shall reimburse each other for incorrect billing charges including without limitation: overcharges, services ordered or requested but not delivered. Reimbursements shall be set forth in the appropriate section of the bill pursuant to CABS/CRIS BOS standards.

4.1.20 The Parties agree to record call information in accordance with this

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Section 4.1. To the extent technically feasible and where a Party does so for itself, the Party shall record all call detail information associated with every call completed to the other Party's local exchange subscriber. These records shall be provided at a Party's request and shall be formatted pursuant to Bellcore's EMR standards and the terms and conditions of this Agreement. These records shall be transmitted to the other Party daily in EMR format via CONNECT: Direct. Each Party shall bill record transmittal charges to the other Party for delivery of such records. The Parties agree that each shall retain, at its sole expense, copies of all EMR records transmitted to the other Party for at least forty-five (45) calendar days after transmission to the other Party.

4.1.21 When MCIm collocates with BA in BA's facility as described in this Agreement, capital expenditures (e.g., costs associated with building the "cage"), shall not be included in the bill provided to MCIm pursuant to this Attachment VIII. All such capital expenses shall be given a unique BAN and invoice number. All invoices for capital expenses shall be sent to the location specified by MCIm for payment. All other non-capital recurring collocation expenses shall be billed to MCIm in accordance with this Agreement. (The CABS BOX documents provide the guidelines on how to bill the charges associated with collocation.) The bill label for such collocation charges shall be entitled "Expanded Interconnection Service." The bill label for non-capital recurring collocation expenses shall be presented in accordance with the current procedures for existing collocation bills that BA renders.

4.1.22 The Parties shall provide meet point billing records in EMR standard format to enable the Parties to bill and collect charges from IEC's for access related to interexchange calls.

4.1.22.1 MCIm and BA will establish MPB arrangements for jointly provided switched access to an IEC in accordance with the MPB guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as modified herein. Both Parties will use their best reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the NECA Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, in MECAB and in MECOD.

4.1.22.2 MCIm and BA will implement the "Multiple Bill/Single Tariff" option, except as otherwise mutually agreed to by the Parties, in order to

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bill IEC for that portion of the network elements provided by MCIm or BA. For all traffic carried over the MPB arrangement, MCIm and BA shall each bill for its own portion of applicable rate elements.

4.1.22.3 [INTENTIONALLY LEFT BLANK]

4.1.22.4 BA and MCIm agree that in a MPB arrangement where one Party provides local transport and the other Party provides the end office switching, the Party who provides the end office switching is entitled to bill any RIC and CCL charges associated with the traffic. The Parties further agree that in those MPB situations where one Party sub-tends the other Party's access tandem, the Party providing the access tandem is only entitled to bill the access tandem fee, and their appropriate share of local transport charges and their entrance facilities between the IEC Point of Presence and tandem. The Parties also agree that the Party who provides the end office switching is entitled to bill end office switching fees, their appropriate share of local transport charges, RIC and CCL charges, as appropriate, and such other applicable charges. The Parties agree to renegotiate this section in the event of an FCC or Department decision regarding access charges.

4.1.22.5 BA and MCIm will record and transmit MPB information in accordance with the standards and in the format set forth in this Section. BA and MCIm will coordinate and exchange the billing account reference ("BAR") and billing account cross reference ("BACR") numbers for the MPB arrangements described in this Agreement. Each Party will notify the other if the level of billing or other BAR/BACR elements change, resulting in a new BAR/BACR number.

4.1.22.6 [INTENTIONALLY LEFT BLANK]

4.1.22.7 [INTENTIONALLY LEFT BLANK]

4.1.22.8 [INTENTIONALLY LEFT BLANK]

4.1.22.9 BA shall, except in instances of capacity limitations, permit and enable MCIm to sub-tend the BA access tandem switch(es) nearest to the MCIm rating point(s) associated with the NPA-NXX(s) to/from which the

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MPB services are homed. In instances of capacity limitation at a given access tandem switch, MCIm shall be allowed to sub-tend the nextnearest BA access tandem switch in which sufficient capacity is available. The MPB percentages for each new rating point/access tandem pair shall be calculated in accordance with MECAB and MECOD.

4.1.22.10 Neither MCIm nor BA will charge the other for the services rendered, or for information provided pursuant to Subsection 4.1.22 of this Section, except for a recording charge of \$.00415 per message recorded. The Parties agree that this charge will be applied to originating messages and to terminating messages. Both Parties will provide the other an SPOC to handle any MPB questions.

4.1.23 Under a switched access MPB arrangement between MCIm and BA, MCIm and BA shall share intrastate and interstate access charges for ported calls. BA shall charge the IEC for transport from the point of presence to the end office where the call terminates or to a designated meet point where the call is handed off to MCIm. MCIm will charge the IEC MCIm's share of switched access rates to terminate the call.

4.1.23.1 [INTENTIONALLY LEFT BLANK]

4.1.23.2 When an IEC terminates an interLATA or IntraLATA toll call to an MCIm local exchange customer whose telephone number has been ported from BA, the Parties agree that MCIm shall receive those IXC access charges associated with end office switching, local transport, RIC and CCL, as appropriate. BA shall receive any access tandem fees, dedicated and common transport charges, to the extent provided by BA, and any INP fees (i.e., such as RCF charges) set forth in this Agreement. When a call for which access charges are not applicable is terminated to an MCIm local exchange customer whose telephone number has been ported from BA, and is terminated on MCIm's own switch, the Parties agree that the mutual compensation arrangements described in this Agreement shall apply.

4.1.24 BA and MCIm shall determine the appropriate and mutually agreeable form of administrative billing between billing carriers.

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4.1.25 BA shall establish a switched access MPB arrangement with MCIm. This arrangement will include tandem routed IEC calls and IEC calls routed through a line that is ported via RCF or other standard number portability arrangement.

4.1.25.1 MCIm will bill for carrier common line, local switching, RIC and its portion of the transport charges for tandem routed IEC calls. For lines that are ported from BA to MCIm, BA will bill only transport charges. MCIm will bill for all other applicable access charges.

4.1.25.2 BA and MCIm will provide all necessary switched access records to each other for access billing.

4.2 Information Exchange and Interfaces

4.2.1 The Parties shall provide to each other a monthly bill that includes all charges incurred by and credits and/or adjustments due to other Party for those services ordered, established, utilized, discontinued or performed pursuant to this Agreement. Each Party shall issue monthly bills scheduled in accordance with such Party's billing system standard calendar. bills provided by the Parties shall include:

4.2.1.1 all non-usage sensitive charges incurred for the period beginning with the day of the current bill date and extending to the day before the next bill date;

4.2.1.2 any known unbilled non-usage sensitive charges for prior periods;

4.2.1.3 unbilled usage sensitive charges for the period beginning with the last bill date and extending up to, but not including, the current bill date;

4.2.1.4 any known unbilled usage sensitive charges for prior periods; and

4.2.1.5 any known unbilled adjustments.

4.2.3 The Bill Date (defined as the date the bill was prepared) must be present on each bill transmitted and must be a valid calendar date.

4.2.4 On each bill where "Jurisdiction" lis identified, local and local toll charges shall be identified. The Parties shall provide from through dates for charges

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4.2.5 [INTENTIONALLY LEFT BLANK]

4.2.6 [INTENTIONALLY LEFT BLANK]

4.2.7 BA and MCIm shall issue all bills in accordance with the terms and conditions set forth in this Section 4. Unless otherwise agreed by the Parties, BANs shall be 13 character alpha/numeric. The Bill Date shall be the same month to month. Each Party shall provide the other Party at least thirty (30) calendar days written notice prior to changing, adding or deleting a BAN. Each bill must contain an invoice number. Each bill associated with a BAN shall contain, the appropriate invoice number and the charges. All bills must be received by the other Party no later than ten (10) calendar days from the Bill Date and at least twenty (20) calendar days prior to the payment due date (as described in this Attachment VIII), whichever is earlier. Any bill received on a Saturday, Sunday or a day designated as a bank holiday will be deemed received the next business day. If either Party fails to receive billing data and information within the time period specified above the payment due date will be extended by the number of days receipt has been delayed.

4.2.8 The Parties shall issue all bills containing such billing data and information in accordance with the most current version of CABS /CRIS BOX published by Bellcore, or its successor, or such later versions as are adopted by Bellcore, or its successor as defined in Section 4.1.1 of this Attachment. To the extent that there are no CABS/CRIS BOX standards governing the formatting of certain data, such data shall be issued in the format mutually agreed by the Parties. When new or changed guidelines are introduced into the industry, the Parties agree to negotiate an implementation date for new or changed guidelines.

4.2.9 Each Party shall transmit billing information and data in the appropriate CABS/CRIS BOX format to the other Party at the location specified by the receiving Party. Any change to either Party's NDM Node ID must be sent to the other Party no later than thirty (30) calendar days before the changes take effect.

4.2.10 In emergency situations when tape transmittal has been used, BA shall adhere to the tape packaging requirements set forth in this Agreement. BA shall clearly mark on the outside of each shipping container its name, contact and

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return address.

4.2.11 All emergency billing data transmitted via tape must be provided on a cartridge (cassette) tape and must be of high quality, conform to the parties' record and label standards, 9-track, odd parity, 6250 BPI group coded recording mode and EBCDIC. Each reel of tape must be 100% tested at 20% or better "clipping" level with full width certification and permanent error free at final inspection. MCIm reserves the right to destroy a tape that has been determined to have unrecoverable errors. MCIm also reserves the right to replace a tape with one of equal or better quality.

4.2.12 Billing data tapes used in emergency circumstances shall be in industry standard format for records and labels. The dataset serial number on the first header record shall be in IBM standard if such standards exist and otherwise as agreed by the parties.

4.2.13 A single 6-digit serial number must appear on the external (flat) surface of the tape for visual identification. This number shall also appear in the "dataset serial number field" of the first header record of the IBM standard tape label. This serial number will be determined by the sending company, to meet IBM standard label format requirements. The external and internal label shall be the same. The dataset name shall appear in the "data set name field" on the first header record of the IBM standard tape label. The dataset name, as well as the Party's name, address, and contact shall further identify the tape.

4.2.14 Tape labels shall conform to IBM OSVS Operating System Standards contained in the IBM Standard Labels Manual. IBM standard labels are 80-character records recorded in EBCDIC, odd parity.

4.2.15 The Parties shall conform to the Standard Volume Label Format which will be prescribed by the Parties.

4.2.16 The Parties shall use The IBM Standard Dataset Label Format which will be prescribed by the Parties.

4.2.17 The Parties shall use test and production dataset format which will be prescribed by the Parties.

4.3 Standards

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4.3.1 The Parties may utilize manual bills initially. When ready to implement mechanized format the Parties shall send to each other bill data in the appropriate mechanized format (i.e., CABS/CRIS BOX) for testing to ensure that bills can be processed and that bills comply with the requirements of this Attachment VIII. After receipt of the test data from a Party, the receiving Party will notify the transmitting Party if the billing transmission meets the receiving Party's testing specifications. If the transmitting Party shall make the necessary corrections. At least one (1) set of testing data must meet the receiving Party's testing specifications prior to the transmitting Party sending the receiving Party a mechanized production bill for the first time via electronic transmission or tape. Thereafter, the transmitting Party may begin sending production bills via electronic transfer on the next Bill Date or within ten (10) days, whichever is later.

4.3.2 At least thirty (30) days prior to any change in existing formats or change to a different format, the transmitting Party shall send to the receiving Party bill data in the appropriate mechanized format for testing to ensure that the bills can be processed and that the bills comply with the requirements of this Attachment VIII. The transmitting Party agrees that it shall not send to the receiving Party bill data in the new mechanized format until such bill data has met the testing specifications as set forth in this Section 4.3 of this Attachment.

4.3.3 During the testing period, the transmitting Party shall transmit to the receiving Party billing data and information via CONNECT:Direct paper or tape as specified by the receiving Party. Test tapes shall be sent to the receiving Party's specified location.

4.3.4 The receiving Party's requirements outside the CABS/CRIS (BOX) guidelines will be considered on a per item basis. The transmitting Party will attempt to meet non-standard requests to the extent that these are compatible with its billing systems practice and the requesting Party pays the cost of the change. Requests that are not feasible within the transmitting Party's existing billing practice must be negotiated as new systems development requirements.

4.4 Performance Measurements & Reporting

4.4.1 BA shall meet the following performance measurements for the provision

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of EMR records:

4:4.1.1 In order to provide accurate, complete and timely billing records in parity with billing records BA provides to itself, BA commits to provide electronically processed call volumes to MCIm within three (3) days 93 - 96% of the time.

4.4.1.2 Accuracy: No more than sixty (60) errors per one (1) million records transmitted.

4.4.1.3 Completeness: There shall be no more than twenty (20) omissions per one (1) million records.

Section 5. Provision Of Subscriber Usage Data

This Section 5 sets forth the terms and conditions for BA's provision of recorded usage data (as defined in this Attachment VIII) to MCIm.

5.1 Procedures

5.1.1 General

5.1.1.1 BA shall comply with industry standards for the exchange of recorded usage data as defined by Bellcore EMR documents. Additional data exchange standards may be mutually agreed upon by BA and MCIm.

5.1.1.2 [INTENTIONALLY LEFT BLANK]

5.1.1.3 BA shall record all usage originating from MCIm subscribers using BA-provided unbundled Network Elements or Services for Resale.

5.1.1.4.2 **Retention of Records.** BA shall maintain a machine readable back-up copy of the usage detail recorded pursuant to Section 5.1.1.3 and provided to MCIm for a minimum of forty-five (45) calendar days. BA shall provide any data back-up to MCIm upon its request. With respect to services for resale, BA shall provide any data back-up to MCIm upon its request, at tariff rates, if

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applicable.

5.1.1.5 BA shall provide to MCIm recorded usage data for MCIm subscribers. BA shall not submit other carrier local usage data as part of the MCIm recorded usage data.

5.1.1.6 [INTENTIONALLY LEFT BLANK]

5.1.1.7 [INTENTIONALLY LEFT BLANK]

5.1.1.7.1 [INTENTIONALLY LEFT BLANK]

5.1.1.7.2 [INTENTIONALLY LEFT BLANK]

5.1.1.8 BA shall provide recorded usage data to MCIm billing locations as designated by MCIm.

5.1.1.9 BA shall establish a single point of contact to respond to MCIm call usage, data error, and record transmission inquiries.

5.1.1.10 BA shall provide MCIm with a single point of contact to establish Remote Identifiers (IDs) and expected usage data volumes for each sending location.

5.1.1.11 MCIm shall provide a SPOC responsible for receiving usage transmitted by BA and receiving usage tapes from a courier service in the event of a facility outage.

5.1.1.12 [INTENTIONALLY LEFT BLANK]

5.1.1.13 Without waiver of, and in addition to the audit and examination rights set forth in Section 15 of Part A of this Agreement, upon reasonable notice and at reasonable times, MCIm or its authorized representatives may examine BA's documents, systems, records and procedures which relate to the recording and transmission of the usage data to MCIm under this Attachment VIII.

5.1.2 [INTENTIONALLY LEFT BLANK]

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5.1.3 Central Clearinghouse and Settlement for Unbundled Elements and Interconnection (only)

5.1.3.1 BA shall comply with Clearinghouse and Incollect/Outcollect procedures to be negotiated by the Parties within sixty (60) days after the effective date of the Agreement.

5.1.3.2 BA shall support and participate with MCIm and other Local Exchange Carriers in the region to develop a neutral third-party in and outcollect process for intra-region alternately billed messages.

5.1.3.3 BA shall settle with MCIm for intra-region billing exchanges of calling card, bill-to-third party, and collect calls. Inter-region billing exchanges of alternate billing calls will be settled through the Bellcore CATS settlement system.

5.1.4 Lost Data for MCIm

5.1.4.1 Loss of Recorded Usage Data - MCIm recorded usage data determined to have been lost, damaged or destroyed as a result of an error or omission by BA in its performance of the recording function shall, upon MCIm's request, be recovered by BA at no charge to MCIm provided BA is notified of such loss, damage or destruction within the time period set forth in Section 5.1.1.4.2 of this Attachment VIII. In the event the data cannot be recovered by BA, BA shall estimate the messages and associated revenue, with assistance from MCIm, based upon the method described below. This method shall be applied on a consistent basis, subject to modifications agreed to by the Parties. This estimate shall be used to adjust amounts MCIm owes BA for services BA provides in conjunction with the provision of recorded usage data.

5.1.4.2 Partial Loss - BA shall review its daily controls to determine if data. has been lost. When there has been a partial loss, actual message and minute volumes shall be reported, if possible. Where actual data are not available, a full day shall be estimated for the recording entity, as outlined in the following paragraphs. The amount of the partial loss is then determined by subtracting the data actually recorded for such day from

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the estimated total for such day.

5.1.4.3 Complete Loss - Estimated message and minute volumes for each loss consisting of an entire AMA tape or entire data volume due to its loss prior to or during processing, lost after receipt, degaussed before processing, receipt of a blank or unreadable tape, or lost for other causes, shall be reported.

5.1.4.4 Estimated Volumes - From message and minute volume reports for the entity experiencing the loss, the Parties shall secure message/minute counts for the four (4) corresponding days of the weeks preceding that in which the loss occurred and compute an average of these volumes, the Parties shall apply the appropriate ARPM provided by the other Party to the estimated message volume to arrive at the estimated lost revenue.

5.1.4.5 If the day of loss is not a holiday but one (1) (or more) of the preceding corresponding days is a holiday, use additional preceding weeks in order to procure volumes for two (2) non-holidays in the previous two (2) weeks that correspond to the day of the week that is the day of the loss.

5.1.4.6 If the loss occurs on a weekday that is a holiday (except Christmas Day and Mother's Day), BA shall use volumes from the two (2) preceding Sundays.

5.1.4.7 If the loss occurs on Mother's Day or Christmas Day, BA shall use volumes from that day in the preceding year multiplied by a growth rate specified by MCIm.

5.1.4.8 MCIm may also request data be provided that has previously been successfully provided by BA to MCIm. BA shall re-provide such data, if available, at no additional charge to MCIm.

5.1.5 Testing, Changes and Controls

5.1.5.1 The recorded usage data, EMR format, content, and transmission process shall be tested as specified by MCIm and BA.

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5.1.5.2 Interface Testing: The purpose of this test is to ensure that the usage records can be sent by BA to MCIm and can be accepted and processed by MCIm. BA shall provide a test file to MCIm's designated POC in the format that shall be used for live day-to-day processing. The file shall contain one (1) full day's production usage and all potential call types. MCIm shall review the file and verify that it conforms to its data center requirements. MCIm shall also provide BA with the agreed-upon control reports as part of this test.

5.1.5.3 Operational Test: The purpose of this test is to ensure that volumes of usage in consecutive sequence can be extracted, distributed, and processed by BA and MCIm.

5.1.5.4 For testing purposes BA shall provide MCIm with BA recorded, unrated usage for a minimum of five (5) consecutive days. MCIm shall provide BA with the message validation reports associated with test usage.

5.1.5.5 Test File: Test data should be transported via CONNECT: Direct whenever possible, however, courier service and tape media may be used if necessary.

5.1.5.6 Periodic Review: Control procedures for all usage transferred between BA and MCIm shall require periodic review. This review may be included as part of an annual audit of BA by MCIm or as part of the agreed-upon normal production interface management function. Breakdowns which affect the flow of usage between BA and MCIm must be identified and jointly resolved as they occur. The resolution may include changes to control procedures as mutually agreed.

5.1.5.7 BA Software Changes:

5.1.5.7.1 When either Party plans to introduce any software, changes which affect the format or content structure of the usage data feed to the other Party, designated personnel shall notify the affected Party no less than forty-five (45) calendar days before such changes are implemented.

5.1.5.7.2 BA shall communicate the projected changes to the

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5.1.5.7.3 MCIm personnel shall review the impact of the change on the entire control structure and the post conversion test plan, herein. The Parties shall negotiate resolution of any problems and shall arrange to have the data tested utilizing the modified software.

5.1.5.7.4 If it is necessary for BA to request changes in the schedule, content or format of usage data transmitted to MCIm, BA shall notify MCIm.

5.1.5.8 MCIm Requested Changes:

5.1.5.8.1 MCIm may request changes in the schedule, content and format of the usage data transmitted from BA, as deemed necessary by MCIm. Any charges associated with these change request will be negotiated by the Parties on a case-by-case basis.

5.1.5.8.2 When the negotiated changes are to be implemented, MCIm and/or BA shall arrange for testing of the modified data in a post conversion test plan designed to encompass all types of changes to the usage data transferred by BA to MCIm and the methods of transmission for that data.

5.1.5.9 BA System Change Description:

5.1.5.9.1 For a BA system change, BA shall provide MCIm with an overall description of the change.

5.1.5.9.2 During the initial negotiations regarding the change, BA shall provide a list of the specific records and/or systems affected by the change to designated MCIm personnel.

5.1.5.9.3 BA shall also provide MCIm a detailed description of the changes to be implemented. It shall include sufficient detail for designated MCIm personnel to analyze and estimate the effects of

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the changes and to design tests to verify the accuracy of the implementation.

5.1.5.10 Change Negotiations:

5.1.5.10.1 MCIm shall be notified in writing of all proposed negotiations initiated by BA. In turn, MCIm shall notify BA of proposed change negotiations initiated by MCIm.

5.1.5.10.2 After formal notification of planned changes, whether originated by BA or MCIm, designated MCIm personnel shall schedule negotiation meetings as required with designated BA personnel. The first meeting should produce the overall change description (if not previously furnished) and the list of records and/or systems affected.

5.1.5.10.3 In subsequent meetings, the Parties shall provide the detailed description of changes to be implemented. After reviewing the described changes, designated MCIm personnel shall negotiate a detailed test procedure with BA.

5.1.5.11 Changes to controls:

MCIm may request changes to the control structure. BA shall consider the requested changes. Where compliance is feasible, but outside the scope of BA's existing system construct, the MCIm request will be considered as a systems development request for time and cost estimation. Time and cost associated with the requested change will be presented to MCIm for purchase order authorization as a prerequisite to implementation of the proposed system changes.

5.1.5.12 Verification Of Changes

5.1.5.12.1 Based on the detailed description of changes furnished by BA, the Parties shall:

-Determine the type of change(s) to be implemented. -Negotiate proposed rate for identified changes. -Develop a comprehensive test plan.

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