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August 27, 1997

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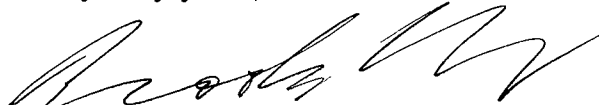
HAND-DELIVERED

Subject: MCI/U S West Washington Arbitration
Docket No. UT-960310

Dear Mr. McLellan:

Enclosed, for filing, are an original and six copies of the Agreement For Local Wireline Network Interconnection And Service Resale Between MCImetro Access Transmission Services, Inc., and U S West Communications, Inc., dated August 13, 1997, in the above-referenced docket. A diskette in WordPerfect 6.1 is also enclosed. The enclosed agreement conforms to the Commission order of approval dated August 18, 1997, as amended August 27, 1997.

Very truly yours,



Brooks E. Harlow

cc w/enc: Ms. Lisa Anderl (hand delivered w/diskette)
Ms. Carol Matchett, Sprint (via Federal Express)
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STATE OF WASH.
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**AGREEMENT
FOR LOCAL WIRELINE NETWORK INTERCONNECTION
AND
SERVICE RESALE**

**Between
MCImetro Access Transmission Services, Inc.
and
U S WEST Communications, Inc.**

[NOTE: In this Agreement, *italicized language* corresponds to language agreed to by the Parties; plain Arial font language corresponds to MCI and/or U S WEST proposed language; and **bold language** corresponds to language included to comply with the Commission's Order]

003392

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ATTACHMENTS

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This Interconnection Agreement (this "Agreement"), effective August 20, 1997 (the "Effective Date"), is entered into by and between MCImetro Access Transmission Services, Inc., a Delaware corporation, and U S WEST Communications, Inc., a Colorado corporation, to establish the rates, terms and conditions for local interconnection, local resale, and the purchase of unbundled network elements (individually referred to as the "service" or collectively as the "services").

RECITALS

WHEREAS, pursuant to this Agreement, MCI and U S WEST will extend certain arrangements to one another within each LATA (as defined herein) in which they both operate within the state of Washington. This Agreement is a combination of agreed terms and terms imposed by arbitration under Section 252 of the Communications Act of 1934, as modified by the Telecommunications Act of 1996, the rules and regulations of the Federal Communications Commission, and the orders, rules and regulations of the Washington Utilities and Transportation Commission; and as such does not necessarily represent the position of either Party on any given issue; 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's network, and for MCI's use in the provision of exchange access ("Local Interconnection"); and

WHEREAS, MCI wishes to purchase Telecommunications Services for resale to others, and U S WEST is willing to provide such services; and

WHEREAS, MCI wishes to purchase on an unbundled basis Network Elements, Ancillary Services and Functions and additional features separately or in any Combination, and to use such services for itself or for the provision of its Telecommunications Services to others, and U S WEST is willing to provide such services;

Now, therefore, in consideration of the terms and conditions contained herein, MCI and U S WEST hereby mutually agree as follows:

SCOPE OF AGREEMENT

A. This Agreement specifies the rights and obligations of each Party with respect to the purchase and sale of Local Interconnection, Local Resale and Network Elements in the LATAs in Washington where U S WEST operates.

B. In the performance of their obligations under this Agreement, the Parties shall act in good faith and consistently with the intent of the Act. Where notice, approval or similar action by a Party is permitted or required by any provision of this Agreement (including, without limitation, the obligation of the Parties to further negotiate the resolution of new or open issues under this Agreement) such action shall not be unreasonably delayed, withheld or conditioned.

C. U S WEST will provide MCI with at least the level of service quality or performance of obligations under this Agreement as U S WEST provides itself or any other Person with respect to all Telecommunications Services, Local Interconnection, Services for Resale, and Network Elements as applicable and shall provide such level of service quality or performance of service obligations in accordance

with the specific requirements agreed to in Attachment 5 of this Agreement.

D. U S WEST shall provide to MCI_m Services for Resale that are equal in quality, subject to the same conditions (including the conditions in U S WEST's effective tariffs which are not otherwise inconsistent with the terms and conditions contained herein), within the same provisioning time intervals that U S WEST provides these services to itself, its Affiliates and others, including end users, and in accordance with any applicable Commission service quality standards, including standards the Commission may impose pursuant to Section 252 (e)(3) of the Act.

E. Each Network Element provided by U S WEST to MCI_m 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 U S WEST provides to itself, to U S WEST's own subscribers, to a U S WEST Affiliate or to any other entity.

F. The Parties agree to work jointly and cooperatively in testing and implementing processes for pre-ordering, ordering, maintenance, provisioning and billing and in reasonably resolving issues which result from such implementation on a timely basis.

G. If a Party makes a change in its network which it believes will materially affect the interoperability of its network with that of the other Party, the Party making the change shall provide advance notice of such change to the other Party in accordance with applicable FCC or Commission regulations.

H. In accordance with Section 251(c)(5) of the Act and the rules and regulations established by the FCC and the Commission, the Parties shall provide reasonable notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or network, as well as of any other changes that would affect the interoperability of those facilities and networks.

I. Except as otherwise provided for in Section 8 of Attachment 2, U S WEST shall not discontinue or refuse to provide any service required hereunder without MCI_m's prior written agreement in accordance with Section 17 of Part A of this Agreement, nor shall U S WEST reconfigure, reengineer or otherwise redeploy its network in a manner which would materially impair MCI_m's ability to offer Telecommunications Services in the manner contemplated by this Agreement, the Act or the FCC's rules and regulations. U S WEST agrees that all obligations undertaken pursuant to this Agreement, including, without limitation, performance standards, intervals, and technical requirements are material obligations hereof and that time is of the essence.

J.¹ U S WEST shall insure that all MCI_m Customers experience the same dialing parity as similarly situated customers of U S WEST services, such that, for all call types: (a) an MCI_m Customer is not required to dial any greater number of digits than a similarly-situated U S WEST customer; (b) the post-dial delay (time elapsed between the last digit dialed and the first network response), call completion rate and transmission quality experienced by an MCI_m Customer is at least equal in quality to that experienced by a similarly-situated U S WEST customer; and (c) the MCI_m Customer may retain its local telephone number, as further provided for in Section 42 of Part A of this Agreement (INP/PNP) so long as the customer continues receiving service in the same central office serving area.

¹ Order, p. 63 at Issues 58 and 60.

DEFINITIONS

Certain terms used in this Agreement shall have the meanings set forth herein or as otherwise elsewhere defined throughout this Agreement. Other terms used but not defined herein will have the meanings ascribed to them in the Act and the FCC's rules and regulations.

"911 Service" means a universal telephone number which gives the public direct access to the Public Safety Answering Point ("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.

"911 Site Administrator" is a person assigned by MCI to establish and maintain 911 service location information for its subscribers.

"Access Services" refers to interstate and intrastate switched access and private line transport services.

"Act" means the Communications Act of 1934 (47 U.S.C. §§151 et seq.), as amended by the Telecommunications Act of 1996, and as from time to time interpreted in the duly authorized rules and regulations of the FCC or by the Commission.

"ADSL" or "Asymmetrical Digital Subscriber Line" means a transmission technology which transmits an asymmetrical digital signal using one of several transmission methods (for example, carrier-less AM/PM discrete multi-tone, or discrete wavelet multi-tone).

"Affiliate" is an entity, as defined in the Act, that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control with, another entity. For the purposes of this Agreement, "own" or "control" means to own an equity interest (or equivalent) of at least ten percent (10%), or the right to control the business decisions, management and policy of another entity performing any of the obligations set forth in this Agreement.

"AIN" (Advanced Intelligent Network) is a network functionality that permits specific conditions to be programmed into a switch which, when met, directs 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.

"AIN Services" means architecture and configuration of the AIN Triggers within the SCP as developed and/or offered by U S WEST to its customers.

"ALI" (Automatic Location Identification) is a database developed for E911 systems that provides for a visual display of the caller's telephone number and address, and the names of the emergency response agencies responsible for that address. The ALI also shows an Interim Number Portability (INP) number, if applicable.

"ALI/DMS" (Automatic Location Identification/Data Management System) 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 Public Safety Answering Point (PSAP) to route the call.

"AMA" means the Automated Message Accounting structure that initially records telecommunication message information. AMA format is contained in the Automated Message Accounting document, published by Bellcore

as GR-1100-CORE, which defines the industry standard for message recording.

"Ancillary Services" or "Ancillary Functions" means, collectively, the following: (1) Collocation as described in Section 40; (2) access to poles, ducts, conduits and rights-of-way as described in Section 47; (3) unused transmission media as described in Section 51; (4) Directory Listings as described in Section 7 of Attachment 5; (5) E911 as described in Section 6.1 of Attachment 5; (6) Directory Assistance Services as described in Section 6.2 of Attachment 5; (7) Operator Services as described in Section 6.3 of Attachment 5; (8) directory assistance and listings services requests as described in Section 6.4 of Attachment 5; and (9) directory assistance data as described in Section 6.5 of Attachment 5.

"ANI" (Automatic Number Identification) is a feature that identifies and displays the number of a telephone that originates a call.

"ARS" (Automatic Route Selection) is 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.

"ASR" (Access Service Request) means the industry standard forms and supporting documentation used for ordering Access Services. The ASR may be used to order trunking and facilities between MCI and U S WEST for Local Interconnection.

"BLV/BLI" (Busy Line Verify/Busy Line Interrupt) means an operator call in which the end user inquires as to the busy status of, or requests an interruption of, a telephone call.

"Business Day" means any day Monday through Friday except for mutually agreed to holidays.

"CABS" means the Carrier Access Billing System which is defined in a document prepared by the Billing Committee of the OBF. The Carrier Access Billing System document is 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.

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

"CCS" (Common Channel Signaling) 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.

"Central Office Switch" means a switch used to provide Telecommunications Services, including, but not limited to:

"End Office Switches" which are used to terminate Customer station loops for the purpose of interconnecting to each other and to trunks;

"Tandem Office Switches" which are used to connect and switch trunk circuits between and among other Central Office Switches. Access tandems provide connections for exchange access and Toll Traffic while local tandems provide connections for local/EAS traffic; or

Combination End Office/Tandem Office Switches.

"Centrex", including Centrex Plus, 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.

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

"CLASS" (Bellcore Service Mark) is a set of call-management service features that utilize the capability to forward a calling party's number between end offices as part of call setup. Features include Automatic Callback, Automatic Recall, Caller ID, Call Trace, and Distinctive Ringing.

"Combinations" means provision by U S WEST of two or more connected Network Elements ordered by MCI/m to provide its Telecommunication Services in a geographic area or to a specific subscriber and that are placed on the same or related order by MCI/m, subject to restrictions, if any, imposed by the Commission.

"Commission" means the Washington Utilities and Transportation Commission.

"Competitive Local Exchange Carrier" or "CLEC" means an entity authorized to provide Local Exchange Service that does not otherwise qualify as an incumbent LEC.

"Conduit" means a tube or protected pathway that may be used to house communication or electrical cables. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more innerducts.

"Confidential Information" has the meaning set forth in Section 28 of Part A of this Agreement.

"Contract Year" means a twelve (12) month period during the term of this Agreement commencing on the Effective Date and each anniversary thereof.

"Control Office" is 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.

"Custom Calling Features" is a set of call-management service features available to residential and business subscribers including call-waiting, call-forwarding and three-party calling.

"Customer" means a third-party (residence or business) that subscribes to Telecommunications Services provided by either of the Parties.

"DBMS" (Database Management System) is a computer system used to store, sort, manipulate and update the data required to provide, for example, selective routing and ALI.

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

"Digital Signal Level" means one of several transmission rates in the time division multiplexing hierarchy, including, but not limited to:

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

"Digital Signal Level 1" or "DS-1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-1 is the initial level of multiplexing.

"Digital Signal Level 3" or "DS-3" means the 44.736 Mbps third-level in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-3 is defined as the third level of multiplexing.

"Directory Assistance Database" refers to any set of subscriber records used by U S WEST in its provision of live or automated operator-assisted directory assistance including, but not limited to, 411, 555-1212, NPA-555-1212.

"Directory Assistance Services" provides Listings to callers. Directory Assistance Services may include the option to complete the call at the caller's direction.

"Directory Listings" or "Listings" refers to subscriber information, including, but not limited to, name, address and phone numbers, in Directory Assistance Services or directory products.

"Discloser" means that Party to this Agreement which has disclosed Confidential Information to the other Party.

"E911" (Enhanced 911 Service) means a telephone communication service which will automatically route a call dialed "911" to a designated Public Safety Answering Point (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.

"E911 Message Trunk" is a dedicated line, trunk or channel between two (2) central offices or switching devices which provides a voice and signaling path for E911 calls.

Extended Area Service ("EAS") is intraLATA traffic treated as 'local' traffic between exchanges (rather than as 'toll' traffic) as established by the Commission and as reflected in the effective U S WEST tariffs.

"Effective Date" is the date indicated in the Preamble on which this Agreement shall become effective.

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

"EMR" means the Exchange Message Record System used among LECs for exchanging telecommunications message information for billable, non-billable, sample, settlement and study data. EMR format is contained in BR-010-200-010 CRIS Exchange Message Record, published by Bellcore, which defines the industry standard for exchange message records.

"ESN" (Emergency Service Number) is 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.

"FCC" means the Federal Communications Commission.

"FCC Interconnection Order" is the Federal Communications Commission's First Report and Order in CC Docket No. 96-98 released August 8, 1996, as effective.

"Fiber-Meet" means an interconnection architecture method whereby the Parties physically interconnect their networks via an optical fiber interface (as opposed to an electrical interface) at a mutually agreed upon location.

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

"HDSL" or "High-Bit Rate Digital Subscriber Line" means a two-wire or four-wire transmission technology which typically transmits a DS-1 level signal (or higher level signals with certain technologies), using, for example, 2 Binary/1 Quaternary ("2B1Q").

"ILEC" means the incumbent local exchange carrier.

"Information Service Traffic" means traffic which originates on a local access line and which is addressed to an information service provider.

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

"Integrated Digital Loop Carrier" means a digital subscriber loop carrier system which interfaces with the switch digitally at a DS-1 (1.544Mbps) or higher level.

"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 (2) 64 Kbps bearer channels and one (1) 16 Kbps data channel (2B+D). Primary Rate Interface-ISDN (PRI-ISDN) provides for a digital transmission of twenty-three (23) 64 Kbps bearer channels and one (1) 64 Kbps data channel (23B+D).

"Interconnection" is as described in the Act and refers to the connection of separate pieces of equipment, facilities, or platforms between or within networks for the purpose of transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic.

"IXC" (Interexchange Carrier) means a provider of interexchange Telecommunications Services.

"LATA" means Local Access Transport Area.

"LEC" means local exchange carrier.

"LIDB" (Line Information Data Base(s)) is a Service Control Point ("SCP") database that provides for such functions as calling card validation for telephone line number cards issued by LECs and other entities and validation for collect and billed-to-third services.

"Local Interconnection" shall have the meaning set forth in the Recitals to this Agreement.

"Local Resale," "Services for Resale" or "Resale Services" means, collectively, Telecommunications Services and service functions provided by U S WEST to MCI pursuant to Attachment 2 of this Agreement.

"Local Traffic" is intraLATA traffic within an exchange that is treated as toll free traffic as established by the Commission and as reflected in the effective tariffs of U S WEST.

"Loop" is a transmission facility between a distribution frame, or its equivalent, in a U S WEST central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which MCI is granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

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

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

"MCI" means MCI metro Access Transmission Services, Inc. and any Affiliates, subsidiary companies or other entities performing any of the obligations of MCI set forth in this Agreement.

"MECAB" refers to the Multiple Exchange Carrier Access Billing document prepared by the Billing Committee of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee ("CLC") of the Alliance for Telecommunications Industry Solutions ("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 (2) or more LECs (including a LEC and a CLEC), or by one (1) LEC in two (2) or more states within a single LATA.

"MECOD" refers to the Multiple Exchange Carriers Ordering and Design Guidelines for Access Services - Industry Support Interface, a document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee ("CLC") of the Alliance for Telecommunications Industry Solutions ("ATIS"). The MECOD document, 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 (2) or more LECs (including a LEC and a CLEC). It is published by Bellcore as SRBDS 00983.

"Meet-Point Billing" or "MPB" refers to an arrangement whereby two (2) LECs (including a LEC and MCI)

jointly provide Switched Access Service to an IXC, with each LEC (or MCI) receiving an appropriate share of the access element revenues.

"Mid-Span Meet" is a point of interconnection between two (2) networks, designated by two (2) Telecommunications Carriers, at which one carrier's responsibility for service begins and the other carrier's responsibility ends.

"MSAG" (Master Street Address Guide) is 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 U S WEST.

"North American Numbering Plan" or "NANP" means the numbering plan used in the United States that also serves Canada, Bermuda, Puerto Rico and certain Caribbean Islands. The NANP format is a 10-digit number that consists of a 3-digit NPA code (commonly referred to as the area code), followed by a 3-digit NXX code and 4-digit line number.

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

"Network Element" means a facility or equipment used in the provision of a Telecommunications Service including all features, functions and capabilities embedded in such facility or equipment.

"NP" (Number Portability) means the use of the Location Routing Number ("LRN") database solution to provide fully transparent NP for all subscribers and all providers without limitation.

"NPA" (Numbering Plan Area) (sometimes referred to as an area code) is the three digit indicator which is designated by the first three (3) digits of each 10-digit telephone number within the NANP. Each NPA contains 792 possible NXX Codes. 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 Code)" 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.

"NXX" means the fourth, fifth and sixth digits of a ten-digit telephone number within the North American Numbering Plan ("NANP").

"OBF" means the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee ("CLC") of the Alliance for Telecommunications Industry Solutions ("ATIS").

"Operator Services" includes, but is not limited to, (1) operator handling for call completion (e.g., collect calls); (2) operator or automated assistance for billing after the subscriber has dialed the called number (e.g., credit card calls); and (3) special services (e.g., BLV/BLI, Emergency Agency Call).

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

"P.01 Transmission Grade of Service (GOS)" means a trunk facility provisioning standard with the statistical

probability of no more than one (1) call in 100 blocked on initial attempt during the average busy hour.

"PLU" (Percent Local Usage) is a calculation which 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/BLI, 900, 976, transiting calls from other exchange carriers and Switched Access calls are not included in the calculation of PLU.

"Party" means either U S WEST or MCI and "Parties" means U S WEST and MCI.

"Person" means, collectively, an Affiliate, subsidiary, Customer, end user and subscriber of U S WEST.

"Point of Interconnection" or "POI" means the physical point that establishes the technical interface, the test point, where applicable, and the operational responsibility hand-off between MCI and U S WEST for the local interconnection of their networks for the mutual exchange of traffic.

"Point of Interface" is the physical point where MCI hands off transmission media to the U S WEST provided entrance facility associated with a collocation arrangement for the purpose of connecting the entrance facility to some point located within U S WEST's premises.

"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.

"POP" means an IXC's point of presence.

"Port" means a termination on a Central Office Switch that permits customers to send or receive Telecommunications Services over the public switched network, including switch features or switching functionality.

"Premium Listing", such as additional, foreign, cross reference, informational, non-listed, privacy, etc., are as described in the U S WEST general exchange listing tariff.

"Primary Listing" (for example, main list, additional main, joint user, client main list or answering service list) shall mean the one (1) appearance of an end user telephone subscriber's main telephone number and other content such as name and address, which each MCI residence or business subscriber is entitled to receive, at no charge from U S WEST Communications, in the white pages directory published by U S WEST Dex. Where U S WEST business end users are entitled to receive a courtesy listing in the yellow pages section of any directory published on U S WEST's behalf, MCI's business customers will receive the same entitlement.

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

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

"Rate Center" means the geographic point and corresponding geographic area which are associated with one or more particular NPA-NXX codes which have been assigned to U S WEST or MCI for its provision of basic exchange Telecommunications Services. The "Rate Center Point" is the finite geographic point identified by a specific V&H coordinate, which is used to measure distance-sensitive end user traffic to/from the particular NPA-NXX designations associated with the specific Rate Center. The "Rate Center Area" is the exclusive

geographic area identified as the area within which U S WEST or MCI_m will provide basic exchange Telecommunications Services bearing the particular NPA-NXX designations associated with the specific Rate Center. The Rate Center Point must be located within the Rate Center Area.

"Rating Point" means the point at which transport mileage is calculated for the termination of calls. Each Party shall establish its own Rating Point(s) for its own services.

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

"Recipient" means that Party to this Agreement (1) to which Confidential Information has been disclosed by the other Party, or (2) which has obtained Confidential Information in the course of providing services under this Agreement.

"Reseller" is a category of Telecommunications Services providers who obtain Telecommunications Services from another provider through the purchase of wholesale priced Services for Resale to their end user subscribers.

"Routing Point" means a location which U S WEST or MCI_m has designated on its own network as the homing (routing) point for traffic inbound to basic exchange Telecommunications Services provided by U S WEST or MCI_m which bear a certain NPA-NXX designation. The Routing Point is employed to calculate mileage measurements for the distance-sensitive transport element charges of Switched Access Services. Pursuant to Bellcore Practice BR 795-100-100, the Routing Point may be an "End Office" location, or a "LEC Consortium Point of Interconnection." Pursuant to that same Bellcore Practice, examples of the latter shall be designated by a common language location 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 need not be the same as the Rate Center Point, nor must it be located within the Rate Center Area, but must be in the same LATA as the NPA-NXX.

"ROW" (Right-of-Way) means the right to use the land or other property owned, leased, or controlled by another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such poles, conduits, cables, structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and shall include the right to use discrete space in buildings, building complexes or other locations.

"SAG" (Street Address Guide) is a database containing an alphabetical list of street names, high-low house number ranges, descriptive addresses, community names, tax codes, subscriber names, telephone numbers, NXXs, central office names, CLLI and other information maintained by U S WEST.

"SECAB" means the Small Exchange Carrier Access Billing document prepared by the Billing Committee of the OBF. The Small Exchange Carrier Access Billing document, published by Bellcore as Special Report SR OPT-001856, contains the recommended guidelines for the billing of access and other connectivity services.

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

"Service Control Point" or "SCP" is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to

it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., a toll free database stores subscriber record data that provides information necessary to route toll free calls).

"Signaling Transfer Points" or "STPs" provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and Signaling Transfer Points.

"Switch" -- See Central Office Switch.

"Switched Access", "Switched Access Service", "Switched Exchange Access Service" or "Switched Access Traffic" are as defined in the Parties' applicable tariffs.

"Tandem Office Switches" are Class 4 switches which are used to connect and switch trunk circuits between and among End Office Switches and other tandems.

"Tariff Services" as used throughout this Agreement refers to the applicable Party's interstate tariffs and state tariffs, price lists, price schedules and catalogs.

"Technically Feasible" refers solely to technical or operational concerns, rather than economic, space, or site considerations, in accordance with the rules and regulations of the FCC and the Commission.

"Telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

"Telecommunications Carrier" means any provider of Telecommunications Services, except that such term does not include aggregators of Telecommunications Services (as defined in Section 226 of the Act). A Telecommunications Carrier shall be treated as a common carrier under the Act only to the extent that it is engaged in providing Telecommunications Services, except that the FCC shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.

"Telecommunications Services" means the offering of Telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

"Toll Traffic" is traffic that originates in one Rate Center and terminates in another Rate Center with the exception of traffic that is rated as EAS.

"Transit Service" provides the ability for a Telecommunications Carrier to use its connection to a local or access tandem for delivery of calls that originate with a Telecommunications Carrier and terminate to a company other than the tandem company, such as another Competitive Local Exchange Carrier, an existing Local Exchange Carrier, or a wireless carrier. In these cases, neither the originating nor terminating end user is a customer of the tandem Telecommunications Carrier. The tandem Telecommunications Carrier will accept traffic originated by a Party and will terminate it at a Point of Interconnection with another local, intraLATA or interLATA network Telecommunications Carrier. This service is provided through local and access tandem switches.

"Transit Traffic" is any traffic, other than Switched Access Traffic, that originates from one Telecommunications Carrier's network, transits another Telecommunications Carrier's network, and terminates to yet another Telecommunications Carrier's network.

"TRCO" means Trouble Reporting Control Office.

"U S WEST" means U S WEST Communications, Inc. and any Affiliates, subsidiary companies or other entities performing any of the obligations of U S WEST set forth in this Agreement.

"Voluntary Federal Subscriber Financial Assistance Programs" are Telecommunications Services provided to low-income subscribers, pursuant to requirements established by the appropriate federal or state regulatory body.

"Wire Center" denotes, for the purposes of collocation, 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 where one or more Central Offices, used for the provision of Telecommunications Services and Access Services, are located. Wire Center shall mean those points eligible for such connections as specified in the FCC Docket No. 91-141, and rules adopted pursuant thereto.

TERMS AND CONDITIONS

1. General Provisions

- 1.1 Each Party is individually responsible to provide facilities within its network which are necessary for routing, transporting, measuring, and billing traffic from the other Party's network and for delivering such traffic to the other Party's network in the standard format compatible with MCI's network and to terminate the traffic it receives in that standard format or the proper address on its network. The Parties are each solely responsible for participation in and compliance with national network plans, including the National Network Security Plan and the Emergency Preparedness Plan.
- 1.2 Neither Party shall impair the quality of service to other carriers or to either Party's Customers, and each Party may discontinue or refuse service if the other Party violates this provision. Upon such violation, either Party shall provide the other Party notice of such violation, at the earliest practicable time.
- 1.3 Each Party is solely responsible for the services it provides to its Customers and to other Telecommunications Carriers.
 - 1.3.1 The Parties recognize that equipment vendors may manufacture telecommunications equipment that does not fully incorporate and may deviate from industry standards referenced in this Agreement. Due to the manner in which individual equipment manufacturers have chosen to implement industry standards into the design of their products, along with differing vintages of individual facility components and the presence of embedded technologies pre-dating current technical standards, some of the individual facility components deployed within U S WEST's network, including, without limitation, Network Elements and associated business processes and the standards associated with the equipment providing such Network Elements (collectively, "Network Components"), may not adhere to all the specifications set forth and described in the Bellcore, ANSI, ITU and other technical and performance standards outlined in this Agreement. Within forty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which U S WEST will

inform MCI of deviations or planned deviations and the implementation date of such planned deviations from standards referenced in this Agreement for Network Components that may be ordered by MCI. In addition, the Parties agree that those deviations from such standards documented by U S WEST to MCI shall, to the extent permitted by FCC and Commission rules and regulations, supersede sections of this Agreement referencing technical standards otherwise applicable for the affected Network Elements.

- 1.3.2 U S WEST agrees that in no event shall it intentionally allow any Network Component provided by U S WEST to MCI under this Agreement to perform below the standards or deviations therefrom reflected in Section 1.3.1 above, except where requested by MCI. U S WEST shall minimize any degradation to its equipment relative to currently applicable service, where reasonable in view of industry adopted performance standards and technological developments. Written notice (the "Change Notice") of any planned changes in standards for any Network Component which could impact that Network Component will be provided at least ninety (90) days (or at the make/buy point) prior to the planned implementation. If MCI notifies U S WEST of how the proposed change may adversely impact MCI or its Customers (the "MCI Response") within fourteen (14) calendar days after receipt of U S WEST's Change Notice, U S WEST and MCI will schedule joint discussions to address and attempt to resolve the matter, including, without limitation, consideration of proposed alternatives. In addition, if U S WEST learns that any Network Component purchased by MCI under this Agreement has been permitted (even if not intentionally) to fall materially below the level or specification in effect as of the Effective Date of this Agreement, U S WEST shall inform MCI immediately.
- 1.3.3 The Parties recognize that providing a number of the services specified in this Agreement depends upon the "technical feasibility" of providing that service, as that term is defined under the Act and/or by Commission rules and decisions. If the Parties cannot agree on whether providing a service is technically feasible, the matter, including cost and expenses (if any), shall be resolved through good faith negotiation or the dispute resolution process outlined in this Agreement.

2. Most Favored Nation Terms and Treatment

- 2.1 The Parties agree that the provisions of Section 252(i) of the Act shall apply.

3. Payment

- 3.1 In consideration of the services provided by U S WEST under this Agreement, MCI shall pay the charges set forth in Attachment 1 to this Agreement. The billing procedures for charges incurred by MCI hereunder are set forth in Attachment 5 to this Agreement.
- 3.2 Amounts payable under this Agreement, unless reasonably disputed, are due and payable within thirty (30) days after the date of U S WEST's invoice or within twenty (20) days after receipt of the invoice, whichever is later. If the payment due date is not a Business Day, the payment shall be made the next Business Day.

7.5 To the extent that state tariffs limit U S WEST's liability with regard to Listings, the applicable state tariff(s) is incorporated herein and supersedes Section 19, "Limitations of Liability", of Part A of this Agreement with respect to Listings only.¹⁴

8. U S WEST Dex Issues

8.1 U S WEST and MCIIm agree that certain issues, such as yellow page advertising, directory distribution, access to call guide pages, and yellow page listings, will be the subject of negotiations between MCIIm and directory publishers, including U S WEST Dex. U S WEST acknowledges that MCIIm may request U S WEST to facilitate discussions between MCIIm and U S WEST Dex.

¹⁴ Mediator's Recommendations, p. 14.

- 3.3 A late payment charge of 1.5% applies to all billed balances, not reasonably disputed, which are not paid within the applicable time period set forth in Section 3.2 above. To the extent MCI_m pays the billed balance on time, but the amount of the billed balance is reasonably disputed by MCI_m, and, it is later determined that a refund is due MCI_m, interest shall be payable on the refunded amount in the amount of 1.5% per month. To the extent MCI_m pays the billed balance on time, but the amount of the billed balance is reasonably disputed by MCI_m, and, it is later determined that no refund is due MCI_m, no interest shall be payable on the disputed amount.
- 3.4 Late payment charges shall not be used as a 'credit' to a deposit, if any, without the express approval of U S WEST.
- 3.5 Unless specified otherwise in this Agreement, U S WEST shall bill all amounts due from MCI_m for each resold service in accordance with the terms and conditions as specified in the U S WEST tariff.

4. Taxes

- 4.1 Any federal, state or local excise, sales, or use taxes (excluding any taxes levied on income) resulting from the performance of this Agreement shall be borne by the Party upon which the obligation for payment is imposed under applicable law, even if the obligation to collect and remit such taxes is placed upon the other Party. Any such taxes shall be shown as separate items on applicable billing documents between the Parties. The Party so obligated to pay any such taxes may contest the same in good faith, at its own expense, and shall be entitled to the benefit of any refund or recovery, provided that such Party shall not permit any lien to exist on any asset of the other Party by reason of the contest. 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 assistance as may reasonably be necessary to pursue the contest. To the extent a sale is claimed to be for resale tax exemption, the purchasing Party shall furnish the providing Party a proper resale tax 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 during the applicable reporting period.

5. Intellectual Property

- 5.1 **Obligations of Party Requesting Access.** As a condition to the access or use of patents, copyright, trade secrets, and other intellectual property (including software) owned or controlled by a third party to the extent necessary to implement this Agreement or specifically required by the then applicable federal and state rules and regulations relating to Interconnection and access to telecommunications facilities and services ("Third Party Intellectual Property"), the Party providing access may require the other, upon written notice from time to time, to obtain a license or permission for such access or use of Third Party Intellectual Property, make all payment, if any, in connection with obtaining such license, and provide evidence of such license.
- 5.2 **Obligations of Party Providing Access.** The Party providing access shall provide a list of all

known and necessary Third Party Intellectual Property applicable to the other Party, and to take all necessary and appropriate steps to facilitate the negotiation of any mandatory licenses. The treatment of third party licenses shall be in accordance with FCC rules and regulations and/or judicial determinations.

- 5.3 Any intellectual property jointly developed in the course of performing this Agreement shall belong to both Parties who shall have the right to grant non-exclusive licenses to third parties except as otherwise designated in writing by one Party to the other. 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 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 presently or hereafter owned, controlled or licensable by a Party, is granted to the other Party or shall be implied or arise by estoppel.

6. Severability

- 6.1 In the event that any one or more of the provisions contained herein shall for any reason be held to be unenforceable or invalid in any respect under law or regulation, the Parties will negotiate in good faith for replacement language. If any part of this Agreement is held to be invalid or unenforceable for any reason, such invalidity or unenforceability will affect only the portion of this Agreement which is invalid or unenforceable. In all other respects, this Agreement will stand as if such invalid or unenforceable provision had not been a part hereof, and the remainder of this Agreement shall remain in full force and effect.

7. Responsibility for Environmental Contamination

- 7.1 MCI shall in no event be liable to U S WEST for any costs whatsoever resulting from the presence or release of any environmental hazard MCI did not introduce to the affected work location. U S WEST shall, at MCI's request, indemnify, defend, and hold harmless MCI, and 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) arising out of or resulting from (a) any environmental hazard U S WEST, its contractors or agents introduce to the work location, or (b) the presence or release of any environmental hazard for which U S WEST is responsible under applicable law.
- 7.2 U S WEST shall in no event be liable to MCI for any costs whatsoever resulting from the presence or release of any environmental hazard U S WEST did not introduce to the affected work location. MCI shall, at U S WEST's request, indemnify, defend, and hold harmless U S WEST, and 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) arising out of or resulting from (a) any environmental hazard MCI, its contractors or agents introduce to the work location, or (b) the presence or release of any environmental hazard for which MCI is responsible under applicable law.
- 7.3 In the event any suspect materials within U S WEST-owned, operated or leased facilities are identified to be asbestos-containing, MCI will ensure that, to the extent any activities which

it undertakes in the facility disturb such suspect materials, such MCI activities will be in accordance with applicable local, state and federal environmental and health and safety statutes and regulations. Except for abatement activities undertaken by MCI or equipment placement activities that result in the generation of asbestos containing material, MCI shall not have any responsibility for managing, nor be the owner of, nor have any liability for, or in connection with, any asbestos containing material. U S WEST agrees to immediately notify MCI if U S WEST undertakes any asbestos control or asbestos abatement activities that potentially could affect MCI equipment or operations, including, but not limited to, contamination of equipment.

- 7.4 Each Party will be solely responsible, at its own expense, for proper handling, storing, transport and disposal of all (a) substances or materials that it or its contractors or agents bring to, create or assume control over at work locations, or (b) waste resulting therefrom or otherwise generated in connection with its or its contractors' or agents' activities at the work locations.

8. Branding²

- 8.1 In all cases in which U S WEST has control over handling of services MCI may provide using services provided by U S WEST under this Agreement, U S WEST shall, at MCI's sole discretion, brand any and all such services at all points of customer contact exclusively as MCI services, or otherwise as MCI may specify, or such services shall be provided with no brand at all, as MCI shall determine. U S WEST may not unreasonably interfere with branding by MCI.
- 8.2 MCI shall provide the exclusive interface to MCI subscribers, except as MCI shall otherwise specify. In those instances where MCI requires U S WEST personnel or systems to interface with MCI subscribers, such U S WEST personnel shall identify themselves as representing MCI, or such brand as MCI may specify, and shall not identify themselves as representing U S WEST or any other entity.
- 8.3 All forms, business cards or other business materials furnished by U S WEST to MCI subscribers shall be provided by MCI unless otherwise agreed by MCI, in its sole discretion, in which case, any such customer materials shall be subject to MCI's prior review and approval, and shall bear no corporate name, logo, trademark or trade names other than MCI or its Affiliates or such other brand as MCI, in its sole discretion, shall determine.
- 8.4 Except as specifically permitted by MCI, in no event shall U S WEST provide information to MCI subscribers about MCI or MCI's products or services.
- 8.5 U S WEST shall provide, for MCI's review and approval, the methods and procedures, training and approaches to be used by U S WEST to assure that U S WEST meets MCI's branding requirements.

² Order, p. 63 at Issues 30, 30a, and 62.

8.6 This Section 8 shall confer on U S WEST no rights to the service marks, trademarks and trade names owned by or used in connection with services by MCI or its Affiliates, except as expressly permitted by MCI.

9. Independent Contractor Status

9.1 Nothing contained herein shall constitute the Parties as joint venturers, partners, employees or agents of one another, and neither Party shall have the right or power to bind or obligate the other.

9.2 Each Party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of all employees assisting in the performance of such obligations. Each Party will be solely responsible for all matters relating to payment of such employees, including compliance with social security taxes, withholding taxes, and other payroll taxes with respect to their respective employees, as well as any taxes, contributions or other obligations imposed by applicable state unemployment or workers' compensation acts and all other regulations governing such matters. Each Party has sole authority and responsibility to hire, fire and otherwise control its employees.

9.3 Subject to the limitations on liability and except as otherwise provided in this Agreement, each Party shall be responsible for (a) its own acts and performance of all obligations imposed by applicable law in connection with its activities, legal status and property, real or personal, and (b) the acts of its own Affiliates, employees, agents and contractors during the performance of that Party's obligations hereunder. Except for provisions herein expressly authorizing one Party to act for the other, 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, neither Party shall undertake 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.

10. Referenced Documents

10.1 All references to Sections, Exhibits, and Schedules shall be deemed to be references to Sections of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. Whenever any provision of this Agreement refers to a technical reference, technical publication, MCI practice, U S WEST practice, any publication of telecommunications industry administrative or technical standards, or any other document specifically incorporated into this Agreement, it will be deemed to be a reference to the most recent version or edition (including any amendments, supplements, addenda, or successors) or such document that is in effect, and will include the most recent version or edition (including any amendments, supplements, addenda, or successors) of each document incorporated by reference in such a technical reference, technical publication, MCI practice, U S WEST practice, or publication of industry standards, unless MCI elects otherwise.

11. Publicity and Advertising

11.1 Neither Party shall publish or use any advertising, sales promotions or other publicity materials that use the other Party's logo, trademarks or service marks without the prior written approval of the other Party.

12. Executed in Counterparts

12.1 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but such counterparts shall together constitute one and the same instrument.

13. Headings Not Controlling

13.1 The headings and numbering of Sections, Parts, Appendices and Attachments in this Agreement are for convenience only and shall not be construed to define or limit any of the terms herein or affect the meaning or interpretation of this Agreement.

14. Joint Work Product

14.1 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.

15. Survival

15.1 Any liabilities or obligations of a Party for acts or omissions prior to the cancellation or termination of this Agreement; any obligation of a Party under the provisions regarding Indemnification, Confidential Information, Limitation of Liability, and any other provisions of this Agreement which, by their terms, are contemplated to survive, or to be performed after, termination of this Agreement, shall survive cancellation or termination thereof.

16. Effective Date

16.1 This Agreement shall become effective pursuant to Sections 251 and 252 of the Act, on August 20, 1997.

17. Amendment of Agreement

17.1 Except as otherwise provided in this Agreement, no amendment or waiver of any provision of this Agreement, and no consent to any default under this Agreement, shall be effective unless the same is in writing and signed by an officer of the Party against whom such amendment, waiver or consent is claimed. If either Party desires an amendment to this Agreement during the term of this Agreement, it shall provide written notice thereof to the other Party describing the nature of the requested amendment. If the Parties are unable to agree on the terms of the amendment within thirty (30) days after the initial request therefor, the Party requesting the amendment may invoke the dispute resolution process under Section 27 below to determine the terms of any amendment to this Agreement.

18. Indemnification

- 18.1 Notwithstanding any limitations in remedies contained in this Agreement, each Party (the "Indemnifying Party") will indemnify and hold harmless the other Party ("Indemnified Party") from and against any loss, cost, claim, liability, damage and expense, including reasonable attorney's fees, to third parties, relating to or arising out of the libel, slander, invasion of privacy, misappropriation of a name or likeness, actual or alleged infringement or other violation or breach of any patent, copyright, trademark, service mark, trade name, trade dress, trade secret or any other intellectual property right presently existing or later created, negligence or willful misconduct by the Indemnifying Party, its employees, agents, or contractors in the performance of this Agreement, or the failure of the Indemnifying Party to perform its obligations under this Agreement. In addition, the Indemnifying Party will, to the extent of its obligations to indemnify hereunder, defend any action or suit brought by a third party against the Indemnified Party.
- 18.2 The Indemnified Party will notify the Indemnifying Party promptly in writing of any written claim, lawsuit, or demand by third parties for which the Indemnified Party alleges that the Indemnifying Party is responsible under this Section 18 and tender the defense of such claim, lawsuit or demand to the Indemnifying Party. Failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that the Indemnifying Party might have, except to the extent that such failure prejudices the Indemnifying Party's ability to defend such claim.
- 18.3 The Indemnified Party also will cooperate in every reasonable manner with the defense or settlement of such claim, demand, or lawsuit. The Indemnifying Party shall keep the Indemnified Party reasonably and timely apprised of the status of the claim, demand or lawsuit. The Indemnified Party shall have the right to retain its own counsel, including in-house counsel, at its expense, and participate in but not direct the defense; provided, however, that if there are reasonable defenses in addition to those asserted by the Indemnifying Party, the Indemnified Party and its counsel may raise and direct such defenses, which shall be at the expense of the Indemnifying Party.
- 18.4 The Indemnifying Party will not be liable under this Section 18 for settlements or compromises by the Indemnified Party of any claim, demand or lawsuit unless the Indemnifying Party has approved the settlement or compromise in advance or unless the defense of the claim, demand or lawsuit has been tendered to the Indemnifying Party in writing and the Indemnifying Party has failed to timely undertake the defense. 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.

19. Limitation of Liability

- 19.1 Except as otherwise provided in the indemnity section, no Party shall be liable to the other Party for any loss, defect or equipment failure caused by the conduct of the other Party, the other Party's agents, servants, contractors or others acting in aid or concert with the other Party.
- 19.2 [Intentionally left blank for numbering consistency.]

19.3 In no event shall either Party have any liability whatsoever to the other Party for any indirect, special, consequential, incidental or punitive damages, including, but not limited to, loss of anticipated profits or revenue or other economic loss in connection with or arising from anything said, omitted or done hereunder (collectively, "Consequential Damages"), even if the other Party has been advised of the possibility of such damages; provided, that the foregoing shall not limit a Party's obligation to indemnify, defend and hold the other Party harmless against any amounts payable to a third party, including any losses, costs, fines, penalties, criminal or civil judgments or settlements, expenses (including attorneys' fees) and Consequential Damages of such third party. Nothing contained in this section shall limit either Party's liability to the other for (i) willful or intentional misconduct (including gross negligence); or (ii) bodily injury, death or damage to tangible real or tangible personal property proximately caused by such Party's negligent act or omission or that of its respective agents, subcontractors or employees, nor shall anything contained in this Section limit the Parties' indemnification obligations, as specified above.³

19.4 Notwithstanding the provisions of Section 19.3 above, to the extent U S WEST tariffs contain limitations on liability, MCI shall submit language for inclusion in its intrastate retail tariffs, that is substantially similar to the limitation of liability language contained in U S WEST's tariffs, and such limitations of liability shall govern for Customer claims. In addition, notwithstanding the provisions of Section 19.3 above, to the extent that the Commission's quality of service rules provide for remedies to MCI or its Customers for Customer claims, then those remedies shall govern as to such claims.

20. Term of Agreement

20.1 This Agreement shall be effective for a period of three (3) years, and thereafter shall continue in force and effect unless and until a new agreement, addressing all of the terms of this Agreement, becomes effective between the Parties. The Parties shall commence negotiations on a new agreement no later than one (1) year prior to the expiration of the term of this Agreement. Either Party may request resolution of open issues in accordance with the provisions of Section 27 of Part A of this Agreement, beginning nine (9) months prior to the expiration of this Agreement. Any disputes regarding the terms and conditions of the new interconnection agreement shall be resolved in accordance with said Section 27 and the resulting agreement shall be submitted to the Commission. This Agreement shall remain in effect until a new interconnection agreement approved by the Commission has become effective.

21. Governing Law

21.1 This Agreement shall be governed by and construed in accordance with the Act and the FCC's rules and regulations, except insofar as state law may control any aspect of this Agreement, in which case the domestic laws of the State of Washington, without regard to its conflicts of laws principles, shall govern.

³ Mediator's Recommendations, dated June 25, 1997, pp. 3-4.

22. Cancellation Charges

- 22.1 Except as provided pursuant to a Bona Fide Request, or as otherwise provided in any applicable tariff or contract referenced herein, no cancellation charges shall apply.

23. Regulatory Approvals

- 23.1 This Agreement, and any amendment or modification hereof, will be submitted to the Commission 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.
- 23.2 U S WEST shall provide MCIIm a summary describing the proposed change(s) to each Telecommunications Service which is available pursuant to this Agreement. U S WEST shall also provide MCIIm a summary describing the proposed change(s) of each intrastate and interstate tariff which provides for an Interconnection, unbundled Network Element or Ancillary Service that is available pursuant to this Agreement. Such summaries shall be available through an internet Web page to be posted on the same day the proposed change is filed with the Commission or the FCC or at least thirty (30) days in advance of its effective date, whichever is earlier.
- 23.3 In the event any governmental authority or agency orders U S WEST to provide any service covered by this Agreement in accordance with any terms or conditions that individually differ from one or more corresponding terms or conditions of this Agreement, MCIIm may elect to amend this Agreement to reflect any such differing terms or conditions contained in such decision or order, with effect from the date MCIIm makes such election. The other services covered by this Agreement and not covered by such decision or order shall remain unaffected and shall remain in full force and effect.
- 23.4 The Parties intend that any additional services requested by either Party relating to the subject matter of this Agreement will be incorporated into this Agreement by amendment.

24. Compliance

- 24.1 Each Party shall comply with all applicable federal, state, and local laws, rules and regulations applicable to its performance under this Agreement.
- 24.2 Each Party represents and warrants that any equipment, facilities or services provided to the other Party under this Agreement comply with the Communications Law Enforcement Act of 1994 ("CALEA"). Each Party (the "Indemnifying Party") shall indemnify and hold the other Party (the "Indemnified Party") harmless from any and all penalties imposed upon the Indemnified Party for such noncompliance and shall, at the Indemnifying Party's sole cost and expense, modify or replace any equipment, facilities or services provided to the Indemnified Party under this Agreement to ensure that such equipment, facilities and services fully comply with CALEA.
- 24.3 All terms, conditions and operations under this Agreement shall be performed in accordance

with all applicable laws, regulations and judicial or regulatory decisions of all duly constituted governmental authorities with appropriate jurisdiction, and this Agreement shall be implemented consistent with the FCC's First Report and Order in CC Docket No. 96-98, released August 8, 1996 (the "FCC Interconnection Order") and applicable State Commission Orders. Each Party shall be responsible for obtaining and keeping in effect all FCC, Commission, franchise authority and other regulatory approvals that may be required in connection with the performance of its obligations under this Agreement. In the event the Act or FCC or Commission rules and regulations applicable to this Agreement are held invalid, this Agreement shall survive, and the Parties shall promptly renegotiate any provisions of this Agreement which, in the absence of such invalidated Act, rule or regulation, are insufficiently clear to be effectuated, violate, or are either required or not required by the new rule or regulation. In the event the Parties cannot agree on an amendment within thirty (30) days from the date any such rules, regulations or orders become effective, then the Parties shall resolve their dispute, including liability for non-compliance of the new clause or the cost, if any, of performing activities no longer required by the rule during the renegotiation of the new clause, under the applicable procedures set forth in Section 27 herein.

25. Force Majeure

25.1 Neither Party shall be 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 including, without limitation, acts of nature, acts of civil or military authority, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, work stoppages, equipment failure, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities or acts or omissions of transportation carriers (collectively, a "Force Majeure Event"). No delay or other failure to perform shall be excused pursuant to this Section 25 unless such delay or failure and the 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. 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 a labor dispute or strike, the Parties agree to provide service to each other at a level equivalent to the level they provide themselves. In the event of a labor dispute or strike or work stoppage that continues for a period in excess of forty-eight (48) hours, MCIIm may obtain replacement services for those services affected by such labor dispute or strike or work stoppage, in which event any liability of MCIIm for the affected services shall be suspended for the period of the work stoppage or labor dispute or strike. In the event of such performance delay or failure by U S WEST, U S WEST agrees to resume performance in a nondiscriminatory manner and not favor its own provision of Telecommunications Services above that of MCIIm.

26. Escalation Procedures

26.1 MCIIm and U S WEST agree to exchange escalation lists which reflect contact personnel including vice president-level officers. These lists shall include name, department, title,

phone number, and facsimile number for each person. MCI and U S WEST agree to exchange up-to-date lists as reasonably necessary.

27. Dispute Resolution

27.1⁴ The Parties agree, in good faith, to attempt to resolve any claim, controversy or dispute between the Parties, their agents, employees, officers, directors or affiliated agents ("Dispute") through negotiation or non-binding arbitration. This Section 27 shall not be construed to waive the Parties' rights to seek legal or regulatory intervention as provided by state or federal law.

28. Nondisclosure

28.1 All information, including, but not limited to, specifications, microfilm, photocopies, magnetic disks, magnetic tapes, drawings, sketches, models, samples, tools, technical information, data, employee records, maps, financial reports, and market data, (a) furnished by one Party to the other Party dealing with Customer specific, facility specific, or usage specific information, other than Customer information communicated for the purpose of publication or directory database inclusion, or (b) in written, graphic, electromagnetic, or other tangible form and marked at the time of delivery as "Confidential" or "Proprietary", or (c) declared orally or in writing to the Recipient at the time of delivery, or by written notice given to the Recipient within ten (10) days after delivery, to be "Confidential" or "Proprietary" (collectively referred to as "Proprietary Information"), shall remain the property of the Discloser. A Party who receives Proprietary Information via an oral communication may request written confirmation that the material is Proprietary Information. A Party who delivers Proprietary Information via an oral communication may request written confirmation that the Party receiving the information understands that the material is Proprietary Information.

28.2 Upon request by the Discloser, the Recipient shall return all tangible copies of Proprietary Information, whether written, graphic or otherwise, except that the Recipient's legal counsel may retain one (1) copy for archival purposes.

28.3 Each Party shall keep all of the other Party's Proprietary Information confidential and shall use the other Party's Proprietary Information only in connection with this Agreement. Neither Party shall use the other Party's Proprietary Information for any other purpose except upon such terms and conditions as may be agreed upon between the Parties in writing.

28.4 Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this Agreement do not apply to such Proprietary Information that:

28.4.1 was, at the time of receipt, already known to the Recipient free of any obligation to keep it confidential evidenced by written records prepared prior to delivery by the Discloser; or

28.4.2 is or becomes publicly known through no wrongful act of the Recipient; or

⁴ Order, p. 70 at Issues 75 and 76.

- 28.4.3 is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the Discloser with respect to such information; or
 - 28.4.4 is independently developed by an employee, agent, or contractor of the Recipient, which individual is not involved in any manner with the provision of services pursuant to this Agreement and does not have any direct or indirect access to the Proprietary Information; or
 - 28.4.5 is approved for release by written authorization of the Discloser; or
 - 28.4.6 is required by law, a court, or governmental agency, provided that the Discloser has been notified of the requirement promptly after the Recipient becomes aware of the requirement, subject to the right of the Discloser to seek a protective order as provided in Section 28.5 below.
- 28.5 For a period of ten (10) years from receipt of Proprietary Information, the Recipient shall (a) use it only for the purpose of performing under this Agreement, (b) hold it in confidence and disclose it only to employees, authorized contractors and authorized agents who have a need to know it in order to perform under this Agreement, and (c) safeguard it from unauthorized use or disclosure using no less than the degree of care with which the Recipient safeguards its own Proprietary Information. Any authorized contractor or agent to whom Proprietary Information is provided must have executed a written Agreement comparable in scope to the terms of this Section. Each Party shall provide advance notice of three (3) Business Days to the other of the intent to provide Proprietary information to a governmental authority and the Parties shall cooperate with each other in attempting to obtain a suitable protective order. The Recipient agrees to comply with any protective order that covers the Proprietary Information to be disclosed.
- 28.6 Each Party agrees that the Discloser would be irreparably injured by a breach of this Section 28 by the Recipient or its representatives and that the Discloser shall be entitled to seek equitable relief, including injunctive relief and specific performance, in the event of any breach of this Section 28. Such remedies shall not be exclusive, but shall be in addition to all other remedies available at law or in equity.
- 28.7 CPNI related to either Party's subscribers obtained by virtue of Local Interconnection or any other service provided under this Agreement shall be the Discloser's Proprietary Information and may not be used by the Recipient for any purpose except performance of its obligations under this Agreement, and in connection with such performance, shall be disclosed only to employees, authorized contractors and authorized agents with a need to know, unless the subscriber expressly directs the Discloser to disclose such information to the Recipient pursuant to the requirements of Section 222(c)(2) of the Act. If the Recipient seeks and obtains written approval to use or disclose such CPNI from the Discloser, such approval shall be obtained only in compliance with Section 222(c)(2) and, in the event such authorization is obtained, the Recipient may use or disclose only such information as the Discloser provides pursuant to such authorization and may not use information that the Recipient has otherwise obtained, directly or indirectly, in connection with its performance under this Agreement.

- 28.8 Except as otherwise expressly provided in this Section 28, nothing herein shall be construed as limiting the rights of either Party with respect to its subscriber information under any applicable law, including, without limitation, Section 222 of the Act.
- 28.9 Effective Date Of This Section. Notwithstanding any other provision of this Agreement, the Proprietary Information provisions of this Agreement shall apply to all Proprietary Information furnished by either Party with a claim of confidentiality or proprietary nature at any time.

29. Notices

- 29.1 Except as otherwise provided herein, all notices or other communication hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, certified mail, postage prepaid, return receipt requested, or delivered by prepaid overnight express mail, and addressed as follows:

To MCI: Vice President - Local Initiatives, Western Region
MCImetro Access Transmission Services, Inc.
707 - 17th Street, 42nd Floor
Denver, Colorado 80202

Copy to: General Counsel
MCI Communications Corporation
1801 Pennsylvania Ave, N.W.
Washington, D.C. 20006

To U S WEST: U S WEST
Executive Director Interconnect Services
1801 California, 23rd Floor
Denver, Colorado 80202

Copy to: U S WEST, Inc.
Senior Counsel, Law Dept.
7800 East Orchard Road, Suite 480
Englewood, Colorado 80111

- 29.2 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 29.

30. Assignment

- 30.1 Neither Party may assign, transfer (whether by operation of law or otherwise) or delegate this Agreement (or any rights or obligations hereunder) to a third party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, provided that each Party may assign this Agreement to a corporate affiliate or an entity under its common control or an entity acquiring all or substantially all of its assets or equity by providing prior written notice to the other Party of such assignment or transfer. Any attempted assignment or transfer that is not permitted under the provisions of this Section 30 is void ab initio.

Without limiting the generality of the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the Parties' respective successors and assigns. No assignment or delegation hereof shall relieve the assignor of its obligations under this Agreement.

- 30.2 If any obligation of U S WEST under this Agreement is performed by a subcontractor or Affiliate, U S WEST shall remain fully responsible for the performance of this Agreement in accordance with its terms and U S WEST shall be solely responsible for payments due to its subcontractors.
- 30.3 If any obligation of MCIIm under this Agreement is performed by a subcontractor or Affiliate, MCIIm shall remain fully responsible for the performance of this Agreement in accordance with its terms, and MCIIm shall be solely responsible for payments due to its subcontractors.

31. Warranties

- 31.1 U S WEST shall conduct all activities and interfaces which are provided for under this Agreement with MCIIm Customers in a carrier-neutral, nondiscriminatory manner.
- 31.2 U S WEST warrants that it has provided, and during the term of this Agreement it will continue to provide, to MCIIm true and complete copies of all material agreements in effect between U S WEST and any third party (including Affiliates) providing any services to MCIIm on behalf of or under contract to U S WEST in connection with U S WEST's performance of this Agreement, or from whom U S WEST has obtained licenses or other rights used by U S WEST to perform its obligations under this Agreement, provided, however, that U S WEST may provide such agreements under appropriate protective order.

32. Default

- 32.1 In the event of a breach of any material provision of this Agreement by either Party, the non-breaching Party shall give the breaching Party and the Commission written notice thereof, and:
 - 32.1.1 if such material breach is for non-payment of amounts due hereunder pursuant to Section 3 of Part A of this Agreement, the breaching Party shall cure such breach within thirty (30) calendar 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.
 - 32.1.2 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) calendar days or within a period of time equivalent to the applicable interval required by this Agreement, whichever is shorter. If the breaching Party does not cure such breach within the applicable time period, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue

all available legal and equitable remedies for such breach. Notice under this Subsection 32.1.2 may be given electronically or by facsimile, provided that a hard copy or original of such notice is sent by overnight delivery service.

- 32.1.3 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 non-breaching Party's reasonable satisfaction within forty-five (45) calendar days, and if it does not, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach.
- 32.2 MCIIm may terminate this Agreement in whole at any time only for cause upon sixty (60) calendar days' prior written notice. MCIIm's sole liability shall be payment of amounts due for services provided or obligations assumed up to the date of termination.
- 32.3 In the event of any termination under this Section 32, U S WEST and MCIIm agree to cooperate to provide for an uninterrupted transition of services to MCIIm or another vendor designated by MCIIm to the extent that U S WEST has the ability to provide such cooperation.
- 32.4 Notwithstanding any termination hereof, the Parties shall continue to comply with their obligations under the Act.

33. Remedies

- 33.1 In the event U S WEST fails to switch a subscriber to MCIIm service as provided in this Agreement, U S WEST shall reimburse MCIIm in an amount equal to all fees paid by such subscriber to U S WEST for such failed-to-be-transferred services from the time of such failure to switch to the time at which the subscriber switch is accomplished. This remedy shall be in addition to all other remedies available to MCIIm under this Agreement or otherwise available.
- 33.2 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 in case of any breach or threatened breach by the other Party of any provision of this Agreement. Use of one or more remedies shall not bar use of any other remedy for the purpose of enforcing the provisions of this Agreement.

34. Waivers

- 34.1 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.
- 34.2 No course of dealing or failure of either Party to strictly enforce any term, right, or condition of this Agreement in any instance shall be construed as a general waiver or relinquishment of such term, right or condition.

34.3 Waiver by either Party of any default or breach by the other Party shall not be deemed a waiver of any other default or breach.

34.4 By entering into this Agreement, neither Party waives any right granted to it pursuant to the Act.

35. No Third Party Beneficiaries

35.1 The provisions of this Agreement are for the benefit of the Parties hereto and not for any other person; provided, however, that this shall not be construed to prevent MCI_m 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.

36. Physical Security

36.1 U S WEST shall exercise the same degree of care to prevent harm or damage to MCI_m or its employees, agents or subscribers, or their property as U S WEST provides itself. MCI_m shall exercise the same degree of care to ensure the security of its equipment physically collocated within U S WEST's space as MCI_m provides such security to itself.

36.1.1 U S WEST will restrict access to approved personnel to U S WEST's buildings. MCI_m is responsible for the action of its employees and other authorized non-MCI_m personnel; U S WEST is responsible for the action of its employees and other authorized non-U S WEST personnel.

36.1.2 U S WEST will furnish to MCI_m the current name and telephone number of those central office supervisors where a physical collocation arrangement exists. The central office supervisor(s) will be the only U S WEST employee(s) with access to MCI_m's collocation space.

36.1.3 U S WEST will comply at all times with U S WEST security and safety procedures at the individual central office locations where MCI_m have physical collocation arrangements. The Parties will cooperate to analyze security procedures of each company to evaluate ways in which security procedures of U S WEST may be enhanced.

36.1.4 U S WEST will allow MCI_m to inspect or observe its physical spaces which house or contain MCI_m equipment or equipment enclosures at any time upon completion of the physical collocation quotation. Upon completion of the build out of the physical space, U S WEST will furnish MCI_m with all keys, entry codes, lock combinations, or other materials or information which may be needed to gain entry via direct access to MCI_m's physical space.

36.1.5 U S WEST agrees to logically partition any U S WEST owned access device systems, whether biometric or card reader, or types which are encoded identically or mechanical coded locks on external and/or internal doors to spaces which house MCI_m equipment.

- 36.1.6 U S WEST agrees to limit the keys used in its keying systems for spaces which contain MCIIm equipment to the U S WEST supervisor for the specific facility to emergency access only. MCIIm shall further have the right to change locks where deemed necessary for the protection and security of its physical spaces and will provide the U S WEST supervisor with the current key.
- 36.1.7 U S WEST shall control unauthorized access from passenger and freight elevators, elevator lobbies and spaces which contain or house MCIIm equipment or equipment space in the same manner as U S WEST provides such control for itself.
- 36.1.8 U S WEST will provide notification to designated MCIIm personnel to indicate an actual or attempted security breach of MCIIm physical space in the same time frame as U S WEST provides such notification to itself.

37. Network Security

- 37.1 U S WEST shall provide an appropriate and sufficient back-up and recovery plan to be used in the event of a system failure or emergency.
- 37.2 U S WEST shall install controls to (a) disconnect a user for a pre-determined period of inactivity on authorized ports; (b) protect subscriber proprietary information; and (c) ensure both ongoing operational and update integrity.
- 37.3 Each Party shall be responsible for the security arrangements on its side of the network to the Point of Interconnection. The Parties shall jointly cooperate to analyze network security procedures and cooperate to ensure the systems, access and devices are appropriately secured and compatible.

38. Revenue Protection

- 38.1 U S WEST shall make available to MCIIm all present and future fraud prevention or revenue protection features that U S WEST provides to itself or others. These features include, but are not limited to, operator screening codes, information digits assigned such as information digits '29' and '70' which indicate prison and COCOT pay phone originating line types respectively, in accordance with the requirements established by the FCC, call blocking of domestic, international blocking for business and residence, 900, NPA-976, and specific line numbers. U S WEST shall additionally provide partitioned access to fraud prevention, detection and control functionality within pertinent Operations Support Systems ("OSS") which include, but are not limited to, Line Information Data Base Fraud monitoring systems.
- 38.2 Uncollectible or unbillable revenues resulting from, but not confined to, provisioning, maintenance, or signal network routing errors shall be the responsibility of the Party causing such error.
- 38.3 Uncollectible or unbillable revenues resulting from the accidental or malicious alteration of software underlying Network Elements or their subtending operational support systems by unauthorized third parties shall be the responsibility of the Party having administrative control of access to said Network Element or operational support system software.

- 38.4 Each Party shall be responsible for any uncollectible or unbillable revenues resulting from the unauthorized use of facilities under its control or services it provides, including clip-on fraud.
- 38.5 The Parties shall work cooperatively to minimize fraud associated with third-number billed calls, calling card calls, and any other services related to this Agreement.

39. Law Enforcement Interface

- 39.1 U S WEST shall provide all necessary assistance to facilitate the execution of wiretap or dialed number recorder orders from law enforcement authorities.

40. Collocation

40.1 General Description

- 40.1.1 Collocation means the arrangement whereby MCI may place its own equipment in the U S WEST premises. **Such premises include central offices, serving wire centers and tandem offices, as well as all buildings or similar structures owned or leased by U S WEST that house U S WEST network facilities. This also includes any structures that house network facilities on public rights-of-way, such as vaults containing loop concentrator or similar structures.**⁵ MCI's equipment may be placed via either a physical or virtual collocation arrangement. With physical collocation, MCI obtains dedicated space to place and maintain its equipment. With virtual collocation, U S WEST installs and maintains equipment that MCI provides to U S WEST. Collocation also includes U S WEST providing resources necessary for the operation and economical use of collocated equipment.
- 40.1.2 Collocation is offered for network interconnection between the Parties. **MCI may cross connect to other collocated parties via facilities provided by U S WEST,**⁶ provided that MCI's collocated equipment is also used for interconnection with U S WEST or access to U S WEST's unbundled Network Elements.
- 40.1.3 MCI is responsible for bringing its own or leased facilities to the U S WEST-designated point of interface ("POI"). U S WEST will extend MCI's facilities from the POI to the cable vault within the wire center. If necessary, U S WEST may bring the facilities into compliance with U S WEST internal fire code standards and extend the facilities to the collocated space.
- 40.1.4 MCI will be provided two (2) points of entry into the U S WEST wire center only when there are at least two (2) existing entry points for U S WEST cable and when there are vacant entrance ducts in both.

⁵ Order, p.13.

⁶ Order, p. 41 at Issue 11.

- 40.1.5 **MCIm may collocate transmission equipment (including Digital Cross Connect Systems and Remote Switching Units (RSUs)) to terminate basic transmission facilities but MCIm shall not use physically collocated equipment to avoid payment of access charges. MCIm and U S WEST shall establish procedures, including an audit mechanism, that will demonstrate that MCIm is not using RSUs for the purpose of bypassing access charges.⁷ MCIm must identify what equipment will be installed, to allow for U S WEST to use this information in engineering the power, floor loading, heat release, environmental participant level, and HVAC.**
- 40.1.6 [Intentionally left blank for numbering consistency]
- 40.1.7 Expanded Interconnection Channel Termination (EICT). Telecommunications Interconnection between MCIm's collocated equipment and U S WEST's network may be accomplished via an Expanded Interconnection Channel Termination (EICT). This element can be at the DS-3, DS-1, DS-0, or any other technically feasible level, subject to network disclosure requirements of the FCC, depending on the U S WEST service to which it is connected. The terms and conditions of the tariff for EICT are incorporated only to the extent that they are agreed to by the Parties. Within ninety (90) days (or other acceptable time agreed to by the Parties) of the Effective Date of this Agreement, the Parties will meet to review the tariff and seek resolution on disagreed items.
- 40.1.8 Consistent with U S WEST's internal practice, within ten (10) Business Days of MCIm's request for any space, U S WEST shall provide information available to it regarding the environmental conditions of the space provided for placement of equipment and Interconnection, including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in U S WEST's possession or files, or the possession of an agent, contractor, employee, lessor, or tenant of U S WEST's that holds such information on U S WEST's behalf.
- 40.1.9 U S WEST shall allow MCIm to perform any environmental site investigations, including, but not limited to, asbestos surveys, which MCIm deems to be necessary in support of its collocation needs. MCIm shall advise U S WEST in writing of its intent to conduct such investigation and shall receive written approval from U S WEST to proceed. MCIm shall indemnify U S WEST according to Section 18 of Part A of this Agreement for any loss or claim for damage suffered by U S WEST as a result of MCIm's actions during any site inspection.
- 40.1.10 If the space provided for the placement of equipment, Interconnection, or provision of service contains environmental contamination or hazardous material, particularly, but not limited to, asbestos, lead paint or radon, which makes the placement of such equipment or interconnection hazardous, U S WEST shall offer an alternative space, if available, for MCIm's consideration.

⁷ Staff Recommendations, dated August 11, 1997, pp. 2-3.

40.2 Virtual Collocation

- 40.2.1 U S WEST shall provide virtual collocation for the purpose of Interconnection or access to unbundled Network Elements subject to the rates, terms and conditions of this Agreement.
- 40.2.2 Upon mutual agreement, MCIIm will have physical access to the U S WEST wire center building pursuant to a virtual collocation arrangement.
- 40.2.3 MCIIm will be responsible for obtaining and providing to U S WEST administrative codes, e.g., common language codes, for all equipment specified by MCIIm and installed in wire center buildings.
- 40.2.4 MCIIm will be responsible for payment of training of U S WEST employees for the maintenance, operation and installation of MCIIm's virtually collocated equipment when that equipment is different than the equipment used by U S WEST. Training conditions are further described in the Virtual collocation Rate Element section following.
- 40.2.5 MCIIm will be responsible for payment of reasonable charges incurred as a result of agreed upon maintenance and/or repair of MCIIm's virtually collocated equipment.
- 40.2.6 U S WEST does not guarantee the reliability of MCIIm's virtually collocated equipment, but U S WEST is responsible for proper installation, maintenance and repair of such equipment, including the change out of electronic cards provided by MCIIm.
- 40.2.7 MCIIm is responsible for ensuring the functionality and interoperability of virtually collocated SONET equipment provided by different manufacturers.
- 40.2.8 MCIIm, as bailor, will transfer possession of MCIIm's virtually collocated equipment to U S WEST, as bailee, for the sole purpose of providing U S WEST with the ability to install, maintain and repair MCIIm's virtually collocated equipment. Title to the MCIIm virtually collocated equipment shall not pass to U S WEST.
- 40.2.9 MCIIm shall ensure that upon receipt by U S WEST of MCIIm's virtually collocated equipment, MCIIm will make available all access to ongoing technical support to U S WEST, as available under the equipment warranty or other terms and conditions, all at MCIIm's expense. MCIIm shall advise the manufacturer and seller of the virtually collocated equipment that it will be installed, maintained and repaired by U S WEST.
- 40.2.10 MCIIm's virtually collocated equipment must comply with the Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements TR-NWT-000063, electromagnetic compatibility (EMC) per GR-1089-CORE, Company wire center environmental and transmission standards and any statutory (local, state or federal) and/or regulatory requirements, all of the foregoing which may be in effect at the time of equipment installation or which may subsequently become effective.

MCIm shall provide U S WEST interface specifications (e.g., electrical, functional, physical and software) of MCIm's virtually collocated equipment.

40.2.11 MCIm must specify all software options and associated plug-ins for its virtually collocated equipment.

40.2.12 MCIm is responsible for purchasing and maintaining a supply of spares. Upon failure of the MCIm virtually collocated equipment, MCIm is responsible for transportation and delivery of maintenance spares to U S WEST at the wire center housing the failed equipment.

40.2.13 Where MCIm is virtually collocated in a premises which was initially prepared for virtual collocation, MCIm may elect to retain its virtual collocation in that premises and expand that virtual collocation according to the rates, terms and conditions of this Agreement.

40.3 Physical Collocation

40.3.1 U S WEST shall provide to MCIm physical collocation of equipment necessary for Interconnection or for access to unbundled Network Elements, except that U S WEST shall provide for virtual collocation where space is available or expansion or rearrangement is possible if U S WEST demonstrates to the Commission that physical collocation is not practical for technical reasons or because of space limitations, as provided in Section 251(c)(6) of the Act. MCIm shall pay a prorated amount for expansion of said space. U S WEST shall provide such collocation for the purpose of Interconnection or access to unbundled Network Elements, except as otherwise mutually agreed to in writing by the Parties or as required by the FCC or the Commission, subject to the rates, terms and conditions of this Agreement.

40.3.1.1 U S WEST shall permit MCIm to use vendors for all required engineering and installation services associated with equipment collocated by MCIm pursuant to this Agreement. Within one hundred and twenty (120) days after the Effective Date of this Agreement, U S WEST and MCIm shall compose and agree on a list of approved vendors and/or agree on minimum qualifications for such contractors consistent with industry standards, which agreement shall not be unreasonably withheld. In the event such agreement cannot be reached and the dispute resolution process outlined in Section 27 above has not concluded on the issue of approved vendors, the list of approved vendors maintained by U S WEST as of the Effective Date of this Agreement shall be the default list until the conclusion of the dispute resolution process.

40.3.2 Where MCIm is virtually collocated in a premises which was initially prepared for virtual collocation, MCIm may elect, unless it is not practical for technical reasons or because of space limitations, to convert its virtual collocation to physical collocation at such premises in which case MCIm shall coordinate the construction and rearrangement with U S WEST of its equipment (IDLC and transmission) and circuits

for which MCI shall pay U S WEST at applicable rates, and pursuant to the other terms and conditions in this Agreement. In addition, all applicable physical collocation recurring charges shall apply.

- 40.3.3 MCI shall be allowed access to the POI on non-discriminatory terms. MCI owns and is responsible for the installation, maintenance and repair of its equipment located within the space rented from U S WEST.
- 40.3.4 MCI must use leased space as soon as reasonably possible and may not warehouse space for later use or sublease to another provider. Physical collocation is offered on a space-available, first-come, first-served basis.
- 40.3.5 **Unless otherwise agreed to by the Parties, the initial minimum standard leasable amount of floor space is one hundred (100) square feet. MCI must efficiently use the leased space; no more than fifty percent (50%) of the floor space may be used for storage cabinets and work surfaces. Subsequently, MCI may lease increments of less than one hundred (100) square feet if it is sufficient to meet MCI's needs.⁸**
- 40.3.6 MCI's leased floor space will be separated from other competitive providers and U S WEST space through cages or hard walls. MCI may elect to have U S WEST construct the cage, or choose from U S WEST approved contractors to construct the cage, meeting U S WEST's installation Technical Publication 77350. Any deviation to MCI's request must be approved.
- 40.3.7 The following standard features will be provided by U S WEST:
 - (a) Heating, ventilation and air conditioning.
 - (b) Smoke/fire detection and any other building code requirement.
- 40.3.8 U S WEST Responsibilities
 - (a) Design the floor space within each location which will constitute MCI's leased space.
 - (b) Ensure that the necessary construction work is performed on a timely basis to build MCI's leased physical space and the riser from the vault to the leased physical space.
 - (c) Develop a quotation specific to MCI's request.
 - (d) Extend U S WEST-provided and owned fiber optic cable from the POI through the cable vault and extend the cable to MCI's leased physical space or place the cable in fire retardant tubing prior to extension to MCI's

⁸ Order, p. 41 at Issue 13.

leased physical space.

- (e) Installation and maintenance and all related activity necessary to provide Channel Termination between U S WEST's and MCI's equipment.
- (f) Work cooperatively with MCI in matters of joint testing and maintenance.

40.3.9 MCI Responsibilities

- (a) Determine the type of enclosure for the physical space.
- (b) Procure, install and maintain all fiber optic facilities up to the U S WEST designated POI.
- (c) Provide for installation, maintenance, repair and service of all MCI's equipment located in the leased physical space.
- (d) Ensure that all equipment installed by MCI complies with Bellcore Network Equipment Building System Generic Equipment requirements, U S WEST environmental and transmission standards, and any statutory (local, federal, or state) or regulatory requirements in effect at the time of equipment installation or that subsequently become effective.

40.3.10 The installation of any Interconnection service will be coordinated between the Parties so that MCI may utilize those services once MCI has accepted its leased physical space.

40.3.11 If, at any time, U S WEST reasonably determines that the equipment or the installation does not meet standard industry requirements, such failure being due to actions of MCI or its agents, MCI will be responsible for the costs associated with the removal, modification to, or installation of the equipment to bring it into compliance. If MCI fails to correct any non-compliance within thirty (30) calendar days or as soon as reasonably practical after the receipt of written notice of non-compliance, U S WEST may have the equipment removed or the condition corrected at MCI's expense.

40.3.12 If, during installation, U S WEST reasonably determines that MCI activities or equipment are unsafe, non-industry standard or in violation of any applicable laws or regulations, U S WEST has the right to stop work until the situation is remedied. If such conditions pose an immediate threat to the safety of personnel, interfere with the performance of U S WEST's service obligations, or pose an immediate threat to the physical integrity of the conduit system or the cable facilities, U S WEST may perform such work and/or take action as is necessary to correct the condition at MCI's expense.

40.3.13 U S WEST shall provide basic telephone service with a connection jack as requested by MCI from U S WEST for the collocated space. Upon MCI's request and following the normal provisioning process, this service shall be available at the MCI

collocated space on the day the space is turned over to MCI by U S WEST.

- 40.3.14 Where available, U S WEST shall provide access to eyewash stations, bathrooms, and drinking water within the collocated facility on a twenty-four (24) hour per day, seven (7) day per week basis for MCI personnel and its designated agents.
- 40.3.15 U S WEST shall provide MCI with written notice five (5) Business Days prior to those instances where U S WEST or its subcontractors may be performing work that could reasonably potentially affect MCI's service. U S WEST will make reasonable efforts to inform MCI by telephone of any emergency related activity prior to the start of the activity that U S WEST or its subcontractors may be performing that could reasonably potentially affect MCI's service, so that MCI can take any action required to monitor or protect its service.
- 40.3.16 U S WEST shall provide information regarding the location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for U S WEST's point of termination to MCI within five (5) Business Days of MCI's acceptance of U S WEST's quote for collocated space.
- 40.3.17 U S WEST shall provide the dimensions for MCI's outside plant fiber ingress and egress into MCI's collocated space within five (5) Business Days of MCI's acceptance of U S WEST's quote for collocated space.
- 40.3.18 U S WEST shall provide the sizes and number of power feeders for the collocated space to MCI within ten (10) Business Days of MCI's acceptance of U S WEST's quote for collocated space.
- 40.3.19 U S WEST shall provide positive confirmation to MCI when construction of MCI collocated space is fifty percent (50%) completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.
- 40.3.20 [Intentionally left blank for numbering consistency]
- 40.3.21 With the exception of subparagraph (b) below, U S WEST shall provide the following information to MCI within five (5) Business Days or as reasonably necessary upon receipt of a written request from MCI:
- (a) additional work restriction guidelines.
 - (b) U S WEST or industry technical publication guidelines that impact the design of U S WEST collocated equipment, unless such documents are already in the possession of MCI. The following U S WEST Technical Publications provide information regarding central office equipment and collocation guidelines:

77350 Central Office Telecommunications Equipment Installation
and Removal Guidelines

77351 Central Office Telecommunications Equipment Engineering Standards

77355 Grounding - Central Office and Remote Equipment Environment

77386 Expanded Interconnection and Collocation for Private Line Transport and Switched Access Services

MCIIm may obtain the above documents from:

Faison Office Products Company
3251 Revere St. Suite 200
Aurora, Colorado 80011
(303) 340-3672

- (c) appropriate U S WEST contacts (names and telephone numbers) for the following areas:

Engineering
Physical & Logical Security
Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety

- (d) escalation process for the U S WEST employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to MCIIm's collocation.

40.3.22 Power as referenced in this Agreement refers to any electrical power source supplied by U S WEST for MCIIm equipment. U S WEST will supply power to support MCIIm equipment at equipment specific DC and AC voltages. At a minimum, U S WEST shall supply power to MCIIm at parity with that provided by U S WEST to itself. If U S WEST performance, availability or restoration falls below industry standards, U S WEST shall bring itself into compliance with such industry standards as soon as technologically feasible.

- (a) Central office power supplied by U S WEST into the MCIIm equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated MCIIm equipment area. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of MCIIm equipment. The termination location shall be mutually agreed upon by the Parties.
- (b) U S WEST power equipment supporting MCIIm's equipment shall:

- i. comply with applicable industry standards (e.g., Bellcore, NEBS, IEEE, UL, and NEC) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
- ii. have redundant power feeds with physical diversity and battery back-up as required by the equipment manufacturer's specifications for MCIm equipment, or, at minimum, at parity with that provided for similar U S WEST equipment at that location;
- iii. provide central office ground, connected to a ground electrode located within the MCIm collocated space, at a level above the top of MCIm equipment plus or minus two (2) feet to the left or right of MCIm's final request;
- iv. provide an installation sequence and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing services of either Party;
- v. provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
- vi. provide Lock Out-Tag Out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines; and
- vii. ensure that installed equipment meets Bellcore specifications.

40.4 Collocation Rate Elements

40.4.1 Common Rate Elements

The following rate elements are common to both virtual and physical collocation:

- (a) **Quote Preparation Fee.** This covers the work involved in developing a quotation for MCIm for the total costs involved in its collocation request.
- (b) **Entrance Facility.** Provides for fiber optic cable on a per two (2) fiber increment basis from the point of interconnection utilizing U S WEST owned, conventional single mode type of fiber optic cable to the collocated equipment (for virtual collocation) or to the leased space (for physical collocation). Entrance facility includes riser, fiber placement, entrance closure, conduit/innerduct, and core drilling.
- (c) **Cable Splicing.** Represents the labor and equipment to perform a subsequent splice to the MCIm provided fiber optic cable after the initial installation splice. Includes a per-setup and a per-fiber-spliced rate

elements.

- (d) 48 Volt Power. Provides 48 volt power to the MCI_m collocated equipment. Charged on a per ampere basis.
- (e) 48 Volt Power Cable. Provides for the transmission of 48 Volt DC power to the collocated equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack and local power bay to the closest power distribution bay. It also includes the power cable (feeders) A and B from the local power distribution bay to the leased physical space (for physical collocation) or to the collocated equipment (for virtual collocation).
- (f) Inspector Labor. Provides for the U S WEST qualified personnel necessary when MCI_m requires access to the POI after the initial installation or access to its physical collocation floor space, where an escort is required. A call-out of an inspector after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (g) Expanded Interconnection Channel Regeneration. Required when the distance from the leased physical space (for physical collocation) or from the collocated equipment (for virtual collocation) to the U S WEST network is of sufficient length to require regeneration.
- (h) U S WEST will provide external synchronization when available.
- (i) U S WEST will provide 20 hertz ringing supply when available.

40.4.2 Physical Collocation Rate Elements

The following rate elements apply only to physical collocation arrangements:

- (a) Enclosure Buildout. The Enclosure Buildout element, either Cage or Hardwall, includes the material and labor to construct the enclosure specified by MCI_m or MCI_m may choose from U S WEST approved contractors to construct the cage, meeting U S WEST's installation Technical Publication 77350. It includes the enclosure (cage or hardwall), air conditioning (to support MCI_m loads specified), lighting (not to exceed 2 watts per square foot), and convenience outlets (3 per cage or the number required by building code for the hardwall enclosure). Also provides for humidification, if required. Pricing for Enclosure Buildout will be provided on an individual basis due to the uniqueness of MCI_m's requirements, central office structure and arrangements.

- (b) Floor Space Rental. This element provides for the rental of the floor space provided to MCIIm pursuant to a physical collocation arrangement.

40.4.3 Virtual Collocation Rate Elements

The following rate elements apply only to virtual collocation arrangements:

- (a) Maintenance Labor. Provides for the labor necessary for repair of out of service and/or service-affecting conditions and preventative maintenance of the MCIIm virtually collocated equipment. MCIIm is responsible for ordering maintenance spares. U S WEST will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment for MCIIm. A call-out of a maintenance technician after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (b) Training Labor. Provides for the billing of vendor-provided training for U S WEST personnel on a metropolitan service area basis, necessary for MCIIm virtually collocated equipment which is different from equipment used by U S WEST. U S WEST will require three (3) U S WEST employees to be trained per metropolitan service area in which the MCIIm virtually collocated equipment is located. If, by an act of U S WEST, trained employees are relocated, retired, or are no longer available, U S WEST will not require MCIIm to provide training for additional U S WEST employees for the same virtually collocated equipment in the same metropolitan area. Fifty percent (50%) of the amount of training billed to MCIIm will be refunded to MCIIm, should a second collocator or U S WEST in the same metropolitan area select the same virtually collocated equipment as MCIIm. The second collocator or U S WEST will be charged one half of the original amount paid by MCIIm for the same metropolitan area.
- (c) Equipment Bay. Provides mounting space for the MCIIm virtually collocated equipment. Each bay includes the seven (7) foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation is limited to 78 inches. The monthly rate is applied per shelf.
- (d) Engineering Labor. Provides the planning and engineering of the MCIIm virtually collocated equipment at the time of installation, change or removal.
- (e) Installation Labor. Provides for the installation, change or removal of the MCIIm virtually collocated equipment.

40.5 Collocation Installation Intervals

40.5.1 Intervals for physical collocation shall be a maximum of three (3) months from the date of the request. Virtual collocations shall have a maximum interval of two (2) months from the date of the request.⁹ MCI shall make payment of one-half of the nonrecurring charges and fees upon acceptance of the quotation with the remainder due upon completion of the construction. In the event MCI disputes the amount of U S WEST's proposed nonrecurring charges and fees, MCI shall deposit fifty percent (50%) of the nonrecurring charges and fees into an interest bearing escrow account prior to the commencement of construction. The remainder of the nonrecurring charges and fees shall be deposited into the escrow account upon completion of the construction. Upon resolution of the dispute, the escrow agent shall distribute amounts in the account in accordance with the resolution of such dispute and any interest that has accrued with respect to amounts of the account shall be distributed proportionately to the Parties. If there is a dispute between U S WEST and MCI regarding the amount of any nonrecurring charges and fees, such dispute shall be resolved in accordance with Section 27 above. The pendency of any such dispute shall not affect the obligation of U S WEST to complete collocation within the installation intervals described above.

40.6 License

40.6.1 U S WEST hereby grants MCI a license to occupy any premises or rack space which contain collocated equipment, including all necessary ingress, egress and reasonable use of U S WEST's property in accordance with the provisions of this Section 40, for the term of this Agreement.

41. Technical References - Collocation

Subject to Sections 1.3.1 and 1.3.2 of Part A of this Agreement, U S WEST shall provide collocation in accordance with the following standards:

- 41.1 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;
- 41.2 National Electrical Code (NEC), use most recent issue;
- 41.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2 (Bellcore, January 1989);
- 41.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988;
- 41.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140- Volt Central Office Power Plant Rectifiers, Issue 1 (Bellcore, May 1985);

⁹ Order, p. 41 at Issue 12.

- 41.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985);
- 41.7 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);
- 41.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2 (Bellcore, July 1992);
- 41.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1 (Bellcore, December 1991);
- 41.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993; and
- 41.11 Underwriters' Laboratories Standard, UL 94.

42. Number Portability

42.1 Interim Number Portability (INP)

42.1.1 General Terms

- (a) The Parties shall provide Interim Number Portability ("INP") on a reciprocal basis to the extent technically feasible.
- (b) Until permanent number portability is implemented by the industry pursuant to regulations issued by the FCC or the Commission, the Parties agree to provide INP to each other through Remote Call Forwarding, Direct Inward Dialing, or other appropriate means as agreed to by the Parties.
- (c) Once permanent number portability is implemented pursuant to FCC or Commission regulation, either Party may withdraw, at any time and at its sole discretion, its INP offerings, subject to advance notice to the other Party with sufficient time to allow for coordination to allow the seamless and transparent conversion of INP Customer numbers to permanent number portability. Upon implementation of permanent number portability pursuant to FCC regulations, both parties agree to conform and provide such permanent number portability. The Parties agree to expeditiously convert Customers from interim number portability to permanent number portability, provided that the interim service is not removed until the Customer has been converted.
- (d) U S WEST will update and maintain its Line Information Database ("LIDB") listings for numbers retained by MCI and its Customer, and restrict or cancel calling cards associated with these forwarded numbers as directed by MCI. Further, U S WEST will not block third party and collect calls to those numbers unless requested by MCI.

- (e) The ordering Party shall specify, on a per telephone number basis, which method of INP is to be employed and the providing Party shall provide such method to the extent technically feasible.
- (f) Where either Party has activated an entire NXX, or activated a substantial portion of an NXX with the remaining numbers in that NXX either reserved for future use or otherwise unused, if these Customer(s) choose to receive service from the other Party, the first Party shall cooperate with the second Party to have the entire NXX reassigned in the LERG (and associated industry databases, routing tables, etc.) to an end office operated by the second Party. Such transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry lead-times for movement of NXXs from one switch to another.

42.1.2 Description Of Service

- (a) INP Service is a service arrangement that can be provided by U S WEST to MCI or by MCI to U S WEST.
- (b) INP applies to those situations where an end-user Customer elects to change service providers, and such Customer also wishes to retain its existing or reserved telephone number(s). INP consists of providing the capability to route calls placed to telephone numbers assigned to one Party's switches to another Party's switches.
- (c) INP is available as INP-Remote Call Forwarding ("INP-RCF") permitting a call to a U S WEST assigned telephone number to be translated to MCI's dialable local number. MCI may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible on a per path basis. MCI will need to specify the number of simultaneous calls to be forwarded for each number ported.
- (d) DID is another INP method that makes use of direct inward dialing trunks. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between the U S WEST end office and the MCI switch. Traffic on these trunks cannot overflow to other trunks, so the number of trunks shall be conservatively engineered by U S WEST. Also, inter-switch signaling is usually limited to multi-frequency (MF). This precludes passing Calling Line ID to the MCI switch.
- (e) RI-PH will route a dialed call to the U S WEST switch associated with the NXX of the dialed number. The U S WEST switch shall then insert a prefix onto the dialed number which identifies how the call is to be routed to MCI. The prefixed dialed number is transmitted to the U S WEST tandem switch to which MCI is connected. Route indexing is only available with seven (7) digit local dialing.
- (f) The prefix is removed by the operation of the tandem switch and the dialed

number is routed to MCI's switch so the routing of the call can be completed by MCI.

- i. DN-RI is a form of RI-PH that requires direct trunking between the U S WEST switch to which the ported number was originally assigned and the MCI switch to which the number has been ported. The U S WEST switch shall send the originally dialed number to the MCI switch without a prefix.
- ii. U S WEST shall provide RI-PH or DN-RI on an individual telephone number basis, as designated by MCI. Where technically feasible, calls to ported numbers are first directed to the MCI switch over direct trunks but may overflow to tandem trunks if all trunks in the direct group are occupied.
- iii. For both RI-PH and DN-RI the trunks used may, at MCI's option, be the same as those used for exchange of other local traffic with U S WEST. At MCI's option, the trunks shall employ SS7 or in band signaling and may be one way or two way.

(g) INP is subject to the following restrictions:

- i. An INP telephone number may be assigned by MCI only to MCI's Customers located within U S WEST's local calling area and toll rating area that is associated with the NXX of the ported number. This is to prevent the possibility of Customers using number portability to extend the local calling area.
- ii. INP is applicable only if MCI is engaged in a reciprocal traffic exchange arrangement with U S WEST.
- iii. INP is not offered for NXX Codes 555, 976, 960 and 1+ sent-paid telephones, and Service Access Codes (i.e., 500, 700, 800/888, 900). INP is not available for FGA seven-digit numbers (including foreign exchange (FEX), FX and FX/ONAL and foreign central office service). Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.
- iv. The ported telephone number will be returned to the switch which originally had the ported number when the ported service is disconnected. The normal intercept announcement will be provided by the porting company for the period of time until the telephone number is reassigned.
- v. Within thirty (30) days after the Effective Date of this Agreement, U S WEST shall provide MCI a list of those features that are not available for INP telephone numbers due to technical limitations.

42.1.3 Ordering and Maintenance

- (a) MCI is responsible for all direct interactions with MCI's end users with respect to ordering and maintenance.
- (b) U S WEST shall exchange with MCI SS7 TCAP messages as required for the implementation of Custom Local Area Signaling Services ("CLASS") or other features available in the U S WEST network.
- (c) Each Party's designated INP switch must return answer and disconnect supervision to the other Party's switch.
- (d) U S WEST shall disclose to MCI any technical or capacity limitations that would prevent use of a requested INP in a particular switching office.
- (e) The Parties will develop and implement an efficient deployment process to ensure call routing integrity for toll and local calls, with the objective to eliminate Customer downtime.
- (f) For INP, MCI shall have the right to use the existing U S WEST 911 infrastructure for all 911 capabilities. When RCF is used for MCI subscribers, both the ported numbers and shadow numbers shall be stored in ALI databases. MCI shall have the right to verify the accuracy of the information in the ALI databases via direct connection to the SCC ALI database pursuant to the same process and procedures SCC makes available to U S WEST.

42.2 Permanent Number Portability (PNP)

- 42.2.1 Upon implementation of Permanent Number Portability ("PNP") pursuant to FCC regulations, both Parties agree to conform and provide such Permanent Number Portability. To the extent consistent with the FCC rules, as amended from time to time, the requirements for PNP shall include the following:
 - 42.2.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC rules and regulations.
 - 42.2.3 The PNP network architecture shall not subject alternate local exchange carriers to any degradation of service compared to U S WEST in any relevant measure, including transmission quality, switching and transport costs, increased call set-up time and post-dial delay, and MCI shall not be required to rely on the U S WEST network for calls completing to its ported Customers.
 - 42.2.4 When an office is equipped with PNP, in accordance with the procedures specified by the North American Numbering Council, the NXXs in the office shall be defined as portable and translations will be changed in the Parties' switches to open those NXXs for database queries.

- 42.2.5 When an NXX is defined as portable, it shall also be defined as portable in all PNP-capable offices which have direct trunks to the given switch.
- 42.2.6 Upon introduction of PNP in an Metropolitan Statistical Area ("MSA"), the applicable switches will be converted according to a published schedule with no unreasonable delay. All portable NXXs shall be recognized as portable, with queries launched from these switches.
- 42.2.7 Prior to implementation of PNP, the Parties agree to develop, implement, and maintain efficient methods to maintain 911 database integrity when a subscriber ports to another service provider. The Parties agree that the Customer should not be dropped from the 911 database during the transition.
- 42.2.8 When a subscriber ports to another service provider and has previously secured a reservation of line numbers from the donor provider for possible activation at some future point, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber. So long as MCI maintains the reserved numbers, U S WEST shall not reassign said numbers. The Parties will allocate the revenue generated from number reservations in accordance with a schedule to be mutually agreed upon by the Parties within ninety (90) days of the Effective Date of this Agreement.
- 42.2.9 During the process of porting a subscriber, the donor service provider shall implement the 10-Digit trigger feature, when the technology is made available in each switch in accordance with the schedules adopted by the FCC. When the donor provider receives the porting request, the unconditional trigger shall be applied to the subscriber's line at the time that has been agreed to via the Western Region LNP Operations Guidelines in order to overcome donor network time delays in the disconnection of the subscriber. Alternatively, when an activation notice is sent to an NPAC to trigger a broadcast to service provider databases, the donor switch shall have its translations changed to disconnect the subscriber's line within thirty (30) minutes or less after the donor network's local SMS has received the broadcast. Porting requests that require coordination between service providers, in accordance with the guidelines, will be handled on a case-by-case basis and will not be covered by the above.
- 42.2.10 Both MCI and U S WEST shall:
- (a) support all emergency and operator services.
 - (b) use scarce numbering resources efficiently and administer such resources in a competitively neutral manner.
 - (c) jointly cooperate with each other to provide the information necessary to rate and bill all types of calls.
 - (d) jointly cooperate with each other to apply PNP consistently on a nationwide basis, and in accordance with all FCC directives.

- 42.2.11 A ten-digit code, consistent with the North American Numbering Plan, shall be used as a network address for each switch that terminates subscriber lines, i.e., an end office. This address shall support existing six-digit routing and may be implemented without changes to existing switch routing algorithms. In existing end offices, this address shall be selected from one of its existing NPA-NXXs. New end offices shall be assigned an address through normal administrative processes.
- 42.2.12 PNP employs an "N-1" (N minus 1) Query Strategy for interLATA or intraLATA toll calls, by which the originating carrier will pass the call to the appropriate toll carrier who will perform a query to an external routing database and efficiently route the call to the appropriate terminating local carrier either directly or through an access tandem office.
- 42.2.13 U S WEST shall furnish MCI with the first six (6) digits of the originating address when it supplies MCI with the Jurisdiction Information Parameter for the originating address message.
- 42.2.14 U S WEST agrees to begin the introduction of PNP to end user subscribers who may begin changing local service providers and retaining their existing telephone number based on the time line set out by the FCC in its Telephone Number Portability Order (CC Docket No. 95-116), or in accordance with a Commission order if such time for introduction of PNP set by the Commission is earlier than would result under the FCC Order.
- 42.2.15 The generic requirements for the PNP alternative implemented will be in accordance with industry-standard specifications.
- 42.2.16 For a local call to a ported number, the originating carrier is the "N-1" carrier. It will perform an external database query as soon as the call reaches the first PNP-capable switch in the call path and pass the call to the appropriate terminating carrier. A PNP-capable originating switch shall query on a local call to a portable NXX as soon as it determines that it (the originating switch) does not serve the dialed number.
- 42.2.17 U S WEST shall be the default carrier for database queries where MCI is unable to perform its own query due to abnormal conditions. MCI shall be the default carrier for database queries where U S WEST is unable to perform its own query due to abnormal conditions.
- 42.2.18 U S WEST will provide MCI PNP for subscribers moving to a different location, or staying at the same location, within the same Rate Center Area.
- 42.2.19 U S WEST will work cooperatively with other local service providers to establish the Western Region Number Portability Administration Center/Service Management System ("SMS"). The SMS shall be administered by a neutral third party to provide for the efficient porting of numbers between carriers. There must be one (1) exclusive NPAC per portability State or region, and U S WEST shall provide all information uploads and downloads regarding ported numbers to/from, respectively,

the exclusive NPAC. U S WEST and MCI shall cooperate to facilitate the expeditious deployment of PNP through the process prescribed by the FCC, including, but not limited to, participation in the selection of a neutral third party and development of SMS, as well as SMS testing for effective procedures, electronic system interfaces, and overall readiness for use consistent with that specified for provisioning in this Agreement.

42.3 Requirements for INP and NP

42.3.1 [Intentionally left blank for numbering consistency]

42.3.2 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, each Party updating its respective network element translations within fifteen (15) minutes following notification by the industry SMS, or ported-to local service provider, and deploying such temporary translations as may be required to minimize service outage, e.g., unconditional triggers. In addition, MCI shall have the right to determine who initiates the order for INP in specific cut-over situations. The time frames in this paragraph shall be pursuant to Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.99, January 6, 1997, and subsequent versions which may be adopted from time to time. The Parties shall cooperate to review and, if necessary, adjust the above time frame based on their actual experiences.

42.3.3 Testing

U S WEST and MCI shall cooperate in conducting MCI's testing to ensure interconnectivity between systems. U S WEST shall inform MCI of any system updates that may affect the MCI network and U S WEST shall, at MCI's request, perform tests to validate the operation of the network. Additional testing requirements may apply as specified by this Agreement.

42.3.4 Engineering and Maintenance

- (a) U S WEST and MCI will cooperate to ensure that performance of trunking and signaling capacity is engineered and managed at levels which are at least the same level of service as provided by U S WEST 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.
- (b) Additional specific engineering and maintenance requirements shall apply as specified in this Agreement.

42.3.5 Recording and Billing

The Parties shall provide each other with accurate billing and subscriber account record exchange data necessary for billing their subscribers whose numbers have been ported.

42.3.6 Operator Services and Directory Assistance

With respect to Operator Services and Directory Assistance associated with NP for MCIIm subscribers, U S WEST shall provide the following:

- (a) While INP is deployed and prior to conversion to PNP:
 - i. The Parties acknowledge that technology, as of the Effective Date of this Agreement, does not permit the provision of BLV/BLI to ported numbers. When such becomes available in the U S WEST network, such technology shall be made available to MCIIm.
 - ii. U S WEST shall allow MCIIm to order provisioning of Telephone Line Number ("TLN") calling cards and Billed Number Screening ("BNS"), in its LIDB, for ported numbers, as specified by MCIIm. U S WEST shall continue to allow MCIIm access to its LIDB. Other LIDB provisions are specified in this Agreement.
 - iii. Where U S WEST has control of Directory Listings for NXX codes containing ported numbers, U S WEST shall maintain entries for ported numbers as specified by MCIIm in accordance with the Listings Section of this Agreement.

- (b) When PNP is in place:
 - i. The provisions in Section 42.3.6 preceding, shall apply when PNP is in place.
 - ii. If Integrated Services Digital Network User Part ("ISUP") signaling is used, U S WEST shall provide the Jurisdiction Information Parameter in the SS7 Initial Address Message. (See Generic Switching and Signaling Requirements for Number Portability, Issue 1.0, February 12, 1996 (Editor - Lucent Technologies, Inc.)).
 - iii. The Parties shall provide, when received from the NPAC, a 10-Digit Global Title Translation ("GTT") Node for routing queries for TCAP-based Operator Services (e.g., LIDB). The acquiring company will provide the GTT to the NPAC. The NPAC will distribute this information to the donor company and all other parties.
 - iv. U S WEST OSS shall meet all requirements specified in "Generic Operator Services Switching Requirements for Number Portability", Issue 1.1, June 20, 1996, as updated from time to time.

43. [Intentionally left blank for numbering consistency]

44. [Intentionally left blank for numbering consistency]

45. [Intentionally left blank for numbering consistency]

46. [Intentionally left blank for numbering consistency]

47. Access to Poles, Ducts, Conduits, and Rights of Way

47.1 U S WEST shall provide MCI with non-discriminatory access to the poles, ducts, conduits, and rights-of-way U S WEST owns or controls.¹⁰

47.2 [Intentionally left blank of numbering consistency]

47.3 Definitions

"Poles, ducts, conduits and ROW" refer to all the physical facilities and 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 Right-of-Way ("ROW") is the right to use the land or other property owned, leased or controlled by any means by USWC 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 (including air space above public or private property) and shall include the right to use discrete space in buildings, building complexes or other locations.

47.4 Requirements

47.4.1 U S WEST shall make poles, duct, conduits and ROW available to MCI upon receipt of a request for use within the time periods provided in this Section 47, providing all information necessary to implement such use and containing rates, terms and conditions, including, but not limited to, maintenance and use in accordance with this Agreement and at least equal to those which it affords itself, its Affiliates and others. Other users of these facilities, including U S WEST, shall not interfere with the availability or use of the facilities by MCI.

47.4.2 Within ten (10) Business Days of MCI's request for specific poles, ducts, conduits, or ROW, U S WEST shall provide any information in its possession or available to it regarding the environmental conditions of such requested poles, ducts, conduits or ROW route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is

¹⁰ Order, p. 43, as modified by Staff Recommendations, p. 2.

considered "available" under this Agreement if it is in U S WEST's possession or files, or in the possession of an agent, contractor, employee, lessor, or tenant of U S WEST's that holds such information on U S WEST's behalf. If the poles, ducts, conduits or ROW contain such environmental contamination, making the placement of equipment hazardous, U S WEST shall offer alternative poles, ducts, conduits or ROW for MCI's consideration. U S WEST shall allow MCI to perform any environmental site investigations, including, but not limited to, Phase I and Phase II environmental site assessments, as MCI may deem to be necessary.

- 47.4.3 U S WEST shall not prevent or delay any third party assignment of ROW to MCI.
- 47.4.4 U S WEST shall offer the use of such poles, ducts, conduits and ROW it has obtained from a third party to MCI, to the extent such agreement does not prohibit U S WEST from granting such rights to MCI. They shall be offered to MCI on the same terms as are offered to U S WEST. **U S WEST shall exercise its eminent domain authority when necessary to expand an existing ROW over private property in order to accommodate a request from MCI for access to such ROW. MCI shall reimburse U S WEST for U S WEST's reasonable costs, if any, incurred as a result of the exercise of its eminent domain authority on behalf of MCI in accordance with the provisions of this Section 47.4.4.**¹¹
- 47.4.5 U S WEST shall provide MCI equal and non-discriminatory access to poles, ducts, conduit and ROW and any other pathways on terms and conditions equal to that provided by U S WEST to itself or to any other Person. Further, U S WEST shall not preclude or delay allocation of these facilities to MCI because of the potential needs of itself or of other Person, except a maintenance spare may be retained as described below.
- 47.4.6 U S WEST shall not attach, or permit other entities to attach facilities on, within or overlashed to existing MCI facilities without MCI's prior written consent.
- 47.4.7 U S WEST agrees to provide current detailed engineering and other plant records and drawings for specific requests for poles, ducts, conduit and ROW, including facility route maps at a city level, and the fees and expenses incurred in providing such records and drawings, on the earlier of twenty (20) Business Days from MCI's request or the time within which U S WEST provides this information to itself or any other Person. Such information shall be of equal type and quality as that which is available to U S WEST's own engineering and operations staff. U S WEST shall also allow personnel designated by MCI to jointly examine with U S WEST personnel, at no cost to MCI for such personnel, such engineering records and drawings for a specific routing at U S WEST central offices and U S WEST engineering offices upon ten (10) days' written notice to U S WEST. U S WEST acknowledges that the request for information and the subject matter related to the request made under this Section shall be treated as Proprietary Information.

¹¹ Order, p. 45 at Issue 55.

- 47.4.8 U S WEST shall provide to MCIIm a Single Point of Contact for negotiating all structure lease and ROW arrangements.
- 47.4.9 U S WEST shall provide information regarding the availability and condition of poles, ducts, conduit and ROW within five (5) Business Days of MCIIm' s request if the information then exists in U S WEST's records (a records based answer) and within twenty (20) Business Days of MCIIm's request if U S WEST must physically examine the poles, ducts, conduits and ROW (a field based answer) ("Request"). MCIIm shall have the option to be present at the field based survey and U S WEST shall provide MCIIm at least twenty-four (24) hours' notice prior to the start of such field survey. During and after this period, U S WEST shall allow MCIIm 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. U S WEST shall send MCIIm a written notice confirming availability pursuant to the Request within such twenty (20) day period ("Confirmation").
- 47.4.10 Reservation. For the period beginning at the time of the Request and ending ninety (90) days following Confirmation, U S WEST shall reserve such poles, ducts, conduit and ROW for MCIIm that MCIIm may reasonably request. MCIIm shall pay an appropriate reservation fee mutually agreed upon by the Parties for such reservation and shall elect whether to accept the poles, ducts, conduits, or ROW within the ninety (90) day period following Confirmation. MCIIm may accept such facilities by sending written notice to U S WEST ("Acceptance").
- 47.4.10.1 Right of First Refusal. During the Reservation Period, if another party, including U S WEST, makes a bona fide and good faith request for the use of any poles, ducts, conduits or ROW that MCIIm has previously reserved, MCIIm shall have a "right of first refusal" over these facilities. If MCIIm chooses to exercise its right of first refusal, it shall do so by providing U S WEST written notice of same within ten (10) Business Days following receipt of written notice from U S WEST advising MCIIm of the bona fide and good faith request.
- 47.4.10.2 Exercise the Right of First Refusal/Reservation. To ensure proper use of reserved facilities, after the expiration of the reservation period or upon exercise of its right of first refusal, whichever occurs earlier, MCIIm must begin paying the approved rate for access (whether or not it has actually installed conduit or cable) and shall begin construction on the facility within six (6) months, or release its reservation.
- 47.4.11 Reservation. After Acceptance by MCIIm, MCIIm shall have six (6) months to begin attachment and/or installation of its facilities to the poles, ducts, conduit and ROW or request U S WEST to begin make ready or other construction activities. Any such construction, installation or make ready by MCIIm shall be completed by the end of one (1) year after Acceptance. MCIIm shall not be in default of the 6-month or 1-year requirement above if such default is caused in any way by any action,

inaction or delay on the part of U S WEST or its Affiliates or subsidiaries.

- 47.4.12 Make Ready.** U S WEST shall rearrange, modify and/or make ready existing poles, ducts, conduit 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 five (5) days following MCIm's request; provided, however, that any such work required to be performed by U S WEST shall be completed within sixty (60) days or a reasonable period of time based on standard construction intervals in the industry, unless otherwise agreed by MCIm in writing.¹²
- 47.4.13 New Construction. After Acceptance, U S WEST shall complete any new construction, relocation or installation of poles, ducts, conduits or ROW required to be performed by U S WEST or any U S WEST construction, relocation or installation requested by MCIm within a reasonable period of time based on standard construction intervals in the industry or sixty (60) days after obtaining all governmental authority or permits necessary to complete such construction, relocation or installation. If U S WEST anticipates that construction, relocation or installation will go beyond standard industry intervals or the sixty (60) day period, U S WEST shall immediately notify MCIm and the Parties shall mutually agree on a completion date.
- 47.4.14 MCIm shall begin payment for the use of newly constructed poles, ducts, conduit, and right of way upon completion of such construction and installation and confirmation by appropriate testing methods that the facilities are in a condition ready to operate in MCIm's network or upon use for other than for testing by MCIm, whichever is earlier.
- 47.4.15 MCIm shall make payment for construction, relocation, rearrangements, modifications and make ready in accordance with Section 3.5 of Attachment 1 of this Agreement.
- 47.4.16 [intentionally left blank for numbering consistency]
- 47.4.17 MCIm may, at its option, install its facilities on poles, ducts, conduit and ROW and use MCIm or MCIm designated personnel to attach its equipment to such U S WEST poles, ducts, conduits and ROW.
- 47.4.18 If available, U S WEST shall provide MCIm space in manholes for racking and storage of cable and other materials as requested by MCIm.
- 47.4.19 U S WEST shall rearrange, modify and/or make ready any conduit system or poles with retired cable by removing such retired cable from conduit systems or poles to allow for the efficient use of conduit space and pole space. U S**

¹² Order, pp. 42-44 at Issue 54.

WEST shall take all reasonable steps to expand its facilities, which may include placement of taller poles or additional conduit, if necessary, to accommodate MCI's request, and shall do so in accordance with the time frames set forth in this Section 47.¹³ Before denying access based on a lack of capacity, U S WEST must explore potential accommodations with MCI.

47.4.20 Where U S WEST has innerducts which are not, at that time, being used or are not reserved as emergency or maintenance spare in accordance with FCC rules and regulations, U S WEST shall offer such ducts for MCI's use.

47.4.21 U S WEST may not reserve capacity on its poles, ducts, conduits or ROW, but may consider safety and reliability in determining whether it has capacity available for MCI's use. In a dispute over the availability of capacity, U S WEST shall have the burden of proving that any spare capacity is reserved solely to meet U S WEST's legitimate safety and reliability needs.¹⁴

47.4.22 Where a spare innerduct does not exist, U S WEST shall allow MCI to install an innerduct in U S WEST conduit, at MCI's cost and expense. U S WEST must review and approve any installation of innerduct in any U S WEST duct prior to the start of construction. Such approval shall not be unreasonably delayed, withheld or conditioned. MCI shall provide notice to U S WEST of any work activity not less than twenty-four (24) hours prior to the start of construction.

47.4.23 Where U S WEST has any ownership or other rights to ROW to buildings or building complexes, or within buildings or building complexes, U S WEST shall offer such ROW to MCI:

- (a) Subject to the approval of the building owner, if required, the right to use any available space owned or controlled by U S WEST in the building or building complex to install MCI equipment and facilities;
- (b) Subject to the approval of the building owner, if required, ingress and egress to such space; and
- (c) Subject to the approval of the building owner, if required, the right to use electrical power at parity with U S WEST's rights to such power.

47.4.24 Whenever U S WEST intends to modify or alter any poles, ducts, conduits or ROW which contain MCI's facilities, U S WEST shall provide written notification of such action to MCI so that MCI may have a reasonable opportunity to add to or modify its facilities. MCI shall advise U S WEST, in writing, of its intentions to add or modify the facilities within fifteen (15) Business Days of U S WEST's notification. If MCI adds to or modifies its facilities according to this paragraph, MCI shall

¹³ Order, pp. 42-44 at Issue 54.

¹⁴ Order, pp. 42-44 at Issue 53.

bear a proportionate share of the costs incurred by U S WEST in making such facilities accessible.

- 47.4.25 MCI shall not be required to bear any of the costs of rearranging or replacing its facilities, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any entity other than MCI, including U S WEST.
- 47.4.26 U S WEST shall maintain the poles, ducts, conduits and ROW at its sole cost. MCI shall maintain its own facilities installed within the poles, ducts, conduits and ROW at its sole cost. In the event of an emergency, U S WEST shall begin repair of its facilities containing MCI's facilities within a reasonable time frame based on industry standards or a time frame requested by MCI. If U S WEST cannot begin repair within the requested time frame, upon notice and approval of U S WEST, which approval shall not be unreasonably withheld, MCI may begin such repairs without the presence of U S WEST personnel. MCI may climb poles and enter the manholes, handholds, conduits and equipment spaces containing U S WEST's facilities in order to perform such emergency maintenance, but only until such time as qualified personnel of U S WEST arrives ready to continue such repairs. For both emergency and non-emergency repairs, MCI may use spare innerduct or conduits, including the innerduct or conduit designated by U S WEST as emergency spare for maintenance purposes; provided, however, that MCI may only use such spare conduit or innerduct for a maximum period of ninety (90) days.
- 47.4.27 In the event of a relocation necessitated by a governmental entity exercising the power of eminent domain, when such relocation is not reimbursable, all parties shall share pro rata in costs for relocating the base conduit or poles and shall each pay its own cost of cable and installation of the facilities in the newly rebuilt U S WEST poles, ducts, conduits and ROW.
- 47.4.28 U S WEST shall not impose minimum purchase requirements for poles, ducts, conduits or ROW.¹⁵**

48. Bona Fide Request Process for Further Unbundling

- 48.1 Any request for Interconnection or access to an unbundled Network Element not already available via price lists, tariff, or as described herein shall be treated as a "Request" under this Section.
- 48.2 U S WEST shall use the Bona Fide Request ("BFR") process as described in this Section 48, to determine the technical feasibility of the requested Interconnection or Network Element(s) and, for those items found to be technically feasible, to provide the terms and timetable for providing the requested items. Additionally, elements, services and functions which are materially or substantially different from those services, elements or functions already provided by U S WEST to itself, its Affiliates, Customers, or end users may, at the discretion

¹⁵ Order, p. 46 at Issue 57.

of MCI, be subject to this BFR process.

- 48.3 A Request shall be submitted in writing and, at a minimum, shall include: (a) a complete and accurate technical description of each requested Network Element or Interconnection; (b) the desired interface specifications; (c) a statement that the Interconnection or Network Element will be used to provide a Telecommunications Service; (d) the quantity requested; (e) the location(s) requested; and (f) whether MCI wants the requested item(s) and terms made generally available. MCI may designate a Request as Confidential.
- 48.4 Within forty-eight (48) hours of receipt of a Request, U S WEST shall acknowledge receipt of the Request and review such Request for initial compliance with Subsection 48.3 above. In its acknowledgment, US West shall advise MCI of any missing information reasonably necessary to move the Request to the preliminary analysis described in Subsection 48.5 below.
- 48.5 Unless otherwise agreed to by the Parties, within thirty (30) calendar days of its receipt of the Request and all information necessary to process it, U S WEST shall provide to MCI a preliminary analysis of the Request. As reasonably requested by MCI, U S WEST agrees to provide status updates to MCI. U S WEST will notify MCI if the quote preparation fee, if any, will exceed \$5,000. MCI will approve the continuation of the development of the quote prior to U S WEST incurring any reasonable additional expenses. The preliminary analysis shall specify whether or not the requested Interconnection or access to an unbundled Network Element is technically feasible and otherwise qualifies as a Network Element or Interconnection as defined under the Act.
- 48.5.1 If U S WEST determines during the thirty (30) day period that a Request is not technically feasible or that the Request otherwise does not qualify as a Network Element or Interconnection required to be provided under the Act, U S WEST shall so advise MCI as soon as reasonably possible of that fact, and promptly provide a written report setting forth the basis for its conclusion but in no case later than ten (10) calendar days after making such determination.
- 48.5.2 If U S WEST determines during the thirty (30) day period that the Request is technically feasible and otherwise qualifies under the Act, it shall notify MCI in writing of such determination no later than ten (10) calendar days after making such determination.
- 48.5.3 Unless otherwise agreed to by the Parties, as soon as feasible, but no more than ninety (90) calendar days after U S WEST notifies MCI that the Request is technically feasible, U S WEST shall provide to MCI a Request quote which will include, at a minimum, a description of each Interconnection and Network Element, the quantity to be provided, the installation intervals (both initial and subsequent), the impact on shared systems software interfaces, the ordering process changes, the functionality specifications, any interface specifications, and either:
- (a) the applicable rates (recurring and nonrecurring), including the amortized development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element; or

- (b) the payment for development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element and the applicable rates (recurring and nonrecurring), excluding the development costs.

- 48.5.4 The choice of using either option (a) or (b) above shall be at U S WEST's sole discretion. A payment for development cost, however, is appropriate only where MCIIm is the only conceivable user of the functionality (including consideration of U S WEST as a potential user) or where the requested quantity is insufficient to provide amortization.
- 48.6 If U S WEST has used option (a) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, MCIIm must indicate its nonbinding interest in purchasing the Interconnection or Network Element at the stated quantities and rates, cancel its Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.7 If U S WEST has used option (b) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, MCIIm must either agree to pay the development costs of the Interconnection or Network Element, cancel its Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.8 If U S WEST has used option (b) in its Request quote and MCIIm has accepted the quote, MCIIm may cancel the Request at any time, but will pay U S WEST's reasonable development costs of the Interconnection or Network Element up to the date of cancellation.
- 48.9 U S WEST will use reasonable efforts to determine the technical feasibility and conformance with the Act of the Request within the first thirty-two (32) days of receiving the Request. In the event U S WEST has used option (b) above in its Request quote and U S WEST later determines that the Interconnection or Network Element requested in the Request is not technically feasible or otherwise does not qualify under the Act, U S WEST shall notify MCIIm within ten (10) Business Days of making such determination and MCIIm shall not owe any compensation to U S WEST in connection with the Request. Any quotation preparation fees or development costs paid by MCIIm to the time of such notification shall be refunded by U S WEST.
- 48.10 To the extent possible, U S WEST will utilize information from previously developed BFRs to address similar arrangements in order to shorten the response times for the currently requested BFR. In the event MCIIm has submitted a Request for an Interconnection or a Network Element and U S WEST determines in accordance with the provisions of this Section 48 that the Request is technically feasible, the Parties agree that MCIIm's subsequent request or order for the identical type of Interconnection or Network Element shall not be subject to the BFR process. To the extent U S WEST has deployed an identical Network Element under a previous BFR, a subsequent BFR is not required. For purposes of this Section 48.10, an "identical" Request shall be one that is materially identical to a previous Request with respect to the information provided pursuant to Subsections (a) through (e) of Section 48.3 above.
- 48.11 In the event of a dispute under this Section 48, the Parties agree to seek expedited Commission resolution of the dispute, to be completed within twenty (20) days of

U S WEST's response denying MCI's BFR, and in no event more than thirty (30) days after the filing of MCI's petition. Alternatively, the Parties may mutually agree to resolve any disputes under this section through the dispute resolution process pursuant to Section 27 above.

- 48.12 All time intervals within which a response is required from one Party to another under this Section 48 are maximum time intervals. Each Party agrees that it will provide all responses to the other Party as soon as the Party has the information and analysis required to respond, even if the time interval stated herein for a response is not over.

49. Audit Process

- 49.1 As used herein, "Audit" shall mean a comprehensive review of services performed under this Agreement. Either Party (the "Requesting Party") may perform up to three (3) Audits per 12-month period commencing with the Effective Date of this Agreement.
- 49.2 Upon thirty (30) days' written notice by the Requesting Party to the other Party (the "Audited Party"), the Requesting Party shall have the right, through its authorized representative, to make an Audit, during normal business hours, of any records, accounts and processes which contain information related to the services provided and performance standards agreed to under this Agreement. Within the above-described 30-day period, the Parties shall reasonably agree upon the scope of the Audit, the documents and processes to be reviewed, and the time, place and manner in which the Audit shall be performed. The Audited Party agrees to provide Audit support, including appropriate access to and use of the Audited Party's facilities (e.g., conference rooms, telephones, copying machines).
- 49.3 Each Party shall bear its own expenses in connection with the conduct of the Audit. The reasonable cost of special data extractions required by the Requesting Party to conduct the Audit will be paid for by the Requesting Party. For purposes of this Section 49.3, a "Special Data Extraction" shall mean the creation of an output record or informational report (from existing data files) that is not created in the normal course of business. If any program is developed to the Requesting Party's specifications and at the Requesting Party's expense, the Requesting Party shall specify at the time of request whether the program is to be retained by the Audited Party for reuse for any subsequent Audit. Notwithstanding the foregoing, the Audited Party shall pay all of the Requesting Party's external expenses (including, without limitation, the fees of any independent auditor), in the event an Audit results in an adjustment in the charges or in any invoice paid or payable by the Requesting Party hereunder in an amount that is, on an annualized basis, more than the greater of (a) one percent (1%) of the amount in dispute, or (b) \$10,000.
- 49.4 Adjustments, credits or payments shall be made and any corrective action shall commence within thirty (30) days from the Audited Party's receipt of the final audit report to compensate for any errors or omissions which are disclosed by such Audit and are agreed to by the Parties. The highest interest rate allowable by law for commercial transactions shall be assessed and shall be computed by compounding daily from the time of the original due date of the amount of dispute.
- 49.5 Neither such right to examine and audit nor the right to receive an adjustment shall be

affected by any statement to the contrary appearing on checks or otherwise.

- 49.6 This Section 49 shall survive expiration or termination of this Agreement for a period of two (2) years after expiration or termination of this Agreement.
- 49.7 All transactions under this Agreement which are over thirty-six (36) months old are no longer subject to Audit.
- 49.8 All information received or reviewed by the Requesting Party or the independent auditor in connection with the Audit is to be considered Proprietary Information as defined by this Agreement. The Audited Party reserves the right to require any non-employee who is involved directly or indirectly in any Audit or the resolution of its findings as described above to execute a nondisclosure agreement satisfactory to the Audited Party. To the extent an Audit involves access to information of third parties, the Audited Party will aggregate such competitors' data before release to the Requesting Party, to insure the protection of the proprietary nature of information of other competitors. To the extent a competitor is an Affiliate of the Audited Party (including itself and its subsidiaries), the Parties shall be allowed to examine such Affiliate's disaggregated data, as required by reasonable needs of the Audit.

50. [Intentionally left blank for numbering consistency]

51. Unused Transmission Media¹⁶

51.1 Definitions

51.1.1 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.

51.1.2 Dark fiber is excess fiber optic cable which has been placed in a network and is not currently being lit by electronics from any carrier. Dark Fiber, one type of Unused Transmission Media, is unused strands of optical fiber. Dark Fiber also includes strands of optical fiber which may or may not have lightwave repeater (regenerator or optical amplifier) equipment interspliced, but which has no line terminating facilities terminated to such strands. Unused Transmission Media also includes unused wavelengths within a fiber strand for purposes of coarse or dense wavelength division multiplexed (WDM) applications. Typical single wavelength transmission involves propagation of optical signals at single wavelengths (1.3 or 1.55 micron wavelengths). In WDM applications, a WDM device is used to combine optical signals at different wavelengths on to a single fiber strand. The combined signal is then transported over the fiber strand. For coarse WDM applications, one (1) signal each at 1.3 micron and 1.55 micron wavelength are combined. For dense WDM applications, many signals in the vicinity of 1.3 micron wavelength and/or 1.55

¹⁶ Order, p. 52 at Issue 22. The italicized language in this Section 51 has been subsequently agreed to by the Parties.

micron wavelength are combined.

51.2 While U S WEST is not required to provide Unused Transmission Media, other than Dark Fiber, MCI may, subject to the agreement of U S WEST, lease copper twisted pairs, coaxial cable or other Unused Transmission Media.

51.3 Requirements

51.3.1 Subject to Section 51.2 above, U S WEST shall make available Unused Transmission Media to MCI under a lease agreement or other arrangement.

51.3.2 U S WEST shall provide a single point of contact for negotiating all Unused Transmission Media use arrangements.

51.3.3 MCI may test the quality of the Unused Transmission Media to confirm its usability and performance specifications.

51.3.4 Where Unused Transmission Media is required to be offered or is agreed to be offered by U S WEST, U S WEST shall provide to MCI information regarding the location, availability and performance of Unused Transmission Media within ten (10) Business Days for a records based answer and twenty (20) Business Days for a field based answer, after receiving a request from MCI ("Request"). Within such time period, U S WEST shall send written or electronic confirmation or any other method of notification agreed to by the Parties of availability of the Unused Transmission Media ("Confirmation"). From the time of the Request to ninety (90) days after Confirmation, U S WEST shall reserve such requested Unused Transmission Media for MCI's use and may not allow any other Party to use such Media, including U S WEST.

51.3.5 Where Unused Transmission Media is required to be offered or is agreed to be offered by U S WEST, U S WEST shall make Unused Transmission Media available for MCI's use in accordance with the terms of this Section 51 within twenty (20) Business Days or a reasonable time frame consistent with industry standards after it receives written acceptance from MCI that the Unused Transmission Media is wanted for use by MCI. Splicing of MCI fiber may be performed at the same points that are available for U S WEST splices. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable MCI to connect or splice MCI provided transmission media (e.g., optical fiber) or equipment to the Unused Transmission Media.

51.4 Requirements Specific to Dark Fiber

51.4.1 MCI may splice and test Dark Fiber leased from U S WEST using MCI or MCI designated personnel subject to Section 51.2 above. U S WEST shall provide appropriate interfaces to allow testing of Dark Fiber. U S WEST shall provide an excess cable length of twenty-five (25) feet minimum, where available, for fiber in underground conduit. U S WEST shall provide splicing of

MCIm fiber to U S WEST Dark Fiber under normal circumstances (e.g., no construction) in metropolitan areas within seventeen (17) calendar days of MCIm's request, and within thirty (30) calendar days of a request in a non-metropolitan area. MCIm may request expedited splicing, which shall be subject to available U S WEST resources.

51.4.2 For WDM applications, U S WEST shall provide to MCIm an interface to an existing WDM device or allow MCIm to install its own WDM device (where sufficient system loss margins exist or where MCIm provides the necessary loss compensation) to multiplex the traffic at different wavelengths. This applies to both the transmit and receive ends of the Dark Fiber.

51.4.3 U S WEST may not reserve future capacity of its Dark Fiber for its own use.

51.5 Portions of the bandwidth of the fiber may be sectioned and MCIm may share the bandwidth with U S WEST and other CLECs.

52. Service Standards¹⁷

U S WEST will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with service standards, measurements, and performance requirements that are expressly specified in this Agreement and Attachment 5 hereto. In cases where such performance standards are not expressly specified, U S WEST will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with performance standards which are at least equal to the level of performance standards and/or quality of service that U S WEST provides to itself, its Affiliates, to other CLECs, or other quality of service requirements imposed by the Commission, whichever is higher, in providing Local Resale, Ancillary Functions, Network Elements or Combinations to itself, to its end-users or to its Affiliates. If MCIm requests a higher level of service than that provided by U S WEST to itself, MCIm shall make the request pursuant to the BFR process.

52.1 Definitions

Pending adoption of service standards rules by the Commission, the following interim provisions shall apply.

52.1.1 "Specified Performance Commitment" means the commitment by U S WEST to meet the Performance Criteria for any Specified Activity during the Specified Review Period. The Specified Review Period shall be the same period as U S WEST provides itself for existing Performance Criteria and shall be ninety (90) days for new Performance Criteria. The standard of performance for each of the measurements of performance in Washington shall be the quality of service which U S WEST provides in Washington to either itself, its ten (10) largest end user Customers in the aggregate, independent LECs in the aggregate, other CLECs in the aggregate, or other quality of service requirements imposed by the Commission, whichever is

¹⁷ Order, pp. 68-69.

highest. Neither performance penalties nor credits will be imposed for failure to comply with service standards.

52.1.2 "Specified Activity" includes, but is not limited to, the following activities:

- (a) **Installation Activities** – apply to resold services, unbundled Loops, unbundled switching, and Interim Number Portability:
Installation Intervals Offered (measured from application date to original due date);
Installation Commitments Met; and
Installation Reports within seven (7) days (percent of reports per total of new, to or change orders).
- (b) **Repair Activities** – apply to resold service, unbundled Loops, unbundled switching, and Interim Number Portability:
Out of Service Cleared in Less than Twenty-four (24) Hours (percent of total out of service reports);
Report Rate per 100 Access Lines;
Repair Commitments Met;
Out of Service and Service Affecting Cleared in Less than Forty-eight (48) Hours; and
Repair Repeat Reports within Thirty (30) Days (percent of repeats per 100 access lines).

52.1.3 "Performance Criteria" means, with respect to a Specified Review Period (i.e., a calendar month or quarter), the performance by U S WEST for the specified activities for MCIm will meet or exceed the average performance by U S WEST for each resold or unbundled Network Element the total universe of for each Specified Activity.

52.2 Failure to Meet the Performance Criteria

If, during a Specified Review Period, U S WEST fails to meet the Performance Criteria, U S WEST will use its best efforts to meet the Performance Criteria for the next Specified Review Period. If U S WEST fails to meet the Performance Criteria for two (2) consecutive periods, the Parties agree, in good faith, to attempt to resolve such issues through negotiation or non-binding arbitration. This paragraph shall not be construed to waive either Party's right to seek legal or regulatory intervention as provided by state or federal law. MCIm may seek regulatory or other legal relief including requests for specific performance of U S WEST's obligations under this Agreement.

52.3 Limitations

U S WEST's failure to meet or exceed any of the Performance Criteria cannot be as a result, directly or indirectly, of a Delaying Event. A "Delaying Event" means (a) a failure by MCIm to perform any of its obligations set forth in this Agreement, (b) any delay, act or failure to act by a Customer, agent of subcontractor of MCIm, or (c) any

force majeure event. If a Delaying Event prevents U S WEST from performing a Specified Activity, then such Specified Activity shall be excluded from the calculation of U S WEST's compliance with the Performance Criteria.

52.4 Records

U S WEST shall maintain complete and accurate records, for the Specified Review Period, of its performance under this Agreement for each Specified Activity and its compliance with the Performance Criteria. U S WEST shall provide to MCI in such records in a self-reporting format. The Parties agree that such records shall be deemed Proprietary Information.

52.5 Cost Recovery

U S WEST reserves the right to attempt to recover the costs, if any, associated with the creation of the above reports and standards through a future proceeding before a regulatory body.

53. Entire Agreement

53.1 This Agreement shall include the Attachments, Appendices and other documents referenced herein all of which are hereby incorporated by reference, and constitutes the entire agreement between the Parties and supersedes all prior oral or written agreements, representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.

53.2 If a provision contained in any U S WEST tariff conflicts with any provision of this Agreement, the provision of this Agreement shall control, unless otherwise ordered by the FCC or the Commission.

54. Reservation of Rights

54.1 The Parties acknowledge that the terms of this Agreement were established pursuant to an order of the Commission. Any or all of the terms of this Agreement may be altered or abrogated by a successful challenge to this Agreement (or the order approving this Agreement) as permitted by applicable law. By signing this Agreement, neither Party waives its right to pursue such a challenge.

54.2 The Parties enter into this Agreement without prejudice to any position they may have taken previously, or may take in the future in any legislative, regulatory, or other public forum addressing any matters, including matters related to the types of arrangements prescribed by this Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

MCImetro Access Transmission Services, Inc.

Signature

Name Printed/Typed

Title

Date

U S WEST Communications, Inc.

Kathy C Fleming

*Signature

Kathy Fleming

Name Printed/Typed

Executive Director - Interconnect

Title

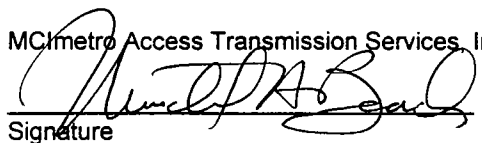
8/19/97

Date

*Signed as ordered by the arbitrator/commission in Docket No. UT-960310. Signature does not indicate agreement with all aspects of the arbitrator's decision, nor does it waive any of U S WEST's right to seek judicial review of all or part of the agreement, or to reform the agreement to conform with the Opinion of the United States Court of Appeals for the Eighth Circuit, or any other decision or opinion following successful judicial review.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

MCImetro Access Transmission Services, Inc.


Signature

MICHAEL A. BEACH
Name Printed/Typed

VICE PRESIDENT
Title

8/19/97
Date

U S WEST Communications, Inc.

*Signature

Name Printed/Typed

Title

Date

*Signed as ordered by the arbitrator/commission in Docket No. UT-960310. Signature does not indicate agreement with all aspects of the arbitrator's decision, nor does it waive any of U S WEST's right to seek judicial review of all or part of the agreement, or to reform the agreement to conform with the Opinion of the United States Court of Appeals for the Eighth Circuit, or any other decision or opinion following successful judicial review.

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RATES and CHARGES

1. General Principles

- 1.1 **All rates in this Agreement are interim in nature. Permanent rates will be established by the Commission in its generic costing and pricing Docket UT-960369.**¹ All rates provided under this Agreement shall remain in effect for the term of this Agreement unless they are not in accordance with all applicable provisions of the Act, the rules and regulations of the FCC, or the Commission's rules and regulations.
- 1.2 Except as otherwise specified in this Agreement, as approved or ordered by the Commission, or as agreed to by the Parties through good faith negotiations, nothing in this Agreement shall prevent a Party through the dispute resolution process described in this Agreement from seeking to recover the costs and expenses, if any, it may incur in (a) complying with and implementing its obligations under this Agreement, the Act, and the rules, regulations and orders of the FCC and the Commission, and (b) the development, modification, technical installation and maintenance of any systems or other infrastructure which it requires to comply with and to continue complying with its responsibilities and obligations under this Agreement.
- 1.3 **Interim rates for Interconnection, unbundled Network Elements, Ancillary Services and interim wholesale discounts are provided in Schedule 1 to this Attachment 1. These rates reflect:**
- 1.3.1 **MCIm's proposed rates for all services, with the exception of those rates described in items 2 and 3 below;**²
- 1.3.2 **U S WEST proposed rates for call transit;**³
- 1.3.3 **U S WEST proposed non-recurring charges;**⁴
- 1.3.4 **U S WEST's proposed rates in those instances where MCIm made no rate proposal;**⁵ and
- 1.3.5 **Interim rates for collocation, based on TELRIC, using MCIm's Hatfield model for recurring charges, and U S WEST's proposed charges for non-recurring**

¹ Order, p. 15.

² Order, p. 28.

³ Order, p. 28.

⁴ Order, p. 28.

⁵ Order, p. 28.

charges.⁶

- 1.4 The interim wholesale discounts shall be 13.96%.⁷
- 1.5 U S WEST may offer geographically averaged rates for Interconnection, unbundled Network Elements, and Ancillary Services.⁸
- 1.6 Interim rates for additional elements should not exceed TELRIC plus a reasonable allocation of forward-looking common costs. Facilities that are dedicated to U S WEST shall be priced on a flat rate rather than a usage-sensitive rate.⁹
2. [Intentionally left blank for numbering consistency]
3. **Resale Rates and Charges**
 - 3.1 U S WEST may impose construction charges for Resale Services offered to MCI_m. Such construction charges shall be the same charges that apply to similarly situated U S WEST retail end users pursuant to U S WEST's retail tariffs.¹⁰
 - 3.2 If the Resale Services are purchased pursuant to tariffs and the tariff rates change, charges billed to MCI_m for such services will be based upon the new tariff rates less the applicable wholesale discount as agreed to herein. The new rate will be effective upon the tariff effective date.
 - 3.3 A Subscriber Line Charge ("SLC") will continue to be paid by MCI_m without discount for each local exchange line resold under this Agreement. All federal and state rules and regulations associated with SLC or as found in the applicable tariffs also apply.
 - 3.4 MCI_m will pay to U S WEST the PIC change charge without discount associated with MCI_m end user changes of interexchange or intraLATA carriers.
 - 3.5 MCI_m agrees to pay U S WEST at the wholesale discounted rate when its end user activates any services or features that are billed on a per use or per activation basis (e.g., continuous redial, last call return, call back calling, call trace, etc.). U S WEST shall provide MCI_m with detailed billing information per applicable OBF standards unless otherwise agreed to by the Parties as necessary to permit MCI_m to bill its end users such charges.
 - 3.6 Nonrecurring charges will be billed as approved by the Commission.

⁶ Order, p. 42.

⁷ Order, p. 36.

⁸ Order, p. 27-28 and 30.

⁹ Order, p. 28-30.

¹⁰ Order, p. 38.

- 3.7 Resale prices shall be wholesale rates determined on the basis of retail rates charged to subscribers for the Telecommunications Service requested, excluding the portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by U S WEST, as specified in the Act, by the FCC and the Commission.
- 3.8 U S WEST shall bill MCI_m and MCI_m is responsible for all applicable charges for the Resale Services. MCI_m shall be responsible for all charges associated with services that MCI_m resells to an end user.

4. Interconnection and Reciprocal Compensation

- 4.1 **The Parties shall use a bill and keep approach for termination and transport elements, including any tandem switching.¹¹**

5. Cost Recovery for Interim Number Portability¹²

- 5.1 **U S WEST shall recover the recurring cost of Interim Number Portability by allocating to MCI_m a portion of the TSLRIC recurring costs in proportion to each Party's share of active working numbers.**
- 5.2 **For those numbers ported for MCI_m, U S WEST shall recover the non-recurring cost not already included in the TSLRIC cost of Interim Number Portability from MCI_m. The non-recurring charges for INP are provided in Schedule 1 to this Attachment 1.**
- 5.3 **MCI_m and U S WEST shall recover access charges for terminating intraLATA toll and interLATA minutes by billing IXC's separately for their portion of the access charges. MCI_m and U S WEST shall base the charge on the functions and facilities each provides for call forwarding or termination.**
- 5.4 **MCI_m may request U S WEST to provide MCI_m call detail records identifying each IXC which are sufficient to allow MCI_m to render bills to IXCs for calls IXCs place to ported numbers in the U S WEST network which U S WEST forwards to MCI_m for termination. To the extent that U S WEST is unable to provide billing detail information within a reasonable time frame, the Parties may agree on an interim method to share access revenues pursuant to a mutually agreed upon surrogate approach.**

6. Unbundled Network Elements

- 6.1 **The rate for each unbundled Network Element provided in accordance with this Agreement shall not exceed U S WEST's Total Element Long Run Incremental Costs ("TELRIC") (including a reasonable allocation of forward-looking common costs) for such Network Element. Subsequently developed Network Elements shall be priced**

¹¹ Order, pp. 17-18 at Issues 88-92.

¹² Order, p. 64 at Issue 50.

in the same manner as similar, preexisting Network Elements are priced.¹³

6.2 Unless otherwise ordered by the Commission, the cost of Loop conditioning shall be included in the TELRIC price of the Loop element.¹⁴

6.3 Any costs associated with U S WEST's connection of MCI's NID to U S WEST's NID will be the responsibility of MCI.

7. Electronic Interfaces

7.1 Pricing for electronic interfaces is deferred to the generic cost/price proceeding where the Commission will consider the appropriate level for recurring and non-recurring charges.¹⁵ The lack of such prices shall in no way affect U S WEST's obligations to implement such interfaces.

8.¹⁶ Busy Line Verify and Interrupt Compensation

8.1 Each Party shall charge the other Party for BLV and BLI at rates specified in Schedule 1 to this Attachment 1.

¹³ Order, pp. 28-30.

¹⁴ Order, p. 54 at Issue 84.

¹⁵ Order, pp. 63-64 at Issue 45.

¹⁶ Order, p. 53.

Schedule 1 to Attachment 1

MCIm Interconnection Rates

State of Washington

INTERCONNECTION - LOCAL EXCHANGE		
Interconnection and Reciprocal Compensation		Bill and Keep
Local Call Termination	Price	
End Office - Per minute of Use	\$0.001800	
Tandem Switch - Per minute of Use	\$0.001400	
(Includes End Office Call Termination and Tandem Transport)		
Common Transport per minute leg	\$0.000920	
Entrance Facility	Price Recurring	Price Nonrecurring
DS-1, Electrical	\$99.78	\$563.92
DS-3, Electrical	\$404.24	\$668.95
Direct Trunked Transport	Price Fixed	Price Per Mile
DS-1	\$102.00	None
DS-3	\$2,665.00	None
INTERCONNECTION EXCHANGE ACCESS		
Call Termination, Transport, and Transit	Per Switched Access Tariff	
COMMON CHANNEL SIGNALING ACCESS SERVICE		
Entrance Facility	Price Recurring	Price Nonrecurring
DS-1, Electrical	\$99.78	\$563.92
DS-3, Electrical	\$404.24	\$668.95
Direct Link Transport	Price Fixed	Price Per Mile
DS-0	\$4.26	None
DS-1	\$102.00	None

DS-3	\$2,865.00	None
	Price Recurring	Price Nonrecurring
CCS Link - First Link	None	\$504.68
CCS Link - Each Additional Link	None	\$72.42
	Price Recurring	Price Nonrecurring
STP Port - Per Port	\$45.81	None
Multiplexing	Price Recurring	Price Nonrecurring
DS-1 to DS-0	\$221.80	None
DS-3 to DS-1	\$218.58	None
PHYSICAL AND VIRTUAL COLLOCATION	U S WEST Price	
Common Elements	Price Recurring	Price Nonrecurring
Quote Preparation Fee	None	\$2,437.30
Entrance Facility - 2 fibers	\$2.07	\$1,307.45
2-WIRE DS-0 EICT	\$1.41	\$339.61
4-WIRE DS-0 EICT	\$1.79	\$339.61
DS-1 EICT	\$9.12	\$404.02
DS-3 EICT	\$31.93	\$433.23
DS-1 EICT - regeneration (Note 2)	\$14.38	\$405.02
DS-3 EICT - regeneration (Note 2)	\$94.24	\$433.32
Cable Splicing	Price Recurring	Price Nonrecurring
Per Setup	None	\$103.59
Per Fiber Spliced	None	\$12.95
48 Volt Power, per ampere, per month	\$13.45	None
48 Volt Power Cable		
20 Amp. Capacity - recurring	\$0.15	\$68.37
40 Amp. Capacity - recurring	\$0.20	\$92.71
60 Amp. Capacity - recurring	\$0.22	\$104.42
Equipment Bay, Per Shelf	\$8.58	None

	Price Regular Hours	Price After Hours
Inspector per ½ Hour	\$28.62	\$37.20
Training per ½ Hour	\$25.36	None
Engineering per ½ Hour	\$24.73	\$33.09
Installation per ½ Hour	\$28.62	\$37.20
Maintenance per ½ Hour	\$25.36	\$33.73
Physical Collocation (Note 3)	Price Recurring	Price Nonrecurring
Cage/Hard Wall Enclosure	ICB	ICB
Rent w/maint /sq ft zone 1	\$2.75	None
Rent w/maint /sq ft zone 2	\$2.26	None
Rent w/maint /sq ft zone 3	\$2.06	None
Note 2: If required. No NRC applies to regeneration ordered concurrently with an associated EICT element.		
Note 3: Zones per NECA-4 Tariff.		
ANCILLARY SERVICES	PRICE	
Directory Assistance	Price	
Price Per Call - Facilities - Based Providers	\$0.34	
Listings	No charge	
Primary Listing, Directory Assistance, White Pages		
E911	No Charge	
LEC and AECs Recover from PSAP		
Interim Number Portability	Price Recurring	
Without Transport		
Per number Ported - First Path	\$4.25	
Per Number Ported- Additional Path	\$3.02	
With Transport		

Per Number Ported - First Path	\$8.73	
Per Number Ported -Additional Path	\$7.50	
Additional Charges	Price Nonrecurring	
Service Establishment, per switch, per route	\$43.80	
Service Establishment - Additional number ported or changes to existing numbers, per number ported	\$9.49	
Additional and Consecutive Numbers - additional numbers ported on same account name and consecutive number, per number ported.	\$7.05	
Assignment of numbers Assignment per industry guidelines	Price No Charge	
Busy Line Verification Per Call	\$0.72	
Busy Line Interrupt Per Call	\$0.87	
	Price Recurring	Price Nonrecurring
Unbundled Loops		
Weighted Average	\$11.33	
Without Testing		\$96.30
With Basic Testing		\$153.86
With Basic Testing at Designated Time		\$206.02
Unbundled Ports End Office Port	\$1.04	\$118.88
Weighted Area Average MOU Rate	\$0.001800	
RESALE WASHINGTON		
Wholesale Discount	13.96%	
NONRECURRING CHARGES DESCRIPTION		
Customer Transfer Charge	Price	
Business, per line	\$56.60	
Residence, per line	\$54.13	
ISDN, per line	\$57.15	

Attachment 1

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RESALE

1. Description

- 1.1 **MCIm may resell to any and all classes of end users Telecommunications Services obtained from U S WEST under this Agreement, except for residential services and Lifeline Assistance/Link-Up (or similar) services, which MCIm may only resell to those subscribers who are eligible for such services (i.e., MCIm may not resell residential service to business customers).** ¹ U S WEST will not prohibit, nor impose unreasonable or discriminatory conditions or limitations on the resale of its Telecommunications Services.
- 1.2² **At the request of MCIm, and pursuant to the requirements of the Act, and FCC and Commission rules and regulations, U S WEST shall make available to MCIm for resale at wholesale rates, all retail Telecommunications Services U S WEST currently provides, or may offer hereafter, including, but not limited to, non-tariffed services, deregulated services which are offered at retail which qualify as Telecommunications Services, grandfathered services, contract services, packaged services, residential services, business services, services offered on an individual case basis, discounted services, promotional offerings where offered for a period of greater than ninety (90) days, and enhanced services which qualify as "Telecommunications Services". This description of services is neither all inclusive nor exclusive. Specific services offered for resale shall also include Centrex, Optional Calling Plans, and Custom Calling Services.**³
- 1.3 At the request of MCIm, and pursuant to the requirements of the Act, and FCC and Commission rules and regulations, U S WEST shall make available to MCIm for resale any Telecommunications Services that U S WEST currently provides or may offer hereafter, including, but not limited to, Telecommunications Services offered through contract service arrangements, special arrangements, discount plans and promotions of more than ninety (90) days duration. Resale discounts may vary from the standard resale discount, subject to the approval of the Commission. U S WEST shall also provide Service Functions, as agreed to in this Attachment 2. The Telecommunications Services and Service Functions provided by U S WEST to MCIm pursuant to this Attachment 2 are collectively referred to as "Local Resale".
- 1.4 This Section 1 describes several services which U S WEST shall make available to MCIm for resale pursuant to this Agreement. This description of services is neither all inclusive nor exclusive. Except as may be noted elsewhere in this Agreement, all services or offerings of U S WEST which are to be offered for resale pursuant to the Act are subject to the terms herein, even though they are not specifically enumerated or described.
- 1.5 U S WEST shall make available the SMDI-E ("Station Message Desk Interface-Enhanced"), where available, or SMDI (Station Message Desk Interface), where SMDI-E is not available, feature capability allowing for voice mail services. U S WEST shall make available, where

¹ Order, p. 66 at Issue 29.

² Order, pp. 10-12 at Issues 27 and 28; p. 37 at Issue 33; and pp. 37-38 at Issue 34.

³ Modified by Staff Recommendations, p. 4.

available, the MWI (Message Waiting Indicator) stutter dialtone and message waiting light feature capabilities. U S WEST shall make available CF-B/DA (Call Forward on Busy/Don't Answer), CF/B (Call Forward on Busy), and CF/DA (Call Forward Don't Answer) feature capabilities allowing for voice mail services.

1.6 Grandfathered Services

U S WEST shall offer for resale to MCIIm all grandfathered services. For purposes of this Agreement, a grandfathered service is a service that U S WEST no longer offers to new subscribers or a class of new subscribers. MCIIm shall be notified of any U S WEST request for the termination of service and/or its grandfathering filed with the Commission or U S WEST's intent to grandfather/withdraw a service at least thirty (30) calendar days prior to the effective date of such grandfathering or intended termination. The form of notification may be either in written or electronic form.

1.7 N11 Service

MCIIm shall have the right to resell any N11 service, including, but not limited to, 411 and 911 services.

1.8 Promotions

Promotions of ninety (90) days or less need not be made available to MCIIm at the wholesale discount rate.⁴

1.9 Enhanced Services

U S WEST is not required to offer for resale enhanced services which qualify as information services. U S WEST must offer for resale any enhanced services which do qualify as Telecommunications Services.⁵

1.10 The specific business process requirements and systems interface requirements are set forth in Attachment 5.

2. General Terms and Conditions for Resale

2.1 **Primary Local Exchange Carrier Selection.** U S WEST shall apply the principles set forth in Section 64.1100 of the FCC Rules, 47 C.F.R. § 64.1100, as implemented, to the process for end user selection of a primary local exchange carrier. In accordance with the customer authorization process described elsewhere in this Agreement, U S WEST shall not require notification from the customer, another carrier, or another entity, in order to process an MCIIm order for local service for a customer.

2.2 Except where otherwise provided, MCIIm, or MCIIm's agent, shall act as the single point of contact for its end users' service needs, including, without limitation, sales, service design, order taking, provision, change orders, training, maintenance, trouble reports, repair, post-

⁴ Complies with Order at Issue 28.

⁵ Order, p. 12.

sale servicing, billing, collection and inquiry. MCI shall inform its end users that they are customers of MCI for Resale Services. MCI's end users who inadvertently contact U S WEST with questions regarding their MCI service will be instructed to contact MCI. U S WEST end users who inadvertently contact MCI with questions regarding their U S WEST service will be instructed to contact U S WEST. Nothing in this Agreement shall be deemed to prohibit either Party from discussing its products and services with customers of the other Party who solicit such information or who are directly contacted by a Party.

3. Basic Service Requirements

3.1 Call Types

- 3.1.1 U S WEST shall provide the following call types, features and functions to MCI and its end users with no loss of feature or functionality: (a) dial tone and ringing; (b) capability for either dial pulse or touch tone; (c) flat and measured services; (d) speech recognition as available with other custom calling and CLASS features; (e) same extended area service free calling area; (f) 1 + intraLATA toll calling; (g) access to interLATA toll calling; (h) access to international calling; (i) lines as well as trunks (DID, DOD); (j) analog and digital private line - all speeds; (k) off-premises extensions; (l) Centrex; and (m) ISDN.
- 3.2 U S WEST will provide access for MCI and all its end user customers to all call types, including, but not limited to, 500, 700, 800, 900, exchanges and dial around services (10XXX).
- 3.3 U S WEST shall impose no restrictions on customer's calling (e.g., there should not be a 750 minute limit on flat rate calling).
- 3.4 U S WEST will provide pre-subscription services for intraLATA and interLATA toll services in accordance with currently accepted methods and procedures.

3.5 Features Requirements

- 3.5.1 U S WEST will provide MCI the ability to suspend and restore customer service, including vacation suspension service, at the direction of MCI.
- 3.5.2 End Office Features. U S WEST will provide to MCI the same end office features available to U S WEST's end users, including, but not limited to, CLASS features, Custom Calling features, and AIN features.
- 3.5.3 Call Blocking Features. U S WEST will provide to MCI the same call blocking features as are available to U S WEST's own Customers.
- 3.6 Upon request, U S WEST shall provide MCI a list, in an agreed upon format by central office, of all the Telecommunications Services, features and functions offered by U S WEST within sixty (60) days after the Effective Date of this Agreement and shall provide updates to such lists as further described in Attachment 5. U S WEST shall also provide an electronic access method for MCI to ascertain the service availability of a particular USOC in a given central office.

4. Requirements for Specific Services

4.1 IntraLATA Toll

U S WEST will provide MCI its intraLATA toll service to MCI for resale where 1+ intraLATA toll presubscription is not available.

4.2 Private Line Services

The following private line services shall be made available without restriction from U S WEST: (a) voice grade private line services; (b) off premise extensions; (c) foreign exchange line service; (d) point-to-point and multi-point digital services (e.g., 9.6 kbps-56 kbps; fractional DS-1); (e) DS-1 services; (f) DS-3 services; (g) OC-3 service (where available); (h) frame relay service; (i) packet switched services; (j) switched digital services; and (k) other private line services as they are made available.

4.3 Centrex Requirements

- 4.3.1 At MCI's option and as they are available to U S WEST's own end users via interstate tariffs and state tariffs, price lists, price schedules, catalogs, or Individual Case Basis, MCI may purchase a single, any combination, or the entire set of Centrex features, including Centrex Management System ("CMS") or its equivalent as described in Attachment 5. The Centrex service provided for resale will meet the requirements set forth in the following provisions of this Section 4.3.
- 4.3.2 All service levels and features of Centrex service provided by U S WEST for resale by MCI shall be at parity with levels and features provided to U S WEST's own customers or as mutually agreed upon by the Parties.
- 4.3.3 MCI may aggregate the Centrex local exchange and intraLATA traffic usage of MCI subscribers to the extent U S WEST makes such aggregation available to itself or to its end users, Customers, or Affiliates.
- 4.3.4 MCI may aggregate multiple MCI customers on dedicated access facilities.
- 4.3.5 U S WEST shall make CMS information available to MCI at the common block level via an electronic interface, as provided to U S WEST's own end users.
- 4.3.6 MCI may use remote call forwarding in conjunction with Centrex service to provide service to MCI local service Customers residing outside of the geographic territory in which U S WEST provides local exchange service. However, U S WEST is not obligated to provide facilities outside its service territory.
- 4.3.7 MCI may purchase any and all levels of Centrex service for resale, without restriction on the minimum or maximum number of lines that may be purchased for any one level of service, equivalent to what is offered to U S WEST's own end users.
- 4.3.8 U S WEST will provide to MCI the ability to suppress the need for MCI customers to dial "9" when placing calls outside the Centrex system.

- 4.3.9 U S WEST shall make available to MCI_m for resale, at no additional charge, intercom calling among all MCI_m customers within a common block who utilize resold Centrex service.

4.4 CLASS and Custom Features Requirements

MCI_m may purchase a single, any combination, or the entire set of CLASS and custom features and functions, on a customer-specific basis. CLASS features shall include, but not be limited to: caller identification, name and number; call screening; call tracing; and automatic call back on busy (*69). U S WEST shall provide to MCI_m a list of all such CLASS and custom features and functions within ten (10) days of the Effective Date of this Agreement and shall provide updates to such list when new features and functions become available.

4.5 Customer Financial Assistance Programs

- 4.5.1 Local services provided to low-income subscribers, pursuant to requirements established by the appropriate state regulatory body, include programs such as Lifeline, Voluntary Federal Customer Financial Assistance Program, and Link-Up America ("Voluntary Federal Customer Financial Assistance Programs"). When a U S WEST subscriber eligible for the Voluntary Federal Subscriber Financial Assistance Programs or other similar state programs chooses to obtain local service from MCI_m, U S WEST shall forward information available to U S WEST regarding such subscriber's eligibility to participate in such programs to MCI_m and in electronic format when available in accordance with the procedures set forth herein.

- 4.5.2 U S WEST shall offer for resale Lifeline and Link-Up Service; provided, however, that MCI_m may only resell Lifeline and Link-Up Service to those Customers eligible to receive such services. U S WEST will provide information about the certification process for the provisioning of Lifeline, Link-up, and similar services. U S WEST will forward to MCI_m, in electronic format (when available), information available to U S WEST regarding a subscriber's program eligibility, status and certification when a U S WEST subscriber currently on any U S WEST telephone assistance program changes service to MCI_m as their local exchange carrier. U S WEST will cooperate in obtaining any subsidy associated with a subscriber transfer to MCI_m.

- 4.5.2.1 In connection with the transfer of a customer from U S WEST to MCI_m, U S WEST shall provide to MCI_m a customer profile, including customer name, billing and residence address, billing telephone number(s), eligibility for Voluntary Federal Customer Financial Assistance Program, and other similar services, and identification of U S WEST features and services subscribed to by the customer.

4.6 Discount Plans and Services

- 4.6.1 In accordance with FCC rules and regulations, U S WEST shall offer for resale all Discount Plans and Services.

4.6.2 MCI can utilize any volume discounts that U S WEST makes available to its end user customers.

4.7 Hospitality Service

U S WEST shall provide all blocking, screening, and all other applicable functions available for hospitality lines utilized as such.

4.8 Telephone Line Number Calling Cards. Effective ten (10) Business Days after the date of an end-user's subscription to MCI service or within twenty-four (24) hours after MCI has notified U S WEST that it has replaced the subscriber's calling card, whichever is earlier, U S WEST will terminate its existing telephone line number-based calling cards and deactivate any U S WEST-assigned telephone line calling card number subaccount and PIN (including area code) ("TLN") from the LIDB. MCI may issue a new telephone calling card to such customer, utilizing the same TLN, and MCI shall have the right to enter such TLN in the LIDB for calling card validation purposes. U S WEST will assume responsibility for billing its calling card calls that appear before the card is terminated. Nothing in this Section shall prohibit U S WEST from terminating calling card service to U S WEST customers who have been determined to be a credit risk, according to U S WEST's normal business practices.

4.8.1 Except as provided above, the Parties will cooperate in the deactivation and activation of calling cards and will make reasonable efforts to minimize the time a customer is without an active calling card.

4.8.2 U S WEST shall not prohibit MCI from issuing a new telephone calling card to an MCI customer utilizing the same TLN and MCI shall have the right to enter the TLN in the LIDB for calling card verification purposes.

4.8.3 U S WEST will provide MCI the ability to utilize U S WEST's LIDB for calling card validation.

4.9 U S WEST shall make engineering support available to MCI for Resale Services on the same basis as it provides such support for U S WEST end users. To the extent the cost of such engineering support has been considered an avoided cost in the development of the avoided cost discount, the cost of such engineering support shall be borne by MCI.

4.10 Payphone Services

U S WEST agrees to sell for resale all tariffed PAL services at an appropriate wholesale discount to be determined by the Commission.

4.10.1 U S WEST shall offer for resale, at a minimum, the following Coin Line, PAL, and PAL Coinless features:

- Billed Number Screening
- Ability to "freeze" PIC selection
- One (1) bill per line and/or multiple lines per BAN
- Point of demarcation at the Network Interface location
- Detailed billing showing all 1+ traffic on paper, diskette or electronic format

Touch-tone service
Option for listed or non-listed numbers
Access to 911 service
One (1) directory per line

4.10.2 At a minimum, U S WEST shall offer for resale the following Coin Line features:

Access to all central office intelligence required to perform answer detection, coin collection, coin return, and disconnect
Answer Detection
Option to block all 1+ calls to international destinations
IntraLATA Call Timing
Option of one-way or two-way service on line
Flat Rate Service, where available
Originating line screening
U S WEST central office intelligence for rating and other functions
Option of measured service, where available
Ability to block any 1+ service that cannot be rated by the coin circuits/TSPS/OSPS to the extent provided on U S WEST coin lines
Protect against clip on fraud to the extent provided on U S WEST coin lines
Protect against blue box fraud to the extent provided on U S WEST coin lines
Provision of Information Digit 27

4.10.3 At a minimum, U S WEST shall offer for resale the following PAL and PAL Coinless features:

Originating line screening
Two-way service option
Flat rate service based on rate groups, where available
Option of one-way service on the line, where available
Option of measured service, where available
Ability to keep existing serving telephone numbers if cutover to
MCIIm resale line incoming/outgoing screening
Provision of Information Digit 07
Provision of International Toll Denial Recognition Tone, when available

4.10.4 At a minimum, U S WEST shall offer for resale the following PAL Coin feature:

Blocking for 1+ international, 10XXXX1 + international, 101XXXX1 + international, 1+900, N11, 976 and option to block all 1-700 and 1-500 calls
Line side supervision option

4.10.5 At a minimum, U S WEST shall offer for resale the following PAL Coinless feature:

Blocking for 1 + international, 10XXXX1 + international, 101XXXX1 +International, 1+900, N11, 976, and 7 digit local

4.10.6 U S WEST shall provide installation intervals for PAL services to MCIIm for ordering, call transfer, billing, and PIC changes in accordance with performance standards that are established by the Commission, pursuant to subsequent

agreement between the Parties or as provided to any other Person.

5. Service Functions

- 5.1 U S WEST shall provide MCI_m with the information available to U S WEST that MCI_m will need to certify subscribers who transfer from U S WEST as exempt from charges (including taxes), or eligible for reduced charges associated with providing services.
- 5.2 U S WEST shall provide MCI_m with appropriate notification of all area transfers with line level detail one hundred twenty (120) days before service transfer, and will also notify MCI_m within one hundred twenty (120) days before such change or any LATA boundary changes.
- 5.3 U S WEST will work cooperatively with MCI_m in practices and procedures regarding the handling of law enforcement and service annoyance calls.

5.4 Support Functions

5.4.1 Routing to Directory Assistance, Operator and Other Services

5.4.1.1 U S WEST shall make available to MCI_m the ability to route:

- (a) all local Directory Assistance calls (411, (NPA) 555-1212) dialed by MCI_m Customers directly to the MCI_m Directory Assistance Services platform, where technically feasible and consistent with FCC rules; and
- (b) local Operator Services calls (O+, O-) dialed by MCI_m Customers directly to the MCI_m local Operator Services platform, where technically feasible and consistent with FCC rules. Such traffic shall be routed over trunk groups between U S WEST end offices and the MCI_m local Operator Services Platform, using standard Operator Services dialing protocols of O+ or O-.

5.4.1.2 All direct routing capabilities described herein shall permit MCI_m Customers to dial the same telephone numbers for MCI_m Directory Assistance and local Operator Service as U S WEST customers use to access similar services.

6. Security and Law

- 6.1 U S WEST will maintain and safeguard all MCI_m customer information according to CPNI privacy guidelines.
- 6.2 U S WEST and MCI_m will work jointly in security matters as they relate to MCI_m customers in a resale environment including, but not limited to, harassment and annoyance calls.
- 6.3 U S WEST and MCI_m will work jointly to support law enforcement agency requirements including, but not limited to, taps, traces and court orders.
- 6.4 U S WEST will work jointly with MCI_m with respect to prevention and settlement of fraud.

6.5 U S WEST and MCIIm will work jointly to provide access to lines in a hostage situation.

7. Ordering and Maintenance

7.1 MCIIm shall transmit to U S WEST the information necessary for the installation (billing, listing and other information), repair, maintenance and post-installation servicing according to U S WEST's standard procedures, as described in the U S WEST resale operations guide that will be provided to MCIIm. When U S WEST's end user or the end user's new service provider discontinues the end user's service in anticipation of moving to another service provider, U S WEST will render its closing bill to the end user effective with the disconnection. Should MCIIm's end user, a new service provider, or MCIIm request service be discontinued to the end user, U S WEST will issue a bill to MCIIm for that portion of the service provided to the MCIIm end user. In no event shall the transition of an end user from U S WEST to MCIIm cause a disconnection of service other than as specifically provided for in this Agreement. It is understood that MCIIm's decision to request a change in class of service (or a conversion to a re-used unbundled Loop) at "transition" may involve a few minutes out-of-service. The preceding may be modified by agreement of the Parties.

7.2 U S WEST will notify MCIIm by facsimile or other processes as agreed to by the Parties, when an end user moves to another service provider.

7.3 The new service provider shall be responsible for issuing either a transfer of service or disconnect/new connect order, as appropriate.

7.4 The Parties agree that they will work cooperatively to develop the standards and processes applicable to the transfer of such accounts that are in arrears.

8. Changes in Retail Service

8.1 U S WEST will notify MCIIm of any changes in the terms and conditions under which it offers Telecommunications Services at retail to subscribers who are not telecommunications service providers or carriers, including, but not limited to, the introduction or discontinuance of any features, functions, services or promotions.

8.2 U S WEST will provide to MCIIm advance notice of the availability of new Telecommunication Services in accordance with Section 23.2 of Part A of this Agreement.

8.3 In the event U S WEST intends to terminate the provisioning of any Resale Services to MCIIm for any reason, MCIIm shall be responsible for providing any and all necessary notice to its end users of the termination. In no case shall U S WEST be responsible for providing such notice to MCIIm's end users. U S WEST will provide sufficient written notice to MCIIm of U S WEST's intent to terminate a Resale Service so that MCIIm may notify its customers or intervene in the proceedings on a timely basis consistent with Commission rules and notice requirements.

9. Customer Authorization Process

9.1 U S WEST and MCIIm will use the existing PIC process as a model, and the same or similar procedures for changes of local providers. For a local carrier change initiated by MCIIm or an agent of MCIIm to a customer, one of the following four (4) procedures will constitute

authorization for the change: (a) Obtain the customer's written authorization (letter of authorization or LOA); (b) Obtain the customer's electronic authorization by use of an toll-free number; (c) Have the customer's oral authorization verified by an independent third party (third party verification); or (d) Send an information package, including a prepaid, returnable postcard, within three (3) days of the customer's request for a local carrier change, and wait fourteen (14) days before submitting the local carrier change to the previous carrier.

- 9.2 It is understood by U S WEST and MCIIm that these procedures may be superseded or modified by FCC rules or industry standards.
- 9.3 U S WEST will provide MCIIm authorization for a local carrier change that is initiated by a customer call to MCIIm. In this case MCIIm will: (a) maintain internal records verifying the customer's stated intent to switch carriers; and (b) consistent with FCC rules, produce the record in case of a slamming dispute.
- 9.4 Should an end user dispute or a discrepancy arise regarding the authority of MCIIm to act on behalf of the end user, MCIIm is responsible for providing a written response evidencing its authority to U S WEST within five (5) Business Days of receipt of a written request from U S WEST describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or MCIIm does not provide a response within five (5) Business Days, U S WEST shall honor the designation of the end user. In the event the end user designation is honored by U S WEST as described above, then MCIIm shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission rules.
- 9.5 Should an end user dispute or a discrepancy arise regarding the authority of U S WEST to act on behalf of the end user, U S WEST is responsible for providing a written response evidencing its authority to MCIIm within five (5) Business Days of receipt of a written request from MCIIm describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or U S WEST does not provide a response within five (5) Business Days, MCIIm shall honor the designation of the end user. In the event the end user designation is honored by MCIIm as described above, then U S WEST shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission rules.
- 9.6 MCIIm shall designate the Primary Interexchange Carrier ("PIC") assignments on behalf of its end users for interLATA services and for intraLATA services when intraLATA presubscription is implemented.
- 9.7 When Customers switch from U S WEST to MCIIm, or to MCIIm from any other service provider, such Customers shall be permitted to retain their current telephone numbers if they so desire and if they do not change their service address to an address served by a different central office. U S WEST shall take no action to prevent MCIIm Customers from retaining their current telephone numbers.

10. MCIIm Responsibilities

- 10.1 MCIIm must send to U S WEST either: (a) complete and accurate end user listing information for Directory Assistance and 911 Emergency Services using processes mutually agreed to by the Parties, or (b) notification of as is migration. MCIIm must provide to U S WEST accurate end user information to ensure appropriate listings in any databases

in which U S WEST retains and/or maintains end user information. MCIm assumes liability for the accuracy of information provided to U S WEST. After receiving accurate information from MCIm, U S WEST assumes liability for the accuracy of transmission of such information to the database provider (e.g., SCC).

10.2 U S WEST shall provide MCIm with the capability to assign large quantities (i.e., greater than ten (10)) telephone numbers for multiple line and PBX customers in accordance with U S WEST's tariffs and/or its own internal practices.

10.3 MCIm will provide a three (3) year non-binding forecast within ninety (90) days of the Effective Date of this Agreement. The forecast shall be updated and provided to U S WEST on a quarterly basis. The initial forecast will provide:

The date service will be offered (by city and/or state)
The type and quantity of service(s) which will be offered
MCIm's anticipated order volume
MCIm's key contact personnel

11. Pricing

11.1 The wholesale discount rate charged to MCIm for Local Resale is set forth in Attachment 1 of this Agreement.

12.⁶ Special Construction Charges

12.1 **When, for the purpose of reselling U S WEST services, MCIm asks U S WEST to build a facility in an area not yet served, or to provide more facility than U S WEST would otherwise provide its customers in fulfilling its responsibilities as a public utility, U S WEST may recover its excess costs. In such a case, U S WEST may recover its economically efficient charges, over and above those normally incurred in serving its own customers, that result from MCIm's request to extend or expand MCIm's Resale Services. U S WEST shall not double recover charges. U S WEST's recovery will be limited to charges not already recovered in prices charged and will be limited to the level of benefit that MCIm experiences as a result of its request. If U S WEST or any third party or parties also benefits from the construction, U S WEST's recovery from MCIm will be limited to a percentage share of the total charges, based on a reasonable estimate of MCIm's proportionate share of the benefit.**

13.⁷ Service Quality

13.1 **U S WEST shall provide to MCIm Services for Resale that are equal in quality, subject to the same conditions (including the conditions in U S WEST's effective tariffs), within the same provisioning time intervals that U S WEST provides these services to other Persons, including end users, and in accordance with any applicable Commission service quality standards, including standards the Commission may**

⁶ Order, p. 38 at Issue 39.

⁷ Order, pp. 67-68 at Issue 36.

impose pursuant to Section 252 (e)(3) of the Act.

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UNBUNDLED ACCESS/ELEMENTS

1. Introduction¹

1.1 U S WEST shall provide unbundled Network Elements in accordance with this Agreement, the Act and FCC rules and regulations. The price for each Network Element is set forth in Attachment 1 of this Agreement. Except as otherwise set forth in this Attachment, MCI may order Network Elements as of the Effective Date of this Agreement.

1.2 General Terms

1.2.1 U S WEST agrees to make available the following unbundled Network Elements which are addressed in more detail in the following sections of this Attachment: (a) local Loop, (b) local and tandem switches (**including all vertical switching features provided by such switches**),² (c) interoffice transmission facilities, (d) Network Interface Devices, (e) signaling and call-related database facilities, (f) operations support systems functions, and (g) operator and directory assistance facilities.

2. Unbundled Network Elements

2.1 U S WEST shall offer Network Elements to MCI 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 U S WEST shall permit MCI to connect MCI's facilities or facilities provided to MCI by third parties with each of U S WEST's unbundled Network Elements at any technically feasible point designated by MCI.

2.3 MCI may use one or more Network Elements to provide any feature, function, capability, or service option such Network Element(s) is capable of providing or any feature, function, capability, or service option described in the technical references identified herein, or as may otherwise be determined by MCI.³

2.3.1 MCI may, at its option, designate any technically feasible method of access to unbundled Network Elements, including access methods currently or previously in use by U S WEST.

2.4⁴ U S WEST shall offer each Network Element individually and in combination with any

¹ Order, p. 47 at Issue 14.

² Order, p. 51 at Issue 18.

³ Order, p. 56 at Issue 25.

⁴ Order, p. 56 at Issue 25.

other Network Element or Network Elements in order to permit MCI to provide Telecommunications Services to its subscribers. MCI may purchase unbundled Network Elements without restriction as to how MCI rebundles those elements.

- 2.5 For each Network Element, U S WEST shall provide a demarcation point (e.g., at a Digital Signal Cross Connect, Light Guide Cross Connect panel or a Main Distribution Frame) and, if necessary, access to such demarcation point, which MCI agrees is suitable. Where U S WEST provides combined Network Elements at MCI's direction, however, no demarcation point shall exist between such contiguous Network Elements.⁵**
- 2.6 The charges set forth in Attachment 1 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).**
- 2.7⁶ This Attachment describes the initial set of Network Elements which MCI and U S WEST have identified as of the Effective Date:**

**Loop
Network Interface Device
Distribution
Local Switching
Operator Systems
Common Transport, if technically feasible
Dedicated Transport
Signaling Link Transport
Signaling Transfer Points
Service Control Points/Databases
Tandem Switching
911
Directory Assistance**

- 2.8 MCI and U S WEST agree that the Network Elements identified in this Attachment are not all possible Network Elements.**
- 2.9 MCI 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, customer demand, or other requirements.**
- 2.9.1 MCI will request such Network Elements in accordance with the Bona Fide Request process described in Part A of this Agreement. Additionally, if U S WEST provides any Network Element that is not identified in this Agreement to itself, to its own subscribers, to a U S WEST Affiliate or to any other**

⁵ Order, p. 49.

⁶ Order, pp. 54-56 at Issue 25.

Person, U S WEST shall make available the same Network Element to MCI on terms and conditions no less favorable to MCI than those provided to itself or to any other party.

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 identified herein for each such Network Element, as well as any performance or other requirements, identified in this Attachment, subject to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
- 3.2 If one or more of the requirements set forth in this Agreement are in conflict, the Parties agree to resolve such conflict in accordance with the dispute resolution provisions of Part A of this Agreement.
 - 3.2.1 U S WEST shall provide to MCI, upon request, engineering, design, performance and other network data sufficient for MCI to determine that the requirements of this Section 3 are being met. In the event such data indicates that the requirements set forth herein are not being met, U S WEST shall, within ten (10) days, cure any design, performance or other deficiency and provide new data sufficient for MCI to determine that such deficiencies have been cured.
 - 3.2.2 U S WEST agrees to work cooperatively with MCI to provide Network Elements that will meet MCI's needs in providing Telecommunications Services to its subscribers.
- 3.3 Unless otherwise requested by MCI, each Network Element or any Combination thereof and the connections between Network Elements provided by U S WEST to MCI shall be made available to MCI at any technically feasible point, that is equal to or better than the manner in which U S WEST provides such Network Elements, Combinations and connections to itself, its own subscribers, to a U S WEST Affiliate or to any other entity.

Description of Unbundled Elements

4. Tandem Switching

U S WEST will provide a tandem switching element ("Tandem Switching") on an unbundled basis. The tandem switch element includes the facilities connecting the trunk distribution frames to the switch, and all the functions of the switch itself, including those facilities that establish a temporary transmission path between two (2) other switches. The definition of the tandem switching element also includes the functions centralized in tandems rather than in separate end office switches, such as call recording, the routing of calls to Operator Services, and signaling conversion functions.

4.1 Definition:

Tandem Switching is the function that establishes a communications path between two (2) switching offices through a third switching office (the tandem switch) including, but not limited to, those of MCI, U S WEST, independent telephone companies (ICOs), IXCs and wireless carriers.

4.2 Technical Requirements

- 4.2.1 Tandem Switching provided by U S WEST to MCI shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540, Issue 2R2, Tandem Supplement, June 1, 1990. The requirements for Tandem Switching include, but are not limited to, the following:
- 4.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;
 - 4.2.1.2 Tandem Switching shall provide screening (digit analysis) and routing as designated by MCI;
 - 4.2.1.3 Where technically feasible, Tandem Switching shall provide recording of all billable events designated by MCI;
 - 4.2.1.4 Tandem Switching shall allow passing of Advanced Intelligent Network triggers supporting AIN features;
 - 4.2.1.5 Tandem Switching shall provide connectivity to Operator Systems as designated by MCI;
 - 4.2.1.6 Tandem Switching shall provide access to toll free number portability database where MCI sends such traffic to a tandem;
 - 4.2.1.7 Tandem Switching shall allow the passing of all functions associated with traffic for all trunk interconnection discussed under the "Network Interconnection" section of this Agreement (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));
 - 4.2.1.8 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and
 - 4.2.1.9 Tandem Switching shall provide connectivity to Transit Traffic to and from other carriers.
- 4.2.2 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IXCs, ICOs, CAPs and CLEC switches.
- 4.2.3 Tandem Switching shall provide local tandeming functionality between two (2) end offices, including two (2) offices belonging to different CLECs (e.g., between an MCI end office and the end office of another CLEC).
- 4.2.4 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed. Additional signaling information and requirements are provided in Section 15 of this Attachment.
- 4.2.5 Tandem Switching shall record billable events and send them to the area billing centers designated by MCI. Billing requirements are specified in Attachment 5

of this Agreement.

- 4.2.6 U S WEST shall perform routine testing and fault isolation on the underlying switch providing Tandem Switching and all its Interconnections. When requested by MCI, the results and reports of the testing shall be made immediately available to MCI.
- 4.2.7 When requested by MCI, U S WEST shall provide to MCI for review performance data regarding traffic characteristics or other measurable elements with respect to MCI traffic.
- 4.2.8 Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on MCI traffic shall be at parity with controls being provided or imposed on U S WEST traffic (e.g., U S WEST shall not block MCI traffic and leave its own traffic unaffected or less affected).
- 4.2.9 Tandem Switching shall route calls to U S WEST or MCI endpoints or platforms (e.g., Operator Services and PSAPs) on a per call basis as designated by MCI. Detailed primary and overflow routing plans for all interfaces available within the U S WEST switching network shall be mutually agreed to by MCI and U S WEST. Such plans shall meet MCI requirements for routing calls through the local network.
- 4.2.10 Tandem Switching shall process originating toll free traffic received from an MCI local switch.
- 4.2.11 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.
- 4.2.12 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

4.3 Interface Requirements

- 4.3.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying tandem is acting as the E911 tandem.
- 4.3.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which U S WEST interconnects.
- 4.3.3 U S WEST shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
- 4.3.4 For applicable call types, Tandem Switching shall interconnect with MCI's switch, using two-way trunks, for traffic that is transiting via the U S WEST network to interLATA or intraLATA carriers. At MCI's request, Tandem Switching shall record and keep records of traffic for billing.

- 4.3.5 At MCI's request, 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 employed by U S WEST as designated by MCI.
- 4.4 Tandem Switching shall meet or exceed each of the requirements for Tandem Switching set forth in the following technical references:
 - 4.4.1 Bell Communications Research TR-TSY-000540, Issue 2R2, Tandem Supplement, June 1, 1990;
 - 4.4.2 GR-905-CORE covering CCSNIS;
 - 4.4.3 GR-1429-CORE for call management features; and
 - 4.4.4 GR-2863-CORE and GR-2902-CORE for CCS AIN interconnection.

5. Shared Transport

- 5.1 **U S WEST will provide unbundled access to shared transmission facilities between end offices and the tandem switch. Further, U S WEST will provide unbundled access to dedicated transmission facilities between its Central Offices or between such offices and those of competing carriers. This includes, at a minimum, interoffice facilities between end offices, IXC POPs, end offices or tandems of U S WEST, and the end offices of U S WEST and requesting carriers. In addition, U S WEST will provide all technically feasible transmission capabilities, such as DS-1, DS-3, and Optical Carrier levels (e.g. OC-3/12/48/96) that MCI could use to provide Telecommunications Services. In the event MCI desires further access to shared transmission facilities, MCI may request such access via the BFR process.⁷**

6. Common Transport

6.1 Definition

Common Transport is an interoffice transmission path between U S WEST Network Elements shared by carriers. Where U S WEST Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common Transport. U S WEST shall offer Common Transport as of the Effective Date of this Agreement at DS-0, DS-1, DS-3, STS-1 or higher transmission bit rate circuits. Common Transport consists of U S WEST inter-office transport facilities and is distinct and separate from Local Switching.

6.2 Technical Requirements

- 6.2.1 U S WEST shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities used to provide Common Transport.
- 6.2.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a

⁷ Staff Recommendations, p. 3.

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

- 6.2.2.1 ANSI T1.101-1994, American National Standard for Telecommunications-Synchronization Interface Standard Performance and Availability;
- 6.2.2.2 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
- 6.2.2.3 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;
- 6.2.2.4 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
- 6.2.2.5 ANSI T1.105.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Automatic Protection Switching;
- 6.2.2.6 ANSI T1.105.02-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Payload Mappings;
- 6.2.2.7 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
- 6.2.2.8 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET)-Jitter at Network Interfaces - DS-1 Supplement;
- 6.2.2.9 ANSI T1.105.05-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Tandem Connection;
- 6.2.2.10 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 6.2.2.11 ANSI T1.105.07-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Sub STS-1 Interface Rates and Formats;
- 6.2.2.12 ANSI T1.105.09-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Network Element Timing and Synchronization;
- 6.2.2.13 ANSI T1.106-1988, American National Standard for Telecommunications

- Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 6.2.2.14 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
- 6.2.2.15 ANSI T1.107a-1990, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS-3 Format Applications);
- 6.2.2.16 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 6.2.2.17 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 6.2.2.18 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
- 6.2.2.19 ANSI T1.404-1994, Network-to-Subscriber Installation - DS-3 Metallic Interface Specification;
- 6.2.2.20 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 6.2.2.21 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 6.2.2.22 Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 6.2.2.23 Bellcore GR-820-CORE, Generic Transmission Surveillance: DS-1 & DS-3 Performance;
- 6.2.2.24 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET): Common Generic Criteria;
- 6.2.2.25 Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993) (A module of LSSGR, FR-NWT-000064.);
- 6.2.2.26 Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access;
- 6.2.2.27 Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991;
- 6.2.2.28 Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue 1, May 1989; and

6.2.2.29 Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition, Issue 1, August 198.

7. Dedicated Transport

7.1 Definition:

- 7.1.1 Dedicated Transport is an interoffice transmission path between MCI designated locations to which MCI is granted exclusive use. Such locations may include U S WEST central offices or other locations, MCI network components, other carrier network components, or subscriber premises.
- 7.1.2 U S WEST shall offer Dedicated Transport in each of the following manners:
 - 7.1.2.1 as capacity on a shared facility;
 - 7.1.2.2 as a circuit (e.g., DS-1, DS-3, STS-1) dedicated to MCI; and
 - 7.1.2.3 as a system (i.e., the equipment and facilities used to provide Dedicated Transport such as SONET ring) dedicated to MCI.
- 7.1.3 When Dedicated Transport is provided as a circuit or as capacity on a shared facility, it shall include, as appropriate:
 - 7.1.3.1 multiplexing functionality;
 - 7.1.3.2 grooming functionality; and
 - 7.1.3.3 redundant equipment and facilities necessary to support protection and restoration.
- 7.1.4 When Dedicated Transport is provided as a system, it shall include:
 - 7.1.4.1 transmission equipment such as multiplexers, line terminating equipment, amplifiers, and regenerators;
 - 7.1.4.2 inter-office transmission facilities such as optical fiber, **dark fiber**⁸, copper twisted pair, and coaxial cable;
 - 7.1.4.3 redundant equipment and facilities necessary to support protection and restoration; and
 - 7.1.4.4 access to the Digital Cross-Connect System ("DCS") functionality as an option in the same manner provided to IXCs that purchase transport services. DCS is described below in Section 7.5 of this Attachment.

7.2 Technical Requirements

⁸ Order, p. 52 at Issue 22.

This Section sets forth technical requirements for all Dedicated Transport.

- 7.2.1 When U S WEST provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS-1, DS-3, STS-1) shall be dedicated to MCI designated traffic.
- 7.2.2 U S WEST shall offer Dedicated Transport using currently available technologies including, but not limited to, DS-1 and DS-3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.
- 7.2.3 When requested by MCI, Dedicated Transport shall provide physical diversity. Physical diversity means that two (2) circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 7.2.4 When physical diversity is requested by MCI, U S WEST shall provide the maximum feasible physical separation between transmission paths for all facilities and equipment (unless otherwise agreed to by MCI).
- 7.2.5 Upon MCI's written request and where available in the U S WEST network, U S WEST shall provide real time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, MCI's traffic.
- 7.2.6 U S WEST shall offer the following interface transmission rates for Dedicated Transport:
 - 7.2.6.1 DS-1 (Extended SuperFrame - ESF/B8ZS, D4, and unframed applications shall be provided, except for those local/EAS tandems as designated by U S WEST);
 - 7.2.6.2 DS-3 (C-bit Parity, M13, and unframed applications shall be provided);
 - 7.2.6.3 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 MCI service node; and
 - 7.2.6.4 where available, SONET standard interface rates in accordance with International Telecommunications Union ("ITU") Recommendation G.707 and Plesiochronous Digital Hierarchy ("PDH") rates per ITU Recommendation G.704.
- 7.2.7 U S WEST shall provide intraoffice wiring up to a suitable Point of Termination ("POT") between Dedicated Transport and MCI designated equipment. U S WEST shall provide the following equipment for the physical POT:
 - 7.2.7.1 DSX1 or DCS for DS-1s or VT1.5s;
 - 7.2.7.2 DSX3 or DCS for DS-3s or STS-1s; and

- 7.2.7.3 Light guide cross-connect for optical signals (e.g., OC-3 and OC-12).
 - 7.2.8 For Dedicated Transport provided as a system, U S WEST shall design the system including, but not limited to, facility routing and termination points according to MCI's specifications.
 - 7.2.9 Upon MCI's request and where available, U S WEST shall provide MCI with electronic provisioning control of MCI specified Dedicated Transport via Command-A-Link or equivalent interface in the same manner as is provided to IXCs.
 - 7.2.10 U S WEST shall offer Dedicated Transport together with and separately from DCS.
- 7.3 Technical Requirements for Dedicated Transport Using SONET Technology

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

7.3.1 All SONET Dedicated Transport provided as a system shall:

7.3.1.1 be synchronized with a primary Stratum 1 level timing source;

7.3.1.2 provide SONET standard interfaces as available in the U S WEST network and consistent with generally accepted industry standards which properly interwork with SONET standard equipment from other vendors, including, but not limited to, SONET standard section, line and path performance monitoring, maintenance signals, alarms, and data channels;

7.3.1.3 provide Data Communications Channel ("DCC") or equivalent connectivity through the SONET transport system. Dedicated Transport provided over a SONET transport system shall be capable of routing DCC messages between MCI and SONET network components connected to the Dedicated Transport. For example, if MCI leases a SONET ring from U S WEST, that ring shall support DCC message routing between MCI and SONET network components connected to the ring; and

7.3.1.4 support the following performance requirements for each circuit (STS-1, DS-1, DS-3, etc.):

7.3.1.4.1 no more than ten (10) Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 7.4.5 below); and

7.3.1.4.2 no more than one (1) Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 7.4.5 below).

7.3.2 SONET rings shall:

7.3.2.1 be provisioned on physically diverse fiber optic cables (including separate

building entrances where available). "Diversely routed" shall be interpreted as the maximum feasible physical separation between transmission paths, unless otherwise agreed to by MCI;M;

- 7.3.2.2 support dual ring interworking per SONET standards where available in the U S WEST network;
- 7.3.2.3 provide the necessary redundancy in optics, electronics, and transmission paths such that no single failure will cause a service interruption;
- 7.3.2.4 where available, provide the ability to disable ring protection switching at MCI;M's direction (selective protection lock-out). This requirement applies to line switched rings only;
- 7.3.2.5 where available, provide the ability to use the protection channels to carry extra traffic. This requirement applies to line switched rings only;
- 7.3.2.6 provide 50 millisecond restoration as defined in SONET standards;
- 7.3.2.7 where available, have settable ring protection switching thresholds that shall be set in accordance with MCI;M's specifications;
- 7.3.2.8 where available, 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;
- 7.3.2.9 provide non-revertive protection switching. This requirement applies to path switched rings only; and
- 7.3.2.10 adhere to the following availability requirements, where availability is defined in the technical reference set forth in Section 7.4.5 below:
 - 7.3.2.10.1 no more than 0.25 minutes of unavailability per month; and
 - 7.3.2.10.2 no more than 0.5 minutes of unavailability per year.

7.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a minimum, **Dedicated Transport** shall meet each of the requirements set forth in Section 7.2.3 of this Attachment and in the following technical references:

- 7.4.1 ANSI T1.105.04-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures;
- 7.4.2 ANSI T1.119-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications;
- 7.4.3 ANSI T1.119.01-1995, American National Standard for Telecommunications -

Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment;

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

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

7.5 Digital Cross-Connect System

7.5.1 Definition

7.5.1.1 Digital Cross-Connect System ("DCS") is a function which provides automated cross connection of Digital Signal level 0 (DS-0) 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 DS-1 rate or greater with cross-connection typically at the DS-0 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 Synchronous Transport Signal level 1 (STS-1) or other Synchronous Optical Network (SONET) signals (e.g., STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (e.g., DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.

7.5.1.2 In locations where automated cross connection capability does not exist, a Digital Signal Cross-Connect ("DSX") or light guide cross-connect patch panels and D4 channel banks or other DS-0 and above multiplexing equipment used to provide the function of a manual cross connection will be made available.

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

7.6 DCS Technical Requirements

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

7.6.2 DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast, and facility test functions, where technically feasible.

7.6.3 DCS shall provide multiplexing, format conversion, signaling conversion, or other

functions, where technically feasible.

- 7.6.4 The end-to-end cross connection shall be input to the underlying device used to provide DCS from an operator at a terminal or via an intermediate system. The cross connection assignment shall remain in effect whether or not the circuit is in use.
- 7.6.5 U S WEST shall administer and maintain DCS.
- 7.6.6 Where available, U S WEST shall provide various types of DCSs, including:
 - 7.6.6.1 DS-0 cross-connects (typically termed DCS 1/0);
 - 7.6.6.2 DS-1/VT1.5 (Virtual Tributaries at the 1.5Mbps rate) cross-connects (typically termed DCS 3/1);
 - 7.6.6.3 DS-3 cross-connects (typically termed DCS 3/3);
 - 7.6.6.4 STS-1 cross-connects; and
 - 7.6.6.5 other technically feasible cross-connects designated by MCIm.
- 7.6.7 U S WEST shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (i.e., U S WEST shall establish the processes to implement cross connects on demand), where available, based on engineering forecasts.
- 7.6.8 U S WEST shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., U S WEST 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, where available, based on engineering forecasts.
- 7.6.9 DCS shall continuously monitor protected circuit packs and redundant common equipment.
- 7.6.10 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 7.6.11 DCS equipment shall be equipped with a redundant power supply or a battery back-up.
- 7.6.12 U S WEST shall have available and utilize spare maintenance facilities and equipment necessary for provisioning repairs.
- 7.6.13 At MCIm's option, U S WEST shall provide, where available, MCIm with real time performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact MCIm's services. For example, this may include hardware alarm data and facility alarm data on a DS-3 in which an MCIm DS-1 is traversing.

- 7.6.14 At MCI's option, U S WEST shall provide MCI with real time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation where available.
 - 7.6.15 Where available, DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS-1 or STS-1 to DS-3).
 - 7.6.16 Where available, DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (e.g., Optical Carrier level 3, i.e., OC-3, interfaces on a DCS 3/1).
 - 7.6.17 Where available, DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring.
 - 7.6.18 DCS shall provide multipoint bridging of multiple channels to other DCSs. MCI 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.
 - 7.6.19 DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by MCI.
- 7.7 DCS Interface Requirements
- 7.7.1 U S WEST shall provide physical interfaces on DS-0, DS-1, and VT1.5 channel cross-connect devices at the DS-1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and MCI standards.
 - 7.7.2 U S WEST shall provide physical interfaces on DS-3 channel cross-connect devices at the DS-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and MCI standards.
 - 7.7.3 U S WEST 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, ITU, and MCI standards.
 - 7.7.4 Interfaces on all other cross-connect devices shall be in compliance with applicable Bellcore, ANSI, ITU, and MCI standards.
- 7.8 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, DCS shall, at a minimum, meet all the requirements set forth in the following technical references:
- 7.8.1 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
 - 7.8.2 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;

- 7.8.3 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
- 7.8.4 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
- 7.8.5 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS-1 Supplement;
- 7.8.6 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 7.8.7 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 7.8.8 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
- 7.8.9 ANSI T1.107a-1990, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS-3 Format Applications);
- 7.8.10 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 7.8.11 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 7.8.12 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
- 7.8.13 ANSI T1.404-1994, Network-to-Subscriber Installation - DS-3 Metallic Interface Specification;
- 7.8.14 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 7.8.15 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 7.8.16 FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 7.8.17 GR-820-CORE, Generic Transmission Surveillance: DS-1 & DS-3 Performance;
- 7.8.18 GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria; and
- 7.8.19 TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

8. Loop

8.1 Definition

8.1.1 A Loop is a transmission facility between a distribution frame, or its equivalent, in a U S WEST central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which MCI is granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

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

8.1.1.1 MCI shall request access to subloop elements, including feeder, distribution, Feeder-Distribution Interface (FDI), and NID, pursuant to the BFR Process. Such requests shall be presumed to be technically feasible, unless U S WEST demonstrates the technical infeasibility of the request.

8.1.2 If U S WEST uses integrated Digital Loop Carrier ("DLC"s) systems to provide the local Loop, U S WEST will make alternate arrangements, equal in quality, to permit MCI to order a contiguous unbundled local Loop. These arrangements may, at U S WEST's option, include the following: providing MCI with copper facilities or universal DLC that meet established technical parameters, deploying Virtual Remote Terminals, allowing MCI to purchase the entire integrated DLC, or converting integrated DLCs to non-integrated systems.

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

8.2 Technical Requirements

Subdivided to each component as detailed below.

8.3 Interface Requirements

Subdivided to each component as detailed below.

8.4 Loop Components

8.4.1 Loop Concentrator/Multiplexer

8.4.1.1 Definition:

8.4.1.1.1 The Loop Concentrator/Multiplexer is the Network Element that: (a) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (b) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing); (c) aggregates a specified number of signals or channels to fewer channels (concentrating); (d) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (e) in some instances, performs electrical to optical (E/O) conversion.

8.4.1.1.2 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.

8.4.1.2 Technical Requirements

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

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

8.4.1.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services;

8.4.1.2.1.3 4-wire digital data (2.4Kbps through 64Kbps and "n" times 64Kbps (where n < 24);

8.4.1.2.1.4 DS-3 rate private lines, where available; and

8.4.1.2.1.5 Optical SONET rate private lines, where available.

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

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

8.4.1.2.2.2 multiplexing of the individual digital signals up to higher transmission bit rate signals (e.g., DS-0, DS-1, DS-3, or optical SONET rates) for transport to the U S WEST central office through the Loop Feeder; and

8.4.1.2.2.3 concentration of end-user subscriber signals onto

fewer channels of a Loop Feeder (when available the concentration ratio shall be as specified from time to time by MCI_m). Concentration ratios shall not impair analog or digital performance.

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

8.4.1.2.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, the Loop Concentrator/Multiplexer shall be provided to MCI_m in accordance with the following Technical References:

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

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

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

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

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

8.4.1.2.4.6 ANSI T1.403-1989, American National Standard for Telecommunications - Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;

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

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

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

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

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

8.4.1.3 Requirements for an Intelligent Loop Concentrator/ Multiplexer:

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

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

8.4.1.3.3 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.

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

8.4.1.3.5 MCI may request U S WEST to provide MCI with real time performance monitoring and alarm data on IC/M elements that may affect MCI's traffic. This includes IC/M hardware alarm data and facility alarm data on the underlying device that provides such IC/M function.

8.4.1.3.6 MCI may request U S WEST to provide MCI with real time ability to initiate tests on the underlying device that provides such IC/M function integrated test equipment as well as other integrated functionality for routine testing and fault isolation.

8.4.1.4 Interface Requirements

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

8.4.1.4.2 The Loop Concentrator/Multiplexer shall provide an analog voice frequency copper twisted pair interface at the serving wire center.

8.4.1.4.3 The Loop Concentrator/Multiplexer shall provide digital 4-wire

electrical interfaces at the serving wire center.

- 8.4.1.4.4 The Loop Concentrator/Multiplexer shall provide optical SONET interfaces at rates of O1.C-3, OC-12, OC-48, and OC-N.
- 8.4.1.4.5 The Loop Concentrator/Multiplexer shall provide the Bellcore TR-303 DS-1 level interface at the serving wire center. Loop Concentrator/ Multiplexer shall provide Bellcore TR-08 modes 1&2 DS-1 interfaces when designated by MCI_m.
- 8.4.1.4.6 The Intelligent Loop Concentrator/Multiplexer shall be provided to MCI_m in accordance with the Technical References set forth in Sections 8.4.1.2.4.8 through 8.4.1.2.4.11, above.

8.4.2 Loop Feeder

8.4.2.1 Definition:

- 8.4.2.1.1 The Loop Feeder is the Network Element that provides connectivity between (a) a Feeder Distribution Interface ("FDI") associated with Loop Distribution and a termination point appropriate for the media in a central office, or (b) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office.
- 8.4.2.1.2 U S WEST shall provide MCI_m physical access to the FDI and the right to connect the Loop Feeder to the FDI.
- 8.4.2.1.3 The physical medium of the Loop Feeder may be copper twisted pair, or single or multi-mode fiber or other technologies as designated by MCI_m. In certain cases, MCI_m will require a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that U S WEST offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

8.4.2.2 Requirements for Loop Feeder

- 8.4.2.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data, or, where available in the network, analog radio frequency signals, as appropriate.
- 8.4.2.2.2 U S WEST shall provide appropriate power for all active elements in the Loop Feeder. U S WEST will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant Remote Terminal ("RT").

8.4.2.3 Additional Requirements for Special Copper Loop Feeder Medium

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

8.4.2.4 Additional Technical Requirements for DS-1 Conditioned Loop Feeder

In addition to the requirements set forth above, MCI may designate that the Loop Feeder be conditioned to transport a DS-1 signal. The requirements for such transport are defined in the references below in Section 8.4.2.6.

8.4.2.5 Additional Technical Requirements for Optical Loop Feeder

In addition to the requirements set forth above, MCI may designate that Loop Feeder will transport DS-3 and OC-n (where "n" is defined in the technical reference in Section 8.4.1.2.4.4 above). The requirements for such transport are defined in the references below in Section 8.4.2.6.

8.4.2.6 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, U S WEST shall offer Loop Feeder in compliance with the requirements set forth in the following Technical References:

8.4.2.6.1 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS-1 interfaces;

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

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

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

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

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

8.4.2.6.7 ANSI T1.403-1989, American National Standard for Telecommunications - Carrier to Subscriber Installation, DS-1 Metallic Interface Specification; and

8.4.2.6.8 Bellcore GR-253-CORE, Synchronous Optical Network Systems

(SONET), Common Generic Criteria.

8.4.2.7 Interface Requirements

8.4.2.7.1 The Loop Feeder point of termination ("POT") within a U S WEST central office will be as follows:

8.4.2.7.1.1 Copper twisted pairs shall terminate on the MDF;

8.4.2.7.1.2 DS-1 Loop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and

8.4.2.7.1.3 Fiber optic cable shall terminate on a light guide termination panel or equivalent.

8.4.2.7.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, Loop Feeder shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:

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

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

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

9. Distribution

9.1 Definition:

9.1.1 Distribution provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of an FDI. The FDI is a device that terminates the Distribution Media and the Loop Feeder, and cross-connects them in order to provide a continuous transmission path between the NID and a telephone company central office. There are three (3) basic types of feeder-distribution connections: (a) multiple (splicing of multiple distribution pairs onto one (1) feeder pair); (b) dedicated ("home run"); and (c) interfaced ("cross-connected"). While older plant uses multiple and dedicated methods, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced connection method. The feeder-distribution interface ("FDI") in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

9.1.2 The Distribution may be copper twisted pair, coax cable, single or multi-mode fiber optic cable or other technologies. A combination that includes two (2) or more of these media is also possible. In certain cases, MCI shall require a copper twisted pair Distribution even in instances where the Distribution for services that U S WEST offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

9.2 Requirements for All Distribution

9.2.1 Distribution shall be capable of transmitting signals for the following services, as requested by MCI:

9.2.1.1 two-wire & four-wire analog voice grade loops; and

9.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services.

9.2.2 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.

9.2.3 U S WEST shall not interfere with MCI's ability to support functions associated with provisioning, maintenance, performance monitoring and testing of the unbundled Distribution.

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

9.2.4.1 Bellcore TR-TSY-000057, "Functional Criteria for Digital Loop Carrier Systems"; and

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

9.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements set forth in Section 9.2 above, MCI may designate Distribution to be copper twisted pair unfettered by any intervening equipment (e.g., filters, load coils, range extenders) so that MCI can use these Loops for a variety of services by attaching appropriate terminal equipment at the ends.

9.4 Additional Requirements for Fiber Distribution

Fiber optic cable Distribution shall be capable of transmitting signals for the following services in addition to the those set forth in Section 9.2.1 above:

9.4.1 DS-3 rate private line service;

- 9.4.2 Optical SONET OC-n rate private lines (where "n" is defined in the technical reference in Section 8.4.1.2.4.4 above); and
- 9.4.3 Where available in the U S WEST network, analog radio frequency based services (e.g., cable television (CATV)).

9.5 Additional Requirements for Coaxial Cable Distribution

Where available in the U S WEST network, Coaxial Cable (coax) Distribution shall be capable of transmitting signals for the following services in addition to those set forth in Section 9.2.1 above:

- 9.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mb/s and 45 Mb/s; and
- 9.5.2 Analog radio frequency based services (e.g., CATV).

9.6 Interface Requirements

- 9.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the performance requirements set forth in Section 18.2 of this Attachment.
- 9.6.2 Distribution shall be at least equal to each of the applicable interface requirements set forth in the following technical references:
 - 9.6.2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices", issued December 1, 1994;
 - 9.6.2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems", issued January 2, 1993;
 - 9.6.2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines"; and
 - 9.6.2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991.

10. Local Switching

10.1 Definition:

- 10.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the Main Distribution Frame ("MDF") or Digital Cross Connect ("DSX") panel to a desired line or trunk. The desired connection path for each call type will vary by subscriber and will be specified by MCI as a routing scenario that will be implemented in advance as part of or after the purchases of the unbundled Local Switching. Such functionality shall include all of the features, functions, and capabilities that the underlying U S WEST local switch is capable of providing. These may include, but are not

limited to: line signaling and signaling software, digit reception, dialed number translations, call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, announcements, calling features and capabilities (including call processing), Centrex, or Centrex-like services, Automatic Call Distributor ("ACD"), Carrier pre-subscription (e.g., long distance carrier, intraLATA toll), Carrier Identification Code ("CIC"), number portability capabilities, testing and other operational features inherent to the switch and switch software. The Local Switching function also provides access to transport, signaling (ISDN User Part ("ISUP") and Transaction Capabilities Application Part ("TCAP"), and platforms such as adjuncts, Public Safety Systems (911), Operator Services, Directory Assistance Services and Advanced Intelligent Network ("AIN"). Remote Switching Module functionality is included in the Local Switching function. Local Switching shall also be capable of routing local, intraLATA, interLATA, and international calls to the subscriber's preferred carrier, call features (e.g., call forwarding) and Centrex capabilities. Local Switching, including the ability to route to MCI'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. **In conjunction with unbundled Local Switching, vertical features may be ordered as separate Network Elements.**⁹

- 10.1.2 Local Switching, including the ability to route to MCI's transport facilities, dedicated facilities and systems, shall be unbundled from all other unbundled Network Elements, i.e., Operator Systems, Common Transport, Shared Transport and Dedicated Transport.

10.2 Technical Requirements

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

10.2.1.1 U S WEST shall route calls to the appropriate trunk or lines for call origination or termination.

10.2.1.2 U S WEST shall route calls on a per line or per screening class basis to (a) U S WEST platforms providing Network Elements or additional requirements, (b) MCI designated platforms, or (c) third-party platforms.

10.2.1.3 U S WEST shall provide to MCI recorded announcements as furnished by MCI and call progress tones to alert callers of call progress and disposition. The installation cost shall be borne by MCI for such announcements and call progress tones to the extent they are different than those standardly used by U S WEST.

10.2.1.4 U S WEST shall change a subscriber from U S WEST's services to MCI's services without loss of feature functionality, unless designated otherwise by MCI.

⁹ Order, p. 51 at Issue 18.

- 10.2.1.5 U S WEST shall perform routine testing (e.g., Mechanized Loop Tests ("MLT") and test calls such as 105, 107 and 108 type calls) and fault isolation on MCI's unbundled Network Elements, as designated by MCI.
- 10.2.1.6 U S WEST shall repair and restore any equipment or any other maintainable component that may adversely impact MCI's use of unbundled Local Switching.
- 10.2.1.7 U S WEST shall control congestion points such as mass calling events and network routing abnormalities using capabilities such as Automatic Call Gapping, Automatic Congestion Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or U S WEST.
- 10.2.1.8 U S WEST shall perform manual call trace as designated by MCI and shall permit subscriber originated call trace.
- 10.2.1.9 U S WEST shall record all billable events, involving usage of the Network Element, and send the appropriate recording data to MCI as further described in Attachment 5.
- 10.2.1.10 For Local Switching used as E911 tandems, U S WEST shall allow interconnection with MCI switches in that same local switch used as a E911 tandem and shall route calls to the appropriate Public Safety Access Point ("PSAP"). In the event the Local Switching element and the E911 tandem are contained within the same U S WEST switch, such trunking shall be provided on an intra-switch basis.
- 10.2.1.11 Where U S WEST provides the following special services, it shall provide to MCI:
- 10.2.1.11.1 essential Service Lines;
 - 10.2.1.11.2 Telephone Service Prioritization ("TSP");
 - 10.2.1.11.3 related services for handicapped;
 - 10.2.1.11.4 where U S WEST provides soft dial tone, it shall do so on a competitively-neutral basis; and
 - 10.2.1.11.5 any other service required by law or regulation.
- 10.2.1.12 U S WEST shall provide Switching Service Point ("SSP") capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch ("STP"s). In the event Local Switching is provided out of a switch without SS7 capability, the tandem shall provide this capability as further described in Section 4 of this Attachment. These capabilities shall adhere to Bellcore specifications TCAP (GR-1432-CORE), ISUP (GR-905-CORE), Call Management (GR-

1429-CORE), Switched Fractional DS-1 (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).

10.2.1.13 U S WEST shall provide interfaces to adjuncts through industry standard and Bellcore interfaces. These adjuncts may include, but are not limited to, Service Node, Service Circuit Node, Voice Mail and Automatic Call Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.

10.2.1.14 Upon MCI's request, U S WEST shall provide performance data regarding a subscriber line, traffic characteristics or other measurable elements to MCI.

10.2.1.15 U S WEST shall offer all technically feasible Local Switching features, and, in providing such features, do so at parity with those provided by U S WEST to itself or any other Person.

10.2.1.15.1 Such feature offerings shall include, but are not limited to:

- Basic and primary rate ISDN;
- Residential features;
- Custom Local Area Signaling Services (CLASS/LASS);
- Custom Calling Features; and
- Centrex (including equivalent administrative capabilities, such as subscriber accessible reconfiguration and detailed message recording).

10.2.1.15.2¹⁰ Advanced Intelligent Network ("AIN") triggers supporting MCI and U S WEST service applications, in U S WEST's SCPs. U S WEST shall offer to MCI all AIN triggers currently available to U S WEST for offering AIN-based services in accordance with applicable technical references:

10.2.1.15.2.1 Off-Hook Immediate;

10.2.1.15.2.2 Off-Hook Delay;

10.2.1.15.2.3 Private EAMF Trunk;

10.2.1.15.2.4 Shared Interoffice Trunk (EAMF, SS7);

10.2.1.15.2.5 Termination Attempt;

10.2.1.15.2.6 3/6/10;

¹⁰ Order, p. 51 at Issue 19.

10.2.1.15.2.7 N11;

10.2.1.15.2.8 Feature Code Dialing;

10.2.1.15.2.9 Custom Dialing Plan(s), including 555 services; and

10.2.1.15.2.10 Automatic Route Selection.

10.2.1.16 U S WEST shall assign each MCI_m subscriber line the class of service designated by MCI_m (e.g., using line class codes or other switch specific provisioning methods), and, at MCI_m's option, shall route Directory Assistance calls from MCI_m subscribers as directed by MCI_m. This includes each of the following call types:

10.2.1.16.1 0+/0- calls;

10.2.1.16.2 911 calls;

10.2.1.16.3 411/DA calls;

10.2.1.16.4 InterLATA calls specific to PIC or regardless of PIC;

10.2.1.16.5 IntraLATA calls specific to PIC or regardless of PIC;

10.2.1.16.6 Toll free calls, prior to database query;

10.2.1.16.7 Call forwarding of any type supported on the switch, to a line or a trunk; and

10.2.1.16.8 Any other customized routing that may be supported by the U S WEST switch.

10.2.1.17 U S WEST shall assign each MCI_m subscriber line the class of service designated by MCI_m (e.g., using line class codes or other switch specific provisioning methods) and shall route Operator Services calls from MCI_m subscribers as directed by MCI_m, at MCI_m's option. For example, U S WEST may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to an MCI_m Operator Services Position System ("OSPS"). Calls from Local Switching must pass the ANI-II digits unchanged.

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

10.2.1.19 Local Switching shall be offered in accordance with the requirements of

the following technical references and their future releases:

- 10.2.1.19.1 GR-1298-CORE, AIN Switching System Generic Requirements;
- 10.2.1.19.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements;
- 10.2.1.19.3 TR-NWT-001284, AIN 0.1 Switching System Generic Requirements; and
- 10.2.1.19.4 SR-NWT-002247, AIN Release 1 Update.

10.2.2 Interface Requirements:

10.2.2.1 U S WEST shall provide the following interfaces to Loops:

- 10.2.2.1.1 Standard Tip/Ring interface, including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);
- 10.2.2.1.2 ¹¹ **Coin phone signaling as part of a public access line (PAL). In the event MCI desires coin phone signaling to be unbundled from the PAL, it may request such unbundling via the BFR process;**
- 10.2.2.1.3 Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
- 10.2.2.1.4 Two-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;
- 10.2.2.1.5 Four-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;
- 10.2.2.1.6 Four-wire DS-1 interface to PBX or subscriber provided equipment (e.g., computers and voice response systems);
- 10.2.2.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
- 10.2.2.1.8 Switched Fractional DS-1 with capabilities to configure Nx64 channels (where "n" = 1 to 24); and
- 10.2.2.1.9 Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303

¹¹ Staff Recommendations, p. 4.

specifications to interconnect Digital Loop Carriers.

10.2.2.2 U S WEST shall provide access to the following, but not limited to:

- 10.2.2.2.1 SS7 Signaling Network or Multi-Frequency trunking, if requested by MCI; and
- 10.2.2.2.2 Interface to MCI Operator Services systems or Operator Services through appropriate trunk interconnections for the system; and
- 10.2.2.2.3 Interface to MCI Directory Assistance Services through the MCI switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other MCI required access to IXCs as requested through appropriate trunk interfaces.

10.3 Customized Routing

10.3.1 Description

Customized routing will enable MCI to direct particular classes of calls to particular outgoing trunks based upon line class codes. MCI may use customized routing to direct its customers' calls to 411, 555-1212, 0+ or 0-, to its own Operator Services platform and Directory Assistance platform.

10.3.2 Limitations

Because there is a limitation in the technical feasibility of offering custom routing beyond the capacity of the 1A ESS switch, custom routing will be offered to CLECs on a first-come, first-served basis.

10.4 Integrated Services Digital Network

10.4.1 Integrated Services Digital Network ("ISDN") is defined in two (2) variations. The first variation is Basic Rate ISDN ("BRI"). BRI consists of two (2) Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN ("PRI"). PRI consists of twenty-three (23) B Channels and one (1) D Channel. Both BRI and PRI B Channels may be used for voice, Circuit Switched Data ("CSD") or Packet Switched Data ("PSD"). The BRI D Channel may be used for call related signaling, non-call related signaling or packet switched data. The PRI D Channel may be used for call related signaling.

10.4.2 Technical Requirements

10.4.2.1 U S WEST shall offer Data Switching providing ISDN that, at a minimum:

10.4.2.2 provides integrated Packet handling capabilities;

10.4.2.3 allows for full 2B+D Channel functionality for BRI; and

10.4.2.4 allows for full 23B+D Channel functionality for PRI.

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

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

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

10.4.2.8 The PRI D Channel shall allow for call associated signaling.

10.4.3 Interface Requirements

10.4.3.1 U S WEST shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 Specifications to Interconnect Digital Loop Carriers.

10.4.3.2 U S WEST shall offer PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore requirements.

10.4.3.3 U S WEST shall offer PSD trunk interfaces operating at 56 Kbps.

11. Network Interface Device

11.1 Definition:

11.1.1 The Network Interface Device ("NID") is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit. One of the functions of the NID is to establish the network demarcation point between a carrier and its subscriber. The NID features two (2) independent chambers or divisions which separate the service provider's network from the subscriber's inside wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider and the subscriber each make their connections.

11.1.2 MCIIm may connect its NID to U S WEST's NID.¹²

11.1.3 U S WEST will allow MCIIm to locate dropwires, other than U S WEST's drop wires, inside an existing U S WEST combination NID used in the provisioning of telephone service for single tenant end users subject to the following conditions:

¹² Order, p. 48.

11.1.3.1 Sufficient space exists inside the combination NID to allow proper installation of equipment in accordance with the NID manufacturers specifications and per the National Electric Code; and

11.1.3.2 In order to maintain maintenance integrity for the NID, MCI will install its own overvoltage protection and customer bridging equipment, terminate the dropwires to that equipment, and assume all operational responsibilities and liabilities for that equipment.

In the event sufficient space is not available in the existing U S WEST NID to accommodate additional drops, MCI will be allowed to install an additional NID, at its own expense, and the MCI NID can be connected to the existing U S WEST NID.

If the existing NID is not the new generation modular type, MCI may install a new NID. U S WEST will be allowed to move its drop wire to the new NID and remove the old NID;

Within ninety (90) days of the Effective Date of this Agreement, the Parties agree to jointly develop a satisfactory process to address the issues with access to single and multi-party NIDs.

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

11.1.5 If MCI purchases an unbundled Loop, MCI may provide its own NID or have U S WEST provide the NID.

11.2 Technical Requirements

11.2.1 The NID shall provide a clean, accessible point of connection for the inside wiring and for the Distribution Media and/or cross connect to MCI's NID and shall maintain a connection to ground meeting the requirements as set forth below.

11.2.2 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 MCI's NID.

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

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

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

11.2.6 U S WEST shall offer the NID together with, and separately from, the Distribution Media component of Loop Distribution.

11.3 Interface Requirements

11.3.1 The NID shall be the interface to subscribers' premises wiring for all loops.

11.3.2 The NID shall be at least equal to all the industry standards for NIDs set forth in the following technical references:

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

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

11.3.2.3 Bellcore Technical Requirement TR-NWT-00239 "Indoor Telephone Network Interfaces";

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

11.3.2.5 Bellcore Technical Requirement TR-NWT-0001 33 "Generic Requirements for Network Inside Wiring."

12. Operator Systems

See Attachment 5.

13. E911

See Attachment 5.

14. Directory Assistance Data

See Attachment 5.

15. Signaling Link Transport

15.1 Definition:

Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between MCI-m-designated Signaling Points of Interconnection ("SPOI") that provides appropriate physical diversity and a cross connect at a U S WEST STP site.

15.2 Technical Requirements

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

- 15.2.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:
 - 15.2.2.1 as an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch ("STP"s) pair; and
 - 15.2.1.2 as a "D-link" which is a connection between two (2) STP pairs in different company networks (e.g., between two (2) STP pairs for two (2) (CLECs)).
- 15.2.3 Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:
 - 15.2.3.1 An A-link layer shall consist of two (2) links.
 - 15.2.3.2 A D-link layer shall consist of four (4) links.
- 15.2.4 A signaling link layer shall satisfy a performance objective such that:
 - 15.2.4.1 there shall be no more than two (2) minutes down time per year for an A-link layer transport only; and
 - 15.2.4.2 there shall be negligible (less than two (2) seconds) down time per year for a D-link layer transport only.
- 15.2.5 Where available, a signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
 - 15.2.5.1 no single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and
 - 15.2.5.2 no two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).
- 15.2.6 For requested link layers, U S WEST will provide MCIm with the level of diversity available.

15.3 Interface Requirements

- 15.3.1 There shall be a DS-1 (1.544 Mbps) interface at the MCIm-designated SPOIs. Each 56 Kbps transmission path shall appear as a DS-0 channel within the DS-1 interface.

16. Signaling Transfer Points (STPs)¹³

16.1 Definition:

¹³ Order, p. 49 at Issue 24.

Signaling Transfer Points ("STP"s) provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer points.

16.2 Technical Requirements

16.2.1 STPs shall provide signaling access to all other Network Elements connected to the U S WEST SS7 network. These include:

16.2.1.1 U S WEST Local Switching or Tandem Switching;

16.2.1.2 U S WEST Service Control Points/DataBases connected to or resident on service control points;

16.2.1.3 Third-party local or tandem switching systems connected to the U S WEST signaling network; and

16.2.1.4 Third-party-provided STPs connected to the U S WEST signaling network.

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

16.2.3 If a U S WEST tandem switch routes traffic, based on dialed or translated digits, on SS7 trunks between an MCI local switch and third party local switch, U S WEST's SS7 network shall convey the TCAP messages necessary to provide Call Management features (automatic callback, automatic recall, and screening list editing) between the MCI 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 U S WEST's STPs.

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

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

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

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

- 16.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation ("GTT") and SCCP Management procedures, as specified in ANSI T1.112.4.**
- 16.2.6 In cases where the destination signaling point is either a U S WEST local or tandem switching system or data base, or is an MCIm or third party local or tandem switching system directly connected to U S WEST's SS7 network, U S WEST STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the U S WEST SS7 network, and shall not perform SCCP Subsystem Management of the destination.**
- 16.2.7 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on U S WEST STPs.**
- 16.2.8 STPs shall provide all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 16.5.6 below. This includes:
 - 16.2.8.1 MTP Routing Verification Test ("MRVT"); and**
 - 16.2.8.2 SCCP Routing Verification Test ("SRVT").****
- 16.2.9 In cases where the destination signaling point is either a U S WEST local or tandem switching system or database, or is an MCIm or third party local or tandem switching system directly connected to the U S WEST SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the U S WEST SS7 network. This requirement shall be superseded by the specifications for inter-network MRVT and SRVT if and when these become approved ANSI standards and available capabilities of U S WEST STPs.**
- 16.2.10 STPs shall be equal to or better than the following performance requirements:
 - 16.2.10.1 MTP Performance, as specified in ANSI T1.111.6; and**
 - 16.2.10.2 SCCP Performance, as specified in ANSI T1.112.5.****

16.3 Interface Requirements

- 16.3.1 U S WEST shall provide the following STPs options to connect MCIm or MCIm-designated local switching systems or STPs to the U S WEST SS7 network:**

16.3.1.1 An A-link interface from MCI local switching systems.

16.3.2 Each type of interface shall be provided by one (1) or more sets (layers) of signaling links, as follows:

16.3.2.1 An A-link layer shall consist of two (2) links.

16.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, such as a DSX-1, in the central office where the U S WEST STPs are located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface.

U S WEST shall offer higher rate DS-1 signaling for interconnecting MCI local switching systems or STPs with U S WEST STPs as soon as these become approved ANSI standards and available capabilities in U S WEST's network.

16.3.4 U S WEST shall provide MTP and SCCP protocol interfaces that shall conform to all relevant sections in the following specifications:

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

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

16.4 Message Screening

16.4.1 U S WEST shall set message screening parameters in order to accept messages from MCI local or tandem switching systems destined to any signaling point in the U S WEST SS7 network with which the MCI switching system has a signaling relation.

16.4.2 U S WEST shall set message screening parameters in order to accept messages from MCI local or tandem switching systems destined to any signaling point or network interconnected to the U S WEST SS7 network with which the MCI switching system has a signaling relation.

16.4.3 U S WEST shall set message screening parameters in order to accept messages destined to an MCI local or tandem switching system from any signaling point or network interconnected to the U S WEST SS7 network with which the MCI switching system has a signaling relation.

16.4.4 U S WEST shall set message screening parameters in order to accept and

send messages destined to an MCI_m SCP from any signaling point or network interconnected to the U S WEST SS7 network with which the MCI_m SCP has a signaling relation.

16.5 STP Requirements

- 16.5.1 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, STPs shall be equal to or better than all of the requirements for STPs set forth in the following technical references:
- 16.5.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);
- 16.5.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;
- 16.5.4 ANSI T1.112-1992 American National, Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);
- 16.5.5 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;
- 16.5.6 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);
- 16.5.7 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);
- 16.5.8 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and
- 16.5.9 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

17. Service Control Points/Databases

17.1 Definition:

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

Management System and AIN.

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

17.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this Section address storage of information, access to information (e.g., signaling protocols and response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to MCI in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Sections 17.3 through 17.7 of this Attachment:

- 17.2.1 U S WEST shall provide interconnection to SCPs through the U S WEST designated STPs using SS7 network and protocols, as specified in Section 16 of this Attachment, with TCAP as the application layer protocol.
- 17.2.2 Regional SCP pairs shall be available pursuant to applicable technical reference documents.
- 17.2.3 U S WEST shall provide to MCI 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).
- 17.2.4 The operational interface provided by U S WEST shall complete Database transactions (i.e., add, modify, delete) for MCI subscriber records stored in U S WEST Databases at parity with which U S WEST provisions its own subscriber records.
- 17.2.5 U S WEST shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of U S WEST network affecting events, testing, dispatch schedule and measurement and exception reports).
- 17.2.6 When and where available, U S WEST shall provide billing and recording information to track Database usage consistent with Connectivity Billing and recording requirements as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 17.2.7 U S WEST shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.
- 17.2.8 U S WEST shall provide SCPs/Databases in accordance with the logical security

requirements specified in this Agreement.

17.3 Number Portability Database

17.3.1 Definition:

The Number Portability ("NP") Database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. NP Database functionality shall also include Global Title Translations ("GTT") for calls involving ported numbers even if U S WEST provides GTT functionality in another Network Element. U S WEST shall provide the NP Database in accordance with industry standards which shall supersede the following as needed.

17.3.2 Requirements

17.3.2.1 U S WEST shall make U S WEST NP database available for MCI switches to query to obtain the appropriate routing number on calls to ported numbers or the industry specified indication that the number is not ported for non-portable numbers in NPA-NXXs that are opened to portability. The specified indication will also be provided when the NPA-NXX is not open to portability.

17.3.2.2 Query responses shall provide such additional information (e.g., Service Provider identification) as may be specified in the NP implementation in the relevant regulatory jurisdiction.

17.3.2.3 U S WEST shall complete CLASS or LIDB queries routed to the U S WEST network by MCI switches and return the appropriate response to the querying source.

17.3.2.4 The NP Database shall provide such other functionality as has been specified in the regulatory jurisdiction in which portability has been implemented.

17.3.2.5 Unavailability of the NP Database query and GTT applications shall not exceed four (4) minutes per year.

17.3.2.6 The U S WEST NP Database shall respond to a round trip query within 500 milliseconds or as amended by industry standards.

17.3.3 Interface Requirements

U S WEST shall interconnect the signaling interface between the MCI or other local switch and the NP Database using the TCAP protocol as specified in the technical references in this Agreement, together with the signaling network interface as specified in the technical references in this Agreement, and such further requirements (e.g., AIN or IN protocols) as may be specified by regulatory or other bodies responsible for implementation of number portability.

17.4 Line Information Database (LIDB)

This Section 17.4 defines and sets forth additional requirements for the Line Information Database.

17.4.1 Definition:

The Line Information Database ("LIDB") is a transaction-oriented database accessible through Common Channel Signaling ("CCS") networks. It contains records associated with subscriber Line Numbers and Special Billing Numbers (in accordance with the requirements in the technical reference in Section 17.6.5 below). LIDB accepts queries from other Network Elements, or MCI'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 provide the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the U S WEST 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.

17.4.2 Technical Requirements

17.4.2.1 U S WEST shall enable MCI to store in U S WEST's LIDB any line number or special billing number. MCI will provide U S WEST a non-binding LIDB forecast. Prior to the availability of permanent NP, U S WEST shall enable MCI to store in U S WEST's LIDB any subscriber Line Number or Special Billing Number record for MCI resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5 below, whether ported or not, for which the NPA-NXX or NXX-0/1XX Group is supported by that LIDB.

17.4.2.2 Prior to the availability of permanent NP, U S WEST shall enable MCI to store in U S WEST's LIDB any subscriber Line Number or Special Billing Number record for MCI resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5 below, whether ported or not, and NPA-NXX and NXX-0/1XX Group Records, belonging to an NPA-NXX or NXX-0/1 XX owned by MCI.

17.4.2.3 Subsequent to the availability of permanent NP, U S WEST shall enable MCI to store in U S WEST's LIDB any subscriber Line Number or Special Billing Number record for MCI resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5 below, whether ported or not, regardless of the number's NPA-NXX or NXX-0/1XX.

17.4.2.4 U S WEST shall perform the following LIDB functions (i.e., processing of

the following query types as defined in the technical reference in Section 17.6.5 below) for MCI's subscriber records in LIDB:

- 17.4.2.4.1 Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls);
 - 17.4.2.4.2 Calling Card Validation; and
 - 17.4.2.4.3 Originating Line Number Screening (OLNS), when available.
- 17.4.2.5 U S WEST shall process MCI's subscriber records in LIDB at least at parity with U S WEST subscriber records, with respect to other LIDB functions (as defined in the technical references in Section 17.6 below). U S WEST shall indicate to MCI what additional functions, if any, are performed by LIDB in its network. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall develop an interim procedure to process MCI subscriber records.
- 17.4.2.6 Within two (2) weeks after a request by MCI, U S WEST shall provide MCI with a list of the subscriber data items which MCI 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.
- 17.4.2.7 U S WEST shall provide LIDB performance in accordance with section 17.6.5 below.
- 17.4.2.8 U S WEST shall provide MCI with the capability to provision (e.g., to add, update, and delete) NPA-NXX and NXX-0/1XX Group Records, and Line Number and Special Billing Number Records, associated with MCI subscribers, directly into U S WEST's LIDB provisioning process. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.9 Unless directed otherwise by MCI, in the event end user subscribers change their local service provider to MCI, U S WEST shall maintain subscriber data (for line numbers, card numbers, and for any other types of data maintained in LIDB) so that such subscribers shall not experience any interruption of service due to the lack of such maintenance of subscriber data.
- 17.4.2.10 All additions, updates and deletions of MCI data to the LIDB shall be made solely at the direction of MCI.
- 17.4.2.11 U S WEST shall provide priority updates to LIDB for MCI data upon

MCIm's request (e.g., to support fraud protection).

17.4.2.12 When available, U S WEST shall provide MCIm the capability to directly obtain, through an electronic interface, reports of all MCIm data in LIDB. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.

17.4.2.13 [Intentionally left blank for numbering consistency]

17.4.2.14 U S WEST shall perform backup and recovery of all of MCIm's data in LIDB as frequently as U S WEST performs backup and recovery for itself and any other Person, including sending to LIDB all changes made since the date of the most recent backup copy. Backup will be performed weekly. When needed, recovery will take place within twenty-four (24) hours.

17.4.2.15 U S WEST shall provide to MCIm access to LIDB measurements and reports at least at parity with the capability U S WEST has for its own subscriber records and that U S WEST provides to any other party. Such access shall be electronic. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.

17.4.2.16 U S WEST shall provide MCIm with LIDB reports of data which are missing or contain errors, as well as any misroute errors, within the same time period as U S WEST provides such reports to itself. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish a process to meet the requirements of this Section.

17.4.2.17 U S WEST shall prevent any access to or use of MCIm data in LIDB by U S WEST personnel or by any other party not authorized in writing by MCIm.

17.4.2.18 If and when technically feasible, U S WEST shall provide MCIm performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners (in accordance with the technical reference in Section 17.6.5 below) for subscriber data that is part of an NPA-NXX or NXX-0/1XX wholly or partially owned by MCIm at least at parity with U S WEST subscriber data. U S WEST shall obtain from MCIm the screening information associated with LIDB Data Screening of MCIm data in accordance with this requirement.

17.4.2.18.1 The Parties agree to investigate technical feasibility of variable LIDB database screening to accomplish Section 17.4.2.18 above.

17.4.2.19 U S WEST shall accept queries to LIDB associated with MCIm subscriber records, and shall return responses in accordance with the

requirements of this Section 17.

17.4.3 Interface Requirements

U S WEST shall offer LIDB in accordance with the requirements of this Section 17.4.3.

17.4.3.1 The interface to LIDB shall be in accordance with the technical reference in Section 17.6.3 below.

17.4.3.2 The CCS interface to LIDB shall be the standard interface described in Section 17.6.3 below.

17.4.3.3 The LIDB Database interpretation of the ANSI-TCAP messages shall comply with the technical reference in Section 17.6.4 below. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

17.5 Toll Free Number Database

The Toll Free Number Database is an 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 17.5 supplements the requirements of Section 17.2 and 17.7 of this Attachment. U S WEST shall provide the Toll Free Number Database in accordance with the following subsections.:

17.5.1 Technical Requirements

17.5.1.1 U S WEST shall make the U S WEST Toll Free Number Database available, through its STPs, for MCI to query from MCI's designated switch including U S WEST unbundled Local Switching.

17.5.1.2 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 U S WEST switch.

17.5.2 Interface Requirements

The signaling interface between the MCI or other local switch and the Toll Free Number Database shall use the TCAP protocol as specified in the technical reference in Section 17.6.1 below, together with the signaling network interface as specified in the technical reference in Sections 17.6.2 and 17.6.6 below.

17.6 SCPs/Databases shall be at least equal to all of the requirements for SCPs/Databases set forth in the following technical references:

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

17.6.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting

Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP) (Bellcore, March 1994);

- 17.6.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);
- 17.6.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);
- 17.6.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995); and
- 17.6.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995).

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

17.7.1 U S WEST shall provide mediated access to all U S WEST service applications, current or future (if technically feasible), resident in U S WEST's SCP through U S WEST's STPs. Such access may be from MCI's switch or U S WEST's unbundled local switch.

17.7.1.1 If the unbundling of AIN triggers becomes technically feasible without unreasonable harm to the network, U S WEST will be required to provide that element to MCI at MCI's expense.

17.7.2 SCE/SMS AIN Access shall provide MCI the ability to create service applications in the U S WEST SCE and deploy those applications via the U S WEST SMS to the U S WEST SCP. This interconnection arrangement shall provide MCI access to the U S WEST development environment and administrative system in a manner at least at parity with U S WEST's ability to deliver its own AIN-based services. SCE AIN Access is the development of service applications within the U S WEST Service Creation Environment capability. SMS AIN Access is the provisioning of service applications via the U S WEST Service Management System capability. AIN trigger provisioning will be accomplished through the U S WEST unbundled Local Switching.

17.7.3 Services Available. U S WEST shall make SCE hardware, software, testing and technical support (e.g., technical contacts, system administrator) resources available to MCI. Scheduling of SCE resources shall allow MCI at least equal priority to U S WEST.

17.7.4 Multi-user Access. The U S WEST SCE/SMS shall allow for multi-user access with proper source code management and other logical security functions.

¹⁴ Order, p. 51 at Issue 19.

- 17.7.5 Partitioning.** When available, the U S WEST SCP shall partition and protect MCIm service logic and data from unauthorized SMS capability and SCE capability access, execution or other types of compromise.
- 17.7.6 Training and Documentation.** U S WEST shall provide training and documentation for MCIm development staff only in cases in which such training or documentation is not reasonably available from another source. If training or documentation is required in accordance with this Section, it will be provided in a manner at least at parity with that provided by U S WEST to its development staff. Training will be conducted at a mutually agreed upon location.
- 17.7.7 Access Environment.** When MCIm selects SCE/SMS AIN Access, U S WEST shall provide for a secure, controlled access environment on-site. When available, MCIm may request mutually agreed upon remote data connections (e.g., dial up, LAN, WAN).
- 17.7.8 Data Exchange.** When MCIm selects SMS AIN Access, U S WEST shall allow MCIm to download data forms and/or tables to the U S WEST SCP, via the U S WEST SMS capability, in the same fashion as U S WEST downloads such forms and/or tables for itself.
- 17.7.9 Certification Testing.** Certification testing is typically a two step process that includes an off-line unit test followed by an on-line controlled introduction testing into one of each of the U S WEST switch types capable of supporting the service. Services created by MCIm will require certification testing by U S WEST before the services can be provisioned in the network. The scheduling of U S WEST certification testing resources for new MCIm services will be jointly coordinated and prioritized between U S WEST and MCIm. MCIm testing requirements will be given equal priority with both U S WEST and other provider's requirements. In most circumstances, such testing will be completed within sixty (60) days from the date the application is submitted by MCIm to U S WEST for certification. In circumstances involving complex applications requiring additional time for testing, U S WEST may request additional time and MCIm will not unreasonably withhold approval of such request. The certification testing procedures described in this Section may be augmented as mutually agreed to by the Parties.
- 17.7.10 Access Standard.** SCPs/Databases shall offer SCE/SMS AIN Access in accordance with the requirements of GR-1280-CORE, AIN Service Control Point (SCP) Generic Requirements.
- 17.8 [Intentionally left blank for numbering consistency]
- 17.9 MCIm will provide to U S WEST timely non-binding forecasts of SS7 call transactions, link requirements, database query volumes, etc., as needed for sizing the individual network capabilities that MCIm will utilize under the terms of this Agreement.

17.10 SS7 Rate Elements:

17.10.1 Entrance Facility - The entrance facility connects MCI's signaling point of interface with the U S WEST Serving Wire Center ("SWC").

17.10.2 Direct Link Transport ("DLT") - The DLT connects the MCI SWC to the U S WEST STP.

17.10.3 STP Port - The STP port provides the switching function at the STP. One (1) STP port is required for each DLT Link. The port provides access to the SCP.

17.11 Advanced Intelligent Network ("AIN") triggers will be provided only to access U S WEST databases. Access to AIN functions is available only through the STP. If MCI requires other access, it will submit a Bona Fide Request.

18. Additional Requirements

This Section 18 of Attachment 3 sets forth the additional requirements for unbundled Network Elements which U S WEST agrees to offer to MCI under this Agreement.

18.1 Cooperative Testing

18.1.1 Definition:

Cooperative Testing means that U S WEST shall cooperate with MCI upon request or as needed to (a) ensure that the Network Elements and Ancillary Functions and additional requirements being provided to MCI by U S WEST are in compliance with the requirements of this Agreement, (b) test the overall functionality of various Network Elements and Ancillary Functions provided by U S WEST to MCI in combination with each other or in combination with other equipment and facilities provided by MCI or third parties, and (c) 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 MCI.

18.1.2 Requirements

Within forty-five (45) days of the Effective Date of this Agreement, MCI and U S WEST will agree upon a process to resolve technical issues relating to Interconnection of MCI's network to U S WEST's network and Network Elements and Ancillary Functions. The agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each Party's management. If MCI and U S WEST do not reach agreement on such a process within the 45-day time period, any issues that have not been resolved by the Parties with respect to such process shall be submitted to the dispute resolution procedures set forth in Part A of this Agreement unless both Parties agree to extend the time to reach agreement on such issues.

18.1.2.1 U S WEST shall provide MCI access for testing at any interface between a U S WEST Network Element or Combinations and

MCIm equipment or facilities. Such test access shall be sufficient to ensure that the applicable requirements can be tested by MCIm. This access shall be available seven (7) days per week, twenty-four (24) hours per day.

- 18.1.2.2 MCIm may test any interfaces, Network Elements or Ancillary Functions and additional requirements provided by U S WEST to MCIm pursuant to this Agreement.
- 18.1.2.3 U S WEST shall provide engineering data as requested by MCIm for the loop components as set forth in this Attachment which MCIm may desire to test. Such data shall include equipment engineering and cable specifications, signaling and transmission path data.
- 18.1.2.4 The Parties shall establish a process to provide engineering/office support information on unbundled Network Elements (e.g., central office layout and design records and drawings, system engineering and other applicable documentation) pertaining to a Network Element or Ancillary Function or the underlying equipment that is then providing a Network Element or Ancillary Function to MCIm.
- 18.1.2.5 Upon request from MCIm, U S WEST shall provide to MCIm all applicable test results from U S WEST testing activities on a Network Element or Ancillary Function or additional requirement or the underlying equipment providing a Network Element or Ancillary Function or additional requirements. MCIm may review such test results and may notify U S WEST of any detected deficiencies.
- 18.1.2.6 U S WEST shall temporarily provision MCIm designated Local Switching features for testing. Within sixty (60) days of the Effective Date of this Agreement, MCIm and U S WEST shall mutually agree on the procedures to be established between U S WEST and MCIm to expedite such provisioning processes for feature testing.
- 18.1.2.7 Upon MCIm's request, U S WEST shall make available technical support to meet with MCIm representatives to provide required support for Cooperative Testing. U S WEST shall define the process to gain access to such technical support.
- 18.1.2.8 Dedicated Transport and Loop Feeder may experience alarm conditions due to in-progress tests. U S WEST shall notify MCIm upon removal of such facilities from service.
- 18.1.2.9 U S WEST shall exercise its best efforts to notify MCIm prior to conducting tests or maintenance procedures on Network Elements or Ancillary Functions or on the underlying equipment that is then

providing a Network Element or Ancillary Function, that will likely cause a service interruption or degradation of service.

- 18.1.2.10 U S WEST shall provide a single point of contact to MCI_m 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.
- 18.1.2.11 U S WEST shall make available to MCI_m access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.
- 18.1.2.12 MCI_m and U S WEST shall complete Cooperative Testing in accordance with the procedures set forth in Attachment 5.
- 18.1.2.13 U S WEST shall participate in Cooperative Testing requested by MCI_m whenever it is deemed necessary by MCI_m to insure service performance, reliability and subscriber serviceability.
- 18.1.2.14 MCI_m may accept or reject the Network Element ordered by MCI_m if, upon completion of cooperative acceptance testing, the tested Network Element does not meet the requirements stated herein.

18.2 Performance

18.2.1 Scope

This section addresses performance requirements for Network Elements and Ancillary Functions to provide local service.

- 18.2.1.1 U S WEST shall work cooperatively with MCI_m to determine appropriate performance allocations across Network Elements.
- 18.2.2 MCI_m may request real-time, remote data access to performance monitoring and alarm data on events affecting (or potentially affecting) MCI_m's traffic. MCI_m shall specify the performance to be monitored and alarm data to be collected. To the extent the above is not available, MCI_m will use the Bona Fide Request process to gain such capability.
- 18.2.3 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, U S WEST shall provide performance at least equal to the requirements set forth in the following technical references:

18.2.3.1 Bell Communications Research, Inc. Documents

18.2.3.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR). This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve subscribers'

lines. Some modules of the LSSGR are also referenced separately in this document.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

18.2.3.2 ANSI Standards

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

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

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

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

18.2.3.3 TIA/EIA Standards

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

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

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

18.2.3.4 IEEE Standards

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

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

18.2.4 Services and Capabilities

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

18.2.4.1.1 all types of voice services;

18.2.4.1.2 all types of voice-band data modem connections up to and including 28.8 Kbps V-34;

18.2.4.1.3 all types of facsimile transmissions up to and including 14.4 Kbps group 3;

18.2.4.1.4 all CLASS/LASS features; and

18.2.4.1.5 all Operator Systems.

18.2.4.2 The following capabilities shall be provided as applicable:

18.2.4.2.1 ISDN BRI

18.2.4.2.2 ISDN PRI

18.2.4.2.3 Switched Digital Data

18.2.4.2.4 Non-Switched Digital Data

18.2.4.2.5 Any types of video applications a subscriber may order

18.2.4.2.6 Any Coin Services a subscriber may order

18.2.4.2.7 Frame Relay and ATM

18.2.4.2.8 Private Line Services

18.2.5 Specific Performance Requirements for Network Elements and Ancillary Functions

18.2.5.1 The following Sections set forth performance parameters for Network Elements and Ancillary Functions. U S WEST shall provide performance equal to or better than all of the applicable requirements set forth in this Section. Unless otherwise noted requirements and objectives are given in terms of specific limits.

18.2.5.2 Within ninety (90) days of the Effective Date of this Agreement, U S WEST will analyze the following performance criteria with respect to the standards identified herein and document the U S WEST deviations consistent with the processes outlined in Sections 1.3.1 and 1.3.2 in Part A of this Agreement.

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

conversion.

18.2.5.4 Loop Combination Architecture Constraints

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

18.2.5.4.1.1 No more than one (1) pair of A-D conversion.

18.2.5.4.1.2 No more than one (1), 2-to-4-wire hybrid.

18.2.5.4.1.3 No voice compression.

18.2.5.4.1.4 No echo canceled or suppressers.

18.2.5.4.1.5 One (1) digital loss pad per PBX.

18.2.5.4.1.6 No digital gain.

18.2.5.4.1.7 No additional equipment that might significantly increase intermodulation distortion.

18.2.5.5 Transmission Impairments

18.2.5.5.1 Analog Impairments

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

18.2.5.5.1.2 Loss

18.2.5.5.1.2.1 Electrical loss is measured using a 1004 Hz test tone at zero (0.0) db at one (1) milliwatt into a 900 ohm termination.

18.2.5.5.1.2.2 [Intentionally left blank for numbering consistency]

18.2.5.5.1.3 Idle Channel Circuit Noise

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

18.2.5.5.1.4 Talker Echo

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

18.2.5.5.1.5 Listener Echo

18.2.5.5.1.5.1 Listener echo is a double reflection of a transmitted signal at two (2) different impedance mismatches in the end-to-end connection. While in extreme cases it can degrade voice transmission performance, listener echo is primarily an issue for voiceband data.

18.2.5.5.1.6 Propagation and Processing Delay

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

18.2.5.5.1.6.2 U S WEST shall cooperate with MCI to limit total service propagation and processing delay to levels at parity with those within the U S WEST local network.

18.2.5.5.1.7 Signal-to-Noise Ratio

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

18.2.5.5.1.8 C-Notched Noise

18.2.5.5.1.9 Attenuation Distortion

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

18.2.5.5.1.10 Envelope Delay Distortion

18.2.5.5.1.10.1 Envelope Delay Distortion (EDD) measures the

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

18.2.5.5.1.11 Phase Jitter

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

18.2.5.5.1.12 Amplitude Jitter

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

18.2.5.5.1.13 Intermodulation Distortion

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

18.2.5.5.1.14 Impulse Noise

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

18.2.5.5.1.15 Phase Hits

18.2.5.5.1.15.1 Phase hits are a sudden change in the phase of a signal lasting at least four (4) milliseconds. Phase hits are

measured using a threshold that indicates how much the phase of the signal has changed with respect to its nominal phase. Phase hits are caused by protection switching and slips or other synchronization errors. Phase hits can impair voiceband data performance.

18.2.5.5.1.16 Gain Hits

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

18.2.5.5.1.17 Dropouts

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

18.2.5.5.1.18 Frequency Shift

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

18.2.5.5.1.19 Crosstalk

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

18.2.5.5.1.20 Clipping

18.2.5.5.1.20.1 Clipping occurs when part of a transmitted signal is dropped and does not reach the receiving portion on a connection. It can be caused by Digital Speech Interpolation ("DSI") equipment used in Digital Circuit Multiplication Systems ("DCMS") which increase the amount of traffic that transmission

facilities carry, and by echo cancelers or echo suppressers.

18.2.5.5.1.21 Digital Impairments

18.2.5.5.1.21.1 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 data performance.

18.2.5.5.1.22 Signal Correlated Distortion

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

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

18.2.5.5.1.23 Slips

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

18.2.5.5.1.24 Digital Timing Jitter and Wander

18.2.5.5.1.24.1 Digital timing jitter is the unwanted phase modulation of digital signals at rates above 10 Hz. Wander is the unwanted phase modulation of digital signals at rates below 10 Hz. Digital timing jitter is caused by imperfections in the timing recovery process of regenerators and the stuffing synchronization process used by multiplexer/demultiplexers. Wander is caused by slowly varying changes in digital signal phase due to clock frequency offset and drift, changes in propagation delay of terrestrial facilities due to temperature changes and changes in the distance of satellites from the earth. These events have a major impact on data performance.

18.2.5.5.1.25 DS-1 Errored Seconds

18.2.5.5.1.25.1 An Errored Second (ES) on a DS-1 facility is any second during which at least one (1) bit is in error. The impact of an ES on performance depends on the number of errors that occur

during a second. Typically, voice performance is not significantly impacted by ES but it can cause errors in data transmissions.

18.2.5.5.1.26 DS-1 Severely Errored Seconds

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

18.2.5.5.1.27 Short Failure Events

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

18.2.5.6 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, once begun, will be successfully completed.

18.2.5.6.1 Blocked Calls

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

18.2.5.6.2 Downtime

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

18.2.5.6.3 Dial Tone Delay

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

18.2.5.6.4 Dial Tone Removal

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

18.2.5.6.5 Post Dial Delay

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

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

18.2.5.6.5.2.1 PDD 1 - A - Intra LSO

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

18.2.5.6.5.2.2 PDD1 - B - LSO to Another Local LSO

18.2.5.6.5.2.3 PDD1 - C - MCI/m LSO to Other LSO

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

18.2.5.6.5.2.3.1.1 Network Inter-Connect, CCS7 between MCI/m and the LEC.

18.2.5.6.5.2.3.1.2 Inband Multifrequency (MF) signaling protocols without a U S WEST egress tandem in the connection.

18.2.5.6.5.2.3.1.3 Inband MF signaling protocols with a U S WEST egress tandem in the connection.

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

18.2.5.6.5.2.4 Impact of Number Portability (NP)

18.2.5.6.5.2.5 Custom Local Area Subscriber Services (CLASS)

18.2.5.6.5.2.6 Partial Dial Timing

18.2.5.6.5.2.6.1 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.

18.2.5.7 Local Switching

18.2.5.8 Operator Systems

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

18.2.5.9 Common Transport

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

18.2.5.10 Dedicated Transport

Specific requirements for this Network Element are in the Dedicated Transport Section of the Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between MCI_m and U S WEST consistent with sound engineering principles.

18.2.5.11 Signaling Transfer Points

Specific requirements for this Network Element are in the Signaling Transfer Points Section of the Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements."

Allocation of impairments shall be negotiated between MCI and U S WEST.

18.2.5.12 Signaling Link Transport

Specific requirements for this Network Element are in the Signaling Link Transport Section of the Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between MCI and U S WEST consistent with sound engineering principles.

18.2.5.13 SCPs/Databases

The performance requirements for Databases (NP, LIDB, E911, etc.) vary depending on the Database and the applications it supports. Database-specific performance requirements are included in the Sections of this Attachment addressing individual Network Elements and in applicable Bellcore documents. In all cases, the query response time, availability, accuracy, updating capabilities, and other performance parameters shall at least be at parity with those services as provided by U S WEST to itself.

18.2.5.14 Tandem Switching

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

18.2.6 Test and Verification

18.2.6.1 U S WEST shall provide unbundled Network Elements to MCI in such a way as to not unreasonably interfere with MCI's ability to confirm acceptable performance of the Network Elements provided by U S WEST to MCI through the use of MCI test equipment located in its collocated space.

18.2.6.2 At MCI's request through the Bona Fide Request process, if not generally available, U S WEST will provide access to the Network Element sufficient for MCI to test the performance of that Network Element to MCI's satisfaction.

18.2.6.3 At MCI's request, U S WEST will perform tests to confirm acceptable performance and provide MCI with documentation of test procedures and results in conformance with U S WEST's internal practices. Additional test procedures may be requested by MCI through the Bona Fide Request process if not generally available.

18.3 Protection, Restoration, and Disaster Recovery

18.3.1 Scope:

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

18.4 Synchronization

18.4.1 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 traceable source so that transmission from these network points have the same average line rate.

18.4.2 Technical Requirements

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

18.4.2.1 The synchronization of clocks within digital networks is divided into two parts: intra-building and inter-building. Within a building, a single clock is designated as the Building Integrated Timing Supply ("BITS"), which provides all of the DS-1 and DS-0 synchronization references required by other clocks in such building. This is referred to as intra-building synchronization. The BITS receives synchronization references from remotely located BITS such as a primary reference source. Synchronization of BITS between buildings is referred to as inter-building synchronization.

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

18.4.2.2.1 Intra-Building

Within a building, there may be different kinds of equipment that require synchronization at the DS-1 and DS-0 rates.

Synchronization at the DS-1 rate is accomplished by the frequency synchronizing presence of buffer stores at various DS-1 transmission interfaces. Synchronization at the DS-0 rate is accomplished by using a composite clock signal that phase synchronizes the clocks. Equipment requiring DS-0 synchronization frequently does not have adequate buffer storage to accommodate the phase variations among different equipment. Control of phase variations to an acceptable level is accomplished by externally timing all interconnecting DS-0 circuits to a single clock source and by limiting the interconnection of DS-0 equipment to less than 1,500 cable feet. Therefore, a BITS shall provide DS-1 and composite clock signals when the appropriate composite signal is a 64-kHz 5/8th duty cycle, return to zero with a bipolar violation every eighth pulse (B8RZ).

18.4.2.2.2 Inter-Building

U S WEST shall provide inter-building synchronization at the DS-1 rate, and the BITS shall accept the primary and/or secondary synchronization links from BITS in other buildings where necessary. From hierarchical considerations, the BITS shall be the highest stratum clock within the building and U S WEST shall provide operations capabilities. When available such capability includes, but is not limited to, synchronization reference provisioning, synchronization reference status inquiries, timing mode status inquiries, and alarm conditions.

18.4.3 Synchronization Distribution Requirements

18.4.3.1 Central office BITS shall contain redundant clocks meeting or exceeding the requirements for a stratum 3 clock as specified in ANSI T1.101-1994 and ANSI T1.105.09 and Bellcore GR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.

18.4.3.2 Central office BITS shall be powered by primary and backup power sources.

18.4.3.3 If both reference inputs to the BITS are interrupted or in a degraded mode (meaning off frequency greater than twice the minimum accuracy of the BITS, loss of frame, excessive bit errors, or in Alarm Indication Signal), then the stratum clock in the BITS shall provide the necessary bridge in timing to allow the network to operate without a frame repetition or deletion (slip free) with better performance than specified in these technical references specified in Section 18.4.3.1 above.

18.4.3.4 DS-1s multiplexed into a SONET synchronous payload envelope within an STS-n (where "n" is defined in ANSI T1.105-1995) signal shall not be used as reference facilities for network synchronization.

18.4.3.5 The total number of Network Elements cascaded from the stratum 1

source shall be minimized.

18.4.3.6 A Network Element shall receive the synchronization reference signal only from another Network Element that contains a clock of equivalent or superior quality (stratum level).

18.4.3.7 U S WEST shall select for synchronization those facilities shown to have the greatest degree of availability (absence of outages).

18.4.3.8 Where possible, all primary and secondary synchronization facilities shall be physically diverse (this means the maximum feasible physical separation of synchronization equipment and cabling).

18.4.3.9 No timing loops shall be formed in any combination of primary and secondary facilities.

18.4.3.10 U S WEST shall continuously monitor the BITS for synchronization related failures.

18.4.3.11 U S WEST shall continuously monitor all equipment transporting synchronization facilities for synchronization related failures.

18.4.3.12 For non-SONET equipment, U S WEST shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.

18.4.3.13 For SONET equipment, U S WEST shall provide synchronization facilities that have time deviation (TDEV) for integration times greater than 0.05 seconds and less than or equal to ten (10) seconds, that is less than or equal to 100 nanoseconds. TDEV, in nanoseconds, for integration times greater than ten (10) seconds and less than 1000 seconds, shall be less than 31.623 times the square-root of the integration time.

18.5 SS7 Network Interconnection

18.5.1 Definition:

SS7 Network Interconnection is the Interconnection of MCI local Signaling Transfer Point (STPs) with U S WEST STPs. This Interconnection provides connectivity that enables the exchange of SS7 messages among U S WEST switching systems and databases, MCI local or tandem switching systems, and other third-party switching systems directly connected to the U S WEST SS7 network.

18.5.2 Technical Requirements

18.5.2.1 SS7 Network Interconnection shall provide signaling connectivity to all components of the U S WEST SS7 network through U S WEST STPs. These include:

- 18.5.2.1.1 U S WEST local or tandem switching systems;
 - 18.5.2.1.2 U S WEST databases; and
 - 18.5.2.1.3 other third-party local or tandem switching systems.
- 18.5.2.2 The connectivity provided by SS7 Network Interconnection shall support the functions of U S WEST switching systems and databases and MCIIm or other third-party switching systems with A-link access to the U S WEST SS7 network.
- 18.5.2.3 SS7 Network Interconnection shall provide transport for certain types of Transaction Capabilities Application Part ("TCAP") messages. If traffic is routed based on dialed or translated digits between an MCIIm local switching system and a U S WEST or other third-party local switching system, either directly or via a U S WEST tandem switching system, then it is a requirement that the U S WEST SS7 network convey via SS7 Network Interconnection the TCAP messages necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the MCIIm local STPs and the U S WEST or other third-party STPs.
- 18.5.2.4 When the capability to route messages based on Intermediate Signaling Network Identifier ("ISNI") is generally available on U S WEST STPs, the U S WEST SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the U S WEST switch routes traffic based on a Carrier Identification Code ("CIC").
- 18.5.2.5 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1. 111. This includes:
- 18.5.2.5.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
 - 18.5.2.5.2 Signaling Link functions, as specified in ANSI T1.111.3; and
 - 18.5.2.5.3 Signaling Network Management functions, as specified in ANSI T1.111.4.
- 18.5.2.6 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112.
- 18.5.2.7 Where the destination signaling point is a U S WEST switching system or database, or is another third-party local or tandem switching system directly connected to the U S WEST STPs (SS7 network), SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.
- 18.5.2.8 Where the destination signaling point is an MCIIm local or tandem switching system, SS7 Network Interconnection shall include intermediate

GTT of messages to a gateway pair of MCI local STPs, and shall not include SCCP Subsystem Management of the destination.

18.5.2.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.

18.5.2.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.

18.5.2.11 If and when inter-network MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of both U S WEST and MCI STPs, SS7 Network Interconnection shall provide these functions of the OMAP.

18.5.2.11.1 The Parties shall develop a mutually agreed upon interim process for MRVT and SRVT within ninety (90) days of the Effective Date of this Agreement. Either Party shall be allowed to shut off MRVT/SRVT for preservation of network integrity.

18.5.2.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:

18.5.2.12.1 MTP Performance, as specified in ANSI T1.111.6;

18.5.2.12.2 SCCP Performance, as specified in ANSI T1.112.5; and

18.5.2.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.

18.5.3 Interface Requirements

18.5.3.1 U S WEST shall offer the following SS7 Network Interconnection options to connect MCI or MCI-designated STPs to the U S WEST STPs (SS7 network):

18.5.3.1.1 D-link interface from MCI STPs.

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

18.5.3.2.1 A D-link layer shall consist of four (4) links.

18.5.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, (e.g., DSX-1) in the central office where the U S WEST STPs is located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface. U S WEST shall offer higher rate DS-1 signaling links for interconnecting MCI local switching systems or STPs with U S WEST STPs as soon as

these become approved ANSI standards and available capabilities of U S WEST STPs.

18.5.3.3.1 In each LATA, there will be two (2) SPOIs. The requirement for two (2) SPOIs is driven by the critical importance attached by the Parties to signaling link diversity.

18.5.3.3.2 Each Party will designate one (1) of the two (2) SPOIs in a reasonable and efficient location in the LATA. A SPOI can be any existing cross connect point in the LATA.

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

18.5.3.4 Where available, the U S WEST central office shall provide intraoffice diversity between the SPOIs and the U S WEST STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to U S WEST's STPs.

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

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

18.5.3.5.2 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;

18.5.3.5.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and

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

18.5.3.6 To the extent technically feasible, U S WEST shall set message screening parameters to block accept messages from MCI's local or tandem switching systems destined to any signaling point in the U S WEST SS7 network with which the MCI's switching system has a legitimate signaling relation.

18.5.4 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following technical references:

18.5.4.1 ANSI T1.110-1992 American National Standard Telecommunications Signaling System Number 7 (SS7) - General Information;

18.5.4.2 ANSI T1.111-1992 American National Standard for Telecommunications

- Signaling System Number 7 (SS7) - Message Transfer Part (MTP);
- 18.5.4.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;
- 18.5.4.4 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);
- 18.5.4.5 ANSI T1.113-1995 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part;
- 18.5.4.6 ANSI T1.114-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Transaction Capabilities Application Part (TCAP);
- 18.5.4.7 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;
- 18.5.4.8 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);
- 18.5.4.9 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);
- 18.5.4.10 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);
- 18.5.4.11 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service;
- 18.5.4.12 Bellcore GR-1428-CORE, CCS Network Interface Specification ("CCSNIS") Supporting Toll Free Service;
- 18.5.4.13 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
- 18.5.4.14 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

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INTERCONNECTION

1. Definitions

- 1.1 For purposes of this Attachment 4, "Interconnection" is the linking of the U S WEST and MCI networks for the mutual exchange of traffic. Interconnection does not include the transport and termination of traffic. Interconnection is provided by virtual or physical collocation, entrance facilities or meet point arrangements.

2. General Description

- 2.1 **U S WEST will provide Interconnection at any technically feasible point, subject to negotiations between the Parties; such points may include, but not be limited to, a Meet Point, the line side distribution frame of the local switch, the trunk side distribution frame of the local switch, trunk interconnection points of the tandem switch, central office cross-connect points, and Signaling Transfer Points necessary to exchange traffic and access call related databases.** ¹ Requests for interconnection shall be presumed technically feasible. U S WEST shall have the full burden of disproving this presumption. If MCI requests interconnection at points other than within U S WEST switching centers or at mid-span fiber meets, MCI shall use the Bona Fide Request process.²
- 2.2 **MCI shall designate at least one (1) POI in the LATA in which MCI originates local traffic and interconnects with U S WEST.** ³ MCI will be responsible for engineering and maintaining its network on its side of the POI. If and when the Parties choose to interconnect at a mid-span meet, MCI and U S WEST will jointly provision the fiber optic facilities that connect the two (2) networks and shall share the financial and other responsibilities for that facility. **U S WEST may limit its portion of a mid-span meet to one (1) mile of facilities. Each Party shall be responsible for building one-half of the facilities for shorter distances.**⁴
- 2.3 Within ten (10) Business Days of MCI's request for any POI, U S WEST shall provide any information in its possession or available to it regarding the environmental conditions of the Interconnection route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in U S WEST's possession, or in the possession of a current or former agent, contractor, employee, lessor, or tenant of U S WEST's.
- 2.4 U S WEST shall allow MCI to perform any environmental site investigations, including, but not limited to, asbestos surveys, MCI deems to be necessary in support of its

¹ Order, p. 13 at Issue 10.

² Order, p. 13 at Issue 10.

³ Order, p. 14 at Issue 1a.

⁴ Order, p. 56 at Issue 7.

collocation needs. MCI shall advise U S WEST in writing of its intent to conduct any such investigations, and shall receive written approval from U S WEST to proceed with the investigation, which approval shall not be unreasonably withheld. MCI shall indemnify U S WEST in accordance with the provisions of Section 18 of Part A of this Agreement for any loss or claim for damage suffered by U S WEST as a result of MCI's actions during any site inspection.

3. Location of Interconnection

- 3.1 MCI shall be responsible for implementing and maintaining its network on its side of the POI. U S WEST will be responsible for implementing and maintaining its network on its side of the POI. **Meet points may be used for Interconnection or access to unbundled Network Elements.**⁵ If and when the Parties choose to interconnect at a Meet Point, MCI and U S WEST will jointly provision the fiber optic facilities that connect the two (2) networks and shall proportionately share the financial and other responsibilities for that facility based on the reasonably negotiated Meet Point percentage.
- 3.2 If interconnection is complicated by the presence of environmental contamination or hazardous materials, and an alternative route is available, U S WEST shall make such alternative route available for MCI's consideration.

4. Collocation

- 4.1 Interconnection may be accomplished through either virtual or physical collocation. The terms and conditions under which collocation will be available are described in Part A of this Agreement.

5. Entrance Facility

- 5.1 Interconnection may be accomplished using an entrance facility without the need for collocation. An entrance facility extends from the Point of Interface to a point within a U S WEST central office.

6. Quality of Interconnection

- 6.1 U S WEST will not, for the purpose of Interconnection, provide to MCI less favorable terms and conditions than it provides itself or any other Person or in a manner less efficient than it would impose on itself or any other Person. The quality of Interconnection will be at least equal to that U S WEST provides to itself or any other Person. To the extent MCI requests higher or lower quality Interconnection, MCI agrees to use the Bona Fide Request process described in Part A of this Agreement.

7. Points of Interconnection

- 7.1 Upon a request for specific point to point routing, U S WEST will make available to MCI information indicating the location and technical characteristics of U S WEST's network facilities. The following alternatives are negotiable and include, but are not limited to: (a)

⁵ Order, p. 48 at Issue 8.

a DS-1 or DS-3 entrance facility, where facilities are available (where facilities are not available and U S WEST is required to build special or additional facilities, special construction charges may apply); (b) virtual collocation; (c) physical collocation; and (d) negotiated Meet Point facilities. Each Party is responsible for providing its own facilities up to the Meet Point. The Parties will negotiate the facilities arrangement between their networks.

8. Trunking Requirements

8.1 U S WEST agrees to provide designed Interconnection facilities that meet the same industry standards for technical criteria and service standards, such as the probability of blocking in peak hours and transmission standards.

8.2 The Parties shall initially reciprocally terminate local exchange traffic and intraLATA/interLATA toll calls originating on each other's networks as follows:

8.2.1 There shall be no restrictions on traffic types carried. Until the access structure is revised, to accommodate non-segregated traffic, pursuant to rules promulgated by the FCC or the Commission, two-way trunk groups will be established wherever practical, based upon MCI's request. **If Local Traffic and Toll Traffic are combined in one (1) trunk group, MCI shall provide a measure of the amount of local and toll traffic relevant for billing purposes to U S WEST. U S WEST may audit the traffic reported to it by MCI if it has reason to believe the reported measurement is not accurate. Such audit shall be conducted in accordance with the Audit Section set forth in this Agreement.**⁶ Exceptions to this provision will not be based on technical infeasibility, but will be based on billing, signaling, and network requirements. For example, exceptions include: (a) billing requirements - switched access vs. local traffic, (b) signaling requirements - MF vs. SS7, (c) network requirements - Directory Assistance traffic to TOPS tandems, and (d) one-way trunks for 911/E911. The following is the current list of traffic types that require separate trunk groups, unless otherwise specifically stated in this Agreement:

- (a) IntraLATA toll and interLATA switched access trunks
- (b) EAS/local trunks
- (c) **Directory Assistance trunks**⁷
- (d) 911/E911 trunks
- (e) Operator Services trunks
- (f) Non-U S WEST toll (transit toll to other providers)
- (g) Non-U S WEST local (transit local to other providers)
- (h) Commercial Mobile Radio Service/Wireless traffic

8.3 Separate trunk groups will be established connecting MCI's switch or MCI's Operator Service center to U S WEST's Operator Service center for operator-assisted busy line interrupt/verify. For traffic from the U S WEST network to MCI for Operator Services,

⁶ Mediator's Recommendations, p. 7.

⁷ Order, p. 53 at Issue 64.

U S WEST will provide one (1) trunk group per LATA served by the local U S WEST switch.

8.4 Trunk Servicing

8.4.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by use of an Access Service Request ("ASR") or another industry standard for local service ordering.

8.4.2 As further described in this Agreement, both Parties will jointly manage the capacity of Local Interconnection trunk groups. U S WEST's trunk servicing group will send a Trunk Group Service Request ("TGSR"), or another industry standard eventually adopted to replace the TGSR, to MCI to trigger changes U S WEST desires to the Local Interconnection trunk groups based on U S WEST's capacity assessment. MCI will issue an ASR or other industry ordering standard to U S WEST:

- (a) within ten (10) Business Days after receipt of the TGSR, upon review of and in response to U S WEST's TGSR; or
- (b) at any time, as a result of MCI's own capacity management assessment, to begin the provisioning process. The interval used for the provisioning of Local Interconnection trunk groups shall be no longer than the standard interval for the provisioning of U S WEST's Switched Access service and shall be consistent with U S WEST's actual provisioning intervals for its own Switched Access customers.

8.4.3 U S WEST will attempt to meet MCI requested due date for the provision of Local Interconnection trunk groups. Where the installation of Local Interconnection trunk groups is required within a time that is shorter than the standard interval, the Parties will make all reasonable efforts and cooperate in good faith to ensure that the mutually agreed upon due date is met.

8.4.4 Orders that comprise a major project may be submitted at the same time, in which case 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 U S WEST and MCI 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, re-homes, facility grooming, or network rearrangements.

8.5 Trunking Requirements

8.5.1 Trunk group connections will be made at a DS-1 or multiple DS-1 level for exchange of EAS/local, intraLATA toll, wireless/Commercial Mobile Radio Service, and Switched Access Traffic. Ancillary Service trunk groups will be made below a DS-1 level, as agreed to by the Parties.

8.5.2 Where CCS is not available, in-band multi-frequency ("MF") wink start signaling will be provided. This MF arrangement will require a separate local trunk circuit between MCI's switch and U S WEST's tandems. Reference Technical Pub. TR-314 and TR394.

9. Service Interruptions

- 9.1 Standards and procedures for notification of trunk disconnects will be jointly developed by the Parties within ninety (90) days of the Effective Date of this Agreement. Neither Party shall be expected to maintain active status for a trunk disconnected by the other Party for an extended or indefinite period of time.
- 9.2 The characteristics and methods of operation of any circuits, facilities or equipment of either Party connected with the services, facilities or equipment of the other Party pursuant to this Agreement shall not: (a) interfere with or impair service over any facilities of the other Party; its Affiliates or its connecting and concurring carriers involved in its services; (b) cause damage to their plant; (c) violate any applicable law or regulation regarding the invasion of privacy of any communications carried over the Party's facilities; or (d) create hazards to the employees of either Party or to the public.
- 9.3 Each Party shall be solely responsible, and bear the expense, for the overall design of its services. Each Party shall also be responsible for any redesign or rearrangement of its services that may be required because of changes in facilities, operations or procedures, minimum network protection criteria, and operating or maintenance characteristics of the facilities. If one Party creates a circumstance causing additional costs to the other Party, the other Party may collect construction charges from the first Party.
- 9.4 To facilitate trouble reporting and to coordinate the repair of the service provided by each Party to the other under this Agreement, each Party shall designate and define a Trouble Reporting Control Office ("TRCO") for such service. Each Party shall furnish a trouble reporting telephone number for the designated TRCO. This number shall have access to the location where facility records are normally located and where current status reports on any trouble reports are readily available. Current and historical trouble reports will be made available, if necessary. Alternative out-of-hours procedures shall be established to ensure access to a location that is staffed and has the authority to initiate corrective action.
- 9.5 Where new facilities, services and arrangements are installed to rectify the service interruption, the TRCO shall ensure that continuity exists and take appropriate transmission measurements before advising the other Party that the new circuit is ready for service.
- 9.6 The Parties shall cooperate in isolating trouble conditions. Before either Party reports a trouble condition, it shall use reasonable efforts to isolate the trouble.
- 9.7 In cases where a trouble condition affects a significant portion of the other Party's service, the Parties shall assign the same priority provided to other interconnecting carriers.

10. Forecasting

- 10.1 The Parties agree that during the first year of Interconnection, joint forecasting and planning meetings will take place no less frequently than once per quarter.
- 10.2 The Parties shall establish joint forecasting responsibilities for traffic utilization over trunk groups. Intercompany forecast information must be provided by the Parties to each other four (4) times a year. The quarterly forecasts shall include forecasted requirements for each trunk group identified in Section 8.2.1 of this Attachment. In addition, for tandem-

switched traffic, the forecast shall include the quantity of tandem-switched traffic forecasted for each subtending end office. The Parties recognize that, to the extent historical traffic data can be shared between the Parties, the accuracy of the forecasts will improve. Forecasts shall be for a minimum of three (current and plus-1 and plus-2) years and shall include:

10.2.1 the use of Common Language Location Identifier (CLLI-MSG), which is described in Bellcore documents BR 795-100-100 and BR 795-400-100; and

10.2.2 a description of major network projects anticipated for the following six (6) months that could affect the other Party. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period. This planning will include the issues of network capacity, forecasting and compensation calculation, where appropriate.

10.2.3 If forecasts vary significantly, the Parties shall meet to review and reconcile such forecasts.

10.2.3.1 If the Parties are unable to reach such a reconciliation, the Local Interconnection trunk groups shall be provisioned to the higher forecast. At the end of three (3) months, the utilization of the Local Interconnection trunk groups will be reviewed and if the average CCS utilization for the third month is under seventy five percent (75%) of 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.

10.2.3.2 If the Parties agree on the original forecast and then it is determined that a trunk group is under seventy five percent (75%) of CCS capacity on a monthly-average basis for each month of any three-month period, 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. In all cases, grade of service objectives identified in this Agreement shall be maintained.

10.3 Each Party shall provide a specified point of contact for planning, forecasting and trunk serving purposes.

10.4 Trunking can be established to tandems or end offices or a combination of both via either one-way or two-way trunks. Trunking will be at the DS-0 level, DS-1 level, DS-3 level, or any other technically feasible level, subject to network disclosure requirements of the FCC. Initial trunking will be established between MCIm's switching centers and U S WEST's access tandem(s). The Parties will utilize direct end office trunking under the following conditions:

10.4.1 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 U S WEST subscribers.

- 10.4.2 Traffic volume - The Parties shall install and retain direct end office trunking sufficient to handle actual or reasonably forecasted traffic volumes, whichever is greater, between an MCI switching center and a U S WEST end office where the local traffic exceeds or is forecasted to exceed 512 CCS at the busy hour.
- 10.4.3 Mutual agreement - The Parties may install direct end office trunking upon mutual agreement in the absence of conditions (1) or (2) above, which agreement shall not unreasonably be withheld.

10.5 Grade of Service:

A blocking standard of one percent (1%) during the average busy day-busy hour, as defined by each Party's standards, for final trunk groups between an MCI end office and a U S WEST access tandem carrying Meet Point traffic shall be maintained. All other final trunk groups are to be engineered with a blocking standard of one percent (1%). Direct end office trunk groups are to be engineered with a blocking standard of one percent (1%).

11. Signaling

- 11.1 Signaling protocol. The Parties will interconnect their networks using SS7 signaling as defined in GR-317 and GR-394, including ISDN User Part ("ISUP") for trunk signaling and Transaction Capabilities Application Part ("TCAP") for CCS-based features in the interconnection of their networks. All appropriate industry standards for signaling interoperability will be followed.
- 11.2 The Parties will provide CCS to each other in conjunction with all trunk groups supporting Local, Transit, and Toll Traffic. The Parties will cooperate on the exchange of TCAP messages to facilitate full interoperability of CCS-based features between their respective networks, including all CLASS features and functions. All CCS signaling parameters will be provided, including Automatic Number Identification ("ANI"), originating line information ("OLI"), calling party category, charge number, etc. For terminating Feature Group D, the Parties will pass CPN if it receives CPN from Feature Group D carriers. All privacy indicators will be honored. Where available, network signaling information such as Transit Network Selection ("TNS") parameter (CCS platform) and CIC/OZZ information (non-CCS environment) will be provided by the Parties wherever such information is needed for call routing or billing. The Parties will follow all appropriate industry standards pertaining to TNS and CIC/OZZ codes.
- 11.3 Standard Interconnection facilities shall be Extended Superframe ("ESF") with B8ZS line code. Where ESF/B8ZS is not available, MCI will agree to using other Interconnection protocols on an interim basis until the standard ESF/B8ZS is available. U S WEST will provide anticipated dates of availability for those areas not currently ESF/B8ZS compatible.
- 11.4 Where MCI is unwilling to utilize an alternate Interconnection protocol, MCI will provide U S WEST an initial forecast of 64 Kbps clear channel capability ("64K CCC") trunk quantities within thirty (30) days of the Effective Date of this Agreement consistent with the forecasting agreements between the Parties. Upon receipt of this forecast, the Parties will begin joint planning for the engineering, procurement, and installation of the designated 64K CCC Local Interconnection trunk groups and the associated B8ZS Extended Super Frame,

for the purpose of transmitting 64K CCC data calls between MCI and U S WEST. Where additional equipment is required, such equipment will be obtained, engineered, and installed on the same basis and with the same intervals as any similar growth job for an IXC, MCI or U S WEST internal customer demand for 64K CCC trunks. Where technically feasible, these trunks will be established as two-way.

12. Ordering

- 12.1 MCI may order Interconnection points beyond those listed in the FCC rules using the ASR process or other industry standard for local service ordering.
- 12.2 U S WEST must provide installation to MCI in the shorter of the time it provides installation to itself or any other Person. U S WEST must provide installation to MCI within ten (10) Business Days if it does not provide the same installation to itself or any other Person.
- 12.3 If MCI requests a shorter installation time than required by the provisions of this Attachment, U S WEST may charge MCI for any increased expense incurred for such installation.
- 12.4 MCI shall, on each order for Local Interconnection trunks, specify the MCI NXXs that are assigned to the trunks.

13. Network Management

13.1 Protective Protocols

Either Party may use protective network traffic management controls such as 7-digit 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.

13.2 Rerouting Protocols

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. Reroutes will not be used to circumvent normal trunk servicing. Rerouting controls will only be used when mutually agreed to by the Parties.

13.3 Mass Calling

MCI and U S WEST shall cooperate and share pre-planning information, where available and in compliance with federal and state regulations, 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. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.

14. Usage Measurement

- 14.1 When applicable, each Party shall provide to the other:
 - 14.1.1 Bellcore AMA formatted records to generate bills to the other Party;
 - 14.1.2 measurement of minutes of use over Local Interconnection trunk groups 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; and
 - 14.1.3 within twenty (20) calendar days after the end of each quarter (commencing with the first full quarter after the Effective Date of this Agreement), a usage report with the total traffic volume described in terms of minutes and messages and by call type (i.e., local, toll, and other) terminated to each other over SS7 Local Interconnection trunk groups.

15. Audiotext and Mass Announcement Services

The Parties agree that access to the audiotext, mass announcement and information services of one Party may be made available to the other Party upon execution of a separate agreement or an amendment to this Agreement.

16. Interconnection to Network Elements

16.1 Technical Requirements

- 16.1.1 When requested by MCI_m, U S WEST shall provide interconnection between U S WEST Network Elements provided to MCI_m and MCI_m's network at transmission rates designated by MCI_m. If additional equipment beyond that which U S WEST currently has in place is planning to put in place or is otherwise required to have in place is required to meet such transmission rates, the installation and/or acquisition of such equipment shall be accomplished pursuant to the ordering process set forth in this Agreement.
- 16.1.2 Traffic shall be combined and routed as follows:
 - 16.1.2.1 At MCI_m's request, U S WEST shall receive MCI_m traffic destined to the U S WEST Operator Systems Network Element, on trunks from an MCI_m end-office or an MCI_m tandem.
 - 16.1.2.2 At MCI_m's request, U S WEST shall receive MCI_m CAMA-ANI (Centralized Automatic Message Accounting - Automatic Number identification) traffic destined to the U S WEST 911 PSAPs, or E911 tandems, on trunks from an MCI_m end-office.
 - 16.1.2.3 At MCI_m's request, U S WEST shall receive MCI_m SS7 traffic destined to any U S WEST E911 tandem on trunks from an MCI_m end-office, when SS7 E911 signaling is available in U S WEST's network.
- 16.1.3 When requested by MCI_m and a third party carrier, U S WEST shall provide interconnections between MCI_m's network, and the other carrier's network through

the U S WEST network at transmission rates designated by MCI, including, but not limited to, DS-1, DS-3, and STS-1, where available. U S WEST shall combine and route traffic to and from other local carriers and interLATA carriers through the U S WEST network, and, at MCI's request, U S WEST shall record and keep records of such traffic for MCI billing purposes to the extent possible.

- 16.1.4 U S WEST shall provide two-way trunk groups for Interconnections. At MCI's request, and consistent with an efficient network architecture, U S WEST shall provide unidirectional traffic on such trunks, in either direction, effectively operating them as if they were one-way trunk groups.
 - 16.1.5 All trunking provided by U S WEST shall adhere to the applicable performance requirements set forth in the "General Performance Requirements" section of this Agreement, pursuant to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
 - 16.1.6 At MCI's request, U S WEST shall work cooperatively with MCI to provide for overflow routing from a given trunk group or groups onto another trunk group or groups as MCI designates.
 - 16.1.7 U S WEST and MCI shall agree on the establishment of two-way trunk groups for the exchange of traffic for other IXCs. These trunk groups can be provided in a meet point arrangement.
 - 16.1.8 Interconnection shall be made available upon MCI's request at any technically feasible Point of Interface. All trunk interconnections shall be provided, including SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID (Direct Inward Dialing), CAMA-ANI, and trunking necessary so that interim NP can be provided.
- 16.2 Trunk Interface Requirements
- 16.2.1 E911 Trunks
 - 16.2.1.1 U S WEST shall allow MCI to provide direct trunking to each U S WEST E911 end office or tandem, as is appropriate for the applicable serving area. These trunks are to be provided as one-way trunks from a given MCI end office to the U S WEST E911 end office or tandem.
 - 16.2.1.2 U S WEST shall provide for overflow E911 traffic in the same manner that U S WEST provides E911 overflow for itself.
 - 16.2.2 S911 Trunks

If and when S911 tandems become available in the U S WEST network, U S WEST shall allow MCI to provide direct trunking to each U S WEST S911 tandem. Such SS7 trunks are to be provided as one-way trunks from a given MCI end-office to the U S WEST S911 tandem.
 - 16.2.3 Local Switch and Access Tandem Trunks
 - 16.2.3.1 U S WEST shall provide trunks groups provisioned exclusively to carry

intraLATA Toll Traffic, as designated by MCIIm.

16.2.1.2 U S WEST shall provide trunk groups provisioned exclusively to carry interLATA traffic, as designated by MCIIm.

16.2.1.3 U S WEST shall provide SS7 trunks which provide SS7 Interconnection. At MCIIm's request, MF trunks may be substituted for SS7 trunks where applicable.

16.2.1.4 U S WEST shall simultaneous route calls based on dialed digits (in accordance with the standard GR-317-CORE), and Carrier Identification Code (in accordance with the standard GR-394-CORE) over a single SS7 trunk group.

16.2.4 U S WEST Operator Services Trunk

U S WEST shall provide Operator Services trunks as one-way trunks from the U S WEST network to the MCIIm network.

16.3 Network Interconnection between U S WEST and MCIIm shall meet or exceed all of the requirements for network Interconnection set forth in the following technical references:

16.3.1 GR-317-CORE, Switching System Generic Requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;

16.3.2 GR-394-CORE, Switching System Generic Requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;

16.3.3 FR-NWT-000271, OSSGR Operator Services Systems Generic Requirements, Bellcore, 1994 Edition; and

16.3.4 FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition.

17. Reciprocal Traffic Exchange

17.1 Scope

Reciprocal traffic exchange addresses the exchange of traffic between MCIIm end users and U S WEST end users. If such traffic is local, the provisions of this Agreement shall apply. Where either Party acts as an intraLATA toll provider or interLATA IXC or where either Party interconnects and delivers traffic to the other from third parties, each Party shall bill such third parties the appropriate charges pursuant to its respective tariffs or contractual offerings for such third party terminations. Absent a separately negotiated agreement to the contrary, compensation for reciprocal traffic exchange applies solely to traffic exchanged directly between the Parties without the use of third party transit providers.

17.2 Responsibilities of The Parties

- 17.2.1 U S WEST and MCIIm 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.
- 17.2.2 MCIIm and U S WEST agree to exchange such reports and/or data as provided in this Agreement to facilitate the proper billing of traffic.
- 17.2.3 [Intentionally left blank for numbering consistency]
- 17.2.4 MCIIm and U S WEST 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.
- 17.2.5 The Party that performs the End Office function is responsible for all Control Office functions for the Meet Point trunking arrangement trunks and trunk groups, and shall be responsible for the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.
- 17.2.6 MCIIm and U S WEST shall:
 - 17.2.6.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.
 - 17.2.6.2 Notify each other when there is any change affecting the service requested, including the due date.
 - 17.2.6.3 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its Interconnection trunks/trunk groups are installed per the Interconnection order, meet agreed-upon acceptance test requirements, and are placed in service by the due date.
 - 17.2.6.4 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.
 - 17.2.6.5 Advise each other's Control Office if there is an equipment failure which may affect the Interconnection trunks.
 - 17.2.6.6 Provide each other with a trouble reporting/repair contact number that is readily accessible and available twenty-four (24) hours per day, seven (7) days per week. Any changes to this contact arrangement must be immediately provided to the other Party.
 - 17.2.6.7 Provide to each other test-line numbers and access to test lines.
 - 17.2.6.8 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.

17.3 Types of Traffic

17.3.1 The types of traffic to be exchanged or provided under this Agreement include, but are not limited to, the following:

17.3.1.1 EAS/Local Traffic;

17.3.1.2 Transit Traffic;

17.3.1.3 Switched Access Traffic ;

17.3.1.4 Ancillary traffic includes all traffic destined for Ancillary Services, or that may have special billing requirements, including, but not limited to, the following:

- (a) Directory Assistance
- (b) 911/E911
- (c) Operator call termination (busy line interrupt and verify)
- (d) 800/888 database dip
- (e) LIDB
- (f) Information services requiring special billing.

17.3.1.5 Unless otherwise stated in this Agreement, ancillary traffic will be exchanged in accordance with whether the traffic is Local/EAS, intraLATA toll, or Switched Access.

17.4 Transport and Termination of Exchange Traffic

17.4.1 Termination of Local Traffic

Local Traffic will be terminated pursuant to the Reciprocal Compensation described in Attachment 1.

17.4.2 EAS/Local Traffic

As negotiated between the Parties, the exchange of Local Traffic between the Parties may occur in several ways.

17.4.2.1 While the Parties anticipate the use of two-way trunks for the delivery of Local Traffic, either Party may elect to provision its own one-way trunks for delivery of Local Traffic to be terminated on the other Party's network at the "initial" point of interconnection;

17.4.2.2 The Parties may elect to purchase transport services from each other or from a third party. Such transport delivers the originating Party's Local Traffic to the terminating Party's end office or tandem for call termination. Transport may be purchased as either tandem switched transport (which is included in the tandem call termination rate) or direct trunk transport;

17.4.2.3 To the extent that MCI has established a collocation arrangement at a

U S WEST end office location, and has available capacity, the Parties agree that MCI/m shall provide two-way direct trunk facilities, when required, from that end office to the MCI/m switch. In all other cases, the direct facility may be provisioned by U S WEST or MCI/m or a third party. If both MCI/m and U S WEST desire to provision the facility and cannot otherwise agree, the Parties may agree to resolve the dispute through the submission of competitive bids.

17.4.3 Transit Traffic

17.4.3.1 U S WEST will accept traffic originated by MCI/m and will terminate it at a Point of Interconnection with another CLEC, Exchange Carrier, IXC or Wireless Carrier. U S WEST will provide this transit service through Tandem Office Switches. MCI/m may also provide U S WEST with transit service.

17.4.3.2 The Parties expect that all networks involved in transporting transit traffic will deliver calls to each involved network with CCS/SS7 protocol and the appropriate ISUP/TCAP message to facilitate full interoperability and billing functions. In all cases, the originating company is responsible to follow the EMR standard and to exchange records with both the transiting company and the terminating company, to facilitate the billing process to the originating network.

17.4.3.3 The Parties will use industry standards developed to handle the provision and billing of Switched Access by multiple providers (MECAB, MECOD and the Parties' FCC tariffs).

17.4.4 Toll Traffic

Toll Traffic routed to an access tandem, or directly routed to an end office, will be terminated as Switched Access Service.

17.5 Interface Code Availability And Optional Features

17.5.1 Interface Code Availability

Supervisory Signaling specifications, and the applicable network channel interface codes for Local Interconnection trunks, are the same as those used for Feature Group D Switched Access Service, as described in the Parties' applicable Switched Access tariffs.

17.5.2 Optional Features

17.5.2.1 Inband MF or SS7 Out of Band Signaling

Inband MF signaling and SS7 out of band signaling are available for local trunks. MF signaling or SS7 out-of-band signaling must be requested on the order for the new local trunks. Provisioning of the local trunks equipped with MF signaling or SS7 out of band signaling is the same as

that used for Feature Group D Switched Access. Common Channel Signaling Service, as described in this Agreement, must be ordered by MCI_m when SS7 out-of-band signaling is requested on local trunks.

17.5.2.2 Clear Channel Capability

Clear channel capability permits 24 DS-0-64 kbit/s services or 1.536 Mbit/s of information on the 1.544 Mbit/s line rate. Clear channel capability is available for local trunks equipped with SS7 out-of-band signaling. Clear channel capability is only available on trunks to U S WEST's access tandem switch or U S WEST's end office switches (where available). Clear channel capability must be requested on the order for the new local trunks. The provisioning of the local trunks equipped with clear channel capability is the same as that used for Feature Group D Switched Access Service. U S WEST will provide MCI_m with a listing of U S WEST end offices, local tandems and access tandems equipped with clear channel capability. (Clear channel capability is not available on trunks to U S WEST's local tandem switches or end offices where it is currently not deployed. MCI_m agrees to use the Bona Fide Request process to request clear channel capability for such additional switches. Prices for such additional clear channel capability, if any, will be established through the BFR process).

17.6 Measuring Local Interconnection Minutes

17.6.1 Measurement of terminating Local Interconnection minutes, as calculated per Attachment 5, begins when the terminating local entry switch receives answer supervision from the called end user's end office indicating the called end user has answered. The measurement of terminating call usage over local trunks ends when the terminating local entry switch receives disconnect supervision from either the called end user's end office, indicating the called end user has disconnected, or MCI_m's Point of Interconnection, whichever is recognized first by the entry switch.

17.6.2 U S WEST and MCI_m are required to provide each other the proper call information (e.g., originated call party number and destination call party number, etc.) to enable each Party to issue bills in a complete and timely fashion.

17.7 Testing

17.7.1 Acceptance Testing

At the time of installation of a local trunk group, and at no additional charge, the Parties will cooperatively test the same parameters tested for terminating Feature Group D Switched Access Service.

17.7.2 Testing Capabilities

17.7.2.1 Terminating Local Interconnection trunk testing is provided where equipment is available, with the following test lines: seven-digit access to

balance (100 type), milliwatt (102 type), nonsynchronous or synchronous, automatic transmission measuring (105 type), data transmission (107 type), loop-around, short circuit, open circuit, and non-inverting digital loopback (108 type).

17.7.2.2 In addition to Local Interconnection trunk acceptance testing, other tests are available (e.g., additional cooperative acceptance testing, automatic scheduled testing, cooperative scheduled testing, manual scheduled testing, and non-scheduled testing) at the applicable tariff rates.

17.10 Mileage Measurement

Where required, the mileage measurement for Local Interconnection facilities and trunks is determined in the same manner as the mileage measurement for Feature Group D Switched Access Service.

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BUSINESS PROCESSES

Section 1. General Business Requirements

1.1 Procedures

1.1.1 U S WEST Contact with Subscribers

1.1.1.1 At all times, MCI shall be the primary (single and sole) contact and account control for all interactions with its subscribers, except as specified by MCI. MCI subscribers include active MCI customers as well as those for whom service orders are pending.

1.1.1.2 U S WEST shall ensure that any U S WEST personnel who may receive customer inquiries, or otherwise have opportunity for subscriber contact: (a) provide appropriate referrals and telephone numbers to subscribers who inquire about MCI services or products; (b) do not in any way disparage or discriminate against MCI, or its products or services; and (c) do not provide information about U S WEST products or services during that same inquiry or subscriber contact.

1.1.1.3 U S WEST shall not use MCI's request for subscriber information, order submission, or any other aspect of MCI's processes or services to aid U S WEST's marketing or sales efforts.

1.1.2 Expedite and Escalation Procedures

1.1.2.1 No later than sixty (60) days after the Effective Date of this Agreement, U S WEST and MCI shall develop mutually acceptable escalation and expedite procedures which may be invoked at any point in the Service Ordering, Provisioning, Maintenance and Subscriber Usage Data transfer processes to facilitate rapid and timely resolution of disputes. Within the said sixty (60) day period, U S WEST and MCI will establish intercompany contact lists for purposes of handling subscriber and other matters which require attention/resolution outside of normal business procedures. To the extent possible, U S WEST shall notify MCI of any changes to its escalation contact list at least one (1) week before such changes are effective.

1.1.2.2 No later than sixty (60) days after the Effective Date of this Agreement, U S WEST and MCI shall jointly establish contingency and disaster recovery plans for those cases in which normal service ordering, provisioning, maintenance, billing and other procedures for U S WEST's unbundled Network Elements, features, functions and resale services are inoperable.

1.1.3 Operational and Technological Changes

1.1.3.1 U S WEST shall notify MCI of any material operational or technological (e.g., network, systems interfaces) changes related to any services, interconnection methods, or Network Elements purchased by MCI. At

such time as U S WEST has decided to make such a change, U S WEST will notify MCIIm in sufficient time to allow MCIIm to make necessary adjustments to accommodate the change, but in no case with less than thirty (30) days notice, unless otherwise agreed to by the Parties. Objections to the proposed change must be given to U S WEST in a reasonable time. For the purposes of this Section, material changes shall be defined as those changes which will likely impact current interactions between MCIIm (or its customers) and U S WEST.

1.1.3.2 U S WEST agrees to notify MCIIm whenever an MCIIm subscriber who is provided local service through Services for Resale, INP/PNP, or unbundled Network Elements changes MCIIm PIC status.

1.1.4 Customer of Record

1.1.4.1 Provided MCIIm has obtained proper Customer Authorization, U S WEST shall recognize MCIIm as the Customer of Record for all Network Elements or Services for Resale ordered by MCIIm and shall send all notices, invoices and information which pertain to such ordered services directly to MCIIm. MCIIm will provide U S WEST with addresses to which U S WEST shall send all such notices, invoices and information.

1.1.5 Work Center Interface Procedures

1.1.5.1 U S WEST and MCIIm shall, within ninety (90) days of the Effective Date of this Agreement, develop and implement work center interface Procedures for each function/business process necessary for fulfilling the terms of this Agreement.

1.2 Service Offerings

1.2.1 Changes in Retail Service Offerings

1.2.1.1 Pursuant to Section 23.2 of Part A of this Agreement, U S WEST shall provide summaries to MCIIm describing the proposed change(s) of services which are available for resale pursuant to this Agreement.

1.2.1.2 [Intentionally left blank for numbering consistency]

1.2.1.3 U S WEST shall provide MCIIm with access to new services, features, and functions concurrent with U S WEST's notice to MCIIm of such changes, so that MCIIm may evaluate these services.

1.2.2 Essential Services

1.2.2.1 U S WEST shall designate trunks or lines as an Essential Service Line (ESL) or Telecommunications Service Priority (TSP), whichever is applicable, upon MCIIm's request, based on industry standards.

1.2.3 [Intentionally left bland for numbering consistency]

1.2.4 [Intentionally left blank for numbering consistency.]

1.2.5 Blocking Services

1.2.5.1 Upon request from MCI, U S WEST shall provide blocking in accordance with U S WEST standard intervals for 700, 900, and 976 services, or other services of similar type as may now exist or may be developed in the future according to industry standards, and shall provide Billed Number Screening (BNS), including required LIDB updates, or equivalent service for blocking completion of bill -to- third party and collect calls, on a line, trunk, or individual service basis.

1.2.6 Training Support

1.2.6.1 U S WEST will train its employees who may communicate with MCI subscribers to treat MCI in a nondiscriminatory manner. U S WEST will solicit and may take into account input from MCI in the development of such training and will permit MCI to review, but not approve, such training. Such training will comply with the branding requirements of this Agreement.

1.2.6.2 U S WEST or its agent shall train MCI employees on U S WEST's systems and processes to MCI's specifications and shall provide at least the same information available to U S WEST employees or its agents performing similar functions. Information/materials provided to MCI should include, at a minimum, operational and procedural information, and U S WEST-specific system access/interface instruction for performing similar functions.

1.2.5 Carrier Identification Codes

1.2.5.1 U S WEST shall provide to MCI the active Carrier Identification Codes (CIC) for both Dial 1 and toll free (e.g., 800, 888) services for each of its access tandems pursuant to industry guidelines.

Section 2. Ordering and Provisioning¹

2.1 General Business Requirements

2.1.1 Ordering and Provisioning Parity: During the term of this Agreement, U S WEST shall provide necessary ordering and provisioning business process support as well as those technical and systems interfaces as may be required to enable MCI to provide at least the same level and quality of service for all resale services, functions, features, capabilities and unbundled Network Elements as U S WEST provides itself, its Affiliates, its own subscribers or any other Person. U S WEST shall provide MCI with the same level of ordering and provisioning support as U S WEST provides itself or any other Person in accordance with standards and performance measurements that are at least equal to the highest level of standards and/or

¹ Order, pp. 46-47 at issue 2.

performance measurements that U S WEST uses and/or which are required by law, regulatory agency, or by U S WEST's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including, but not limited to, such new architecture, equipment, facilities, and interfaces as U S WEST may deploy) that U S WEST provides to MCI_m under this Agreement.

2.1.2 Systems Interface Help Desk/Single Point of Contact (SPOC):

2.1.2.1 U S WEST shall provide a Systems Interface Help Desk, or equivalent, which shall serve for all activities involved in the Electronic Interface for ordering and provisioning of U S WEST's unbundled Network Elements, features, functions, and resale services. The Systems Interface Help Desk shall be available twenty-four (24) hours a day, seven (7) days a week.

2.1.2.2 U S WEST shall provide a SPOC and shall provide to MCI_m toll-free nationwide telephone numbers (available during U S WEST's scheduled work hours) answered by competent, knowledgeable personnel, trained to answer questions and resolve problems in connection with the ordering and provisioning of unbundled Network Elements, features, functions, capabilities, and resale services. U S WEST will provide sufficient resources to provide equivalent service to MCI_m as that furnished to U S WEST's retail customers, or as otherwise agreed to by the Parties.

2.1.2.3 In addition to the electronic interfaces provided for elsewhere in this Agreement, U S WEST shall provide, as requested by MCI_m, through the SPOC, provisioning and dispatch in the form of coordinated scheduling, status, and dispatch capabilities equivalent to what U S WEST provides itself or as otherwise agreed to by the Parties.

2.1.2.4 U S WEST shall provide provisioning support outside of scheduled work hours on an exception basis as requested by MCI_m.

2.1.3 Street Address Guide (SAG): Within thirty (30) days after the Effective Date of this Agreement, U S WEST shall provide to MCI_m the SAG data, or its equivalent, in an electronic format acceptable to MCI_m. All changes to the SAG will be available to MCI_m in the same time as they are available to U S WEST.

2.1.4 Carrier Selection:

2.1.4.1 For services for resale or unbundled Network Elements, U S WEST shall provide to MCI_m, no later than January 1, 1997, the capability to order local service and intraLATA and interLATA toll services by entering MCI_m subscriber's choice of carrier on a single order. U S WEST will offer other carrier selection choices as they become available. U S WEST shall provide MCI_m with the capability to order separate interLATA and intraLATA carriers on a line or trunk basis where 1+ presubscription is available.

2.1.4.2 Where intraLATA 1+ presubscription is not available, or if the subscriber does not select an intraLATA toll carrier, U S WEST agrees to provide intraLATA toll services for resale to MCI and to recognize the end-user as the customer of MCI for intraLATA toll. MCI shall designate the default carrier for all other toll calls if the subscriber does not select a carrier. In all cases, U S WEST will route toll calls to the appropriate carrier as designated by MCI.

2.1.5 Number Administration/Number Reservations:

2.1.5.1 Until Number Administration functions are assumed by a neutral third party in accordance with FCC rules and regulations, U S WEST shall assign NXXs to MCI on a non-discriminatory and equivalent basis following NANP guidelines. In addition, U S WEST shall provide testing and loading of MCI's NXX on the same basis as U S WEST provides itself or its Affiliates. Further, in U S WEST's role as number administrator, it shall provide MCI 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 MCI. U S WEST shall provide the same range of number choices to MCI, including choice of exchange number, as U S WEST provides its own subscribers. Reservation and aging of numbers shall remain U S WEST's responsibility.

2.1.5.2 Where MCI has not obtained its own NXX, U S WEST shall reserve up to 100 telephone numbers, per MCI request, per NPA-NXX, for MCI's exclusive use. U S WEST shall provide additional numbers at MCI's request as customer demand requires. Telephone numbers reserved in this manner may be released for other than MCI use only upon agreement of MCI.

2.1.5.3 For resale and the unbundled switching Network Element, U S WEST shall accept MCI orders for vanity numbers and blocks of numbers for use with complex services including, but not limited to, DID, CENTREX, and Hunting arrangements, as requested by MCI on a non-discriminatory, equivalent basis following NANP guidelines.

2.1.5.4 U S WEST shall provide real-time confirmation of the number reservation on a non-discriminatory, equivalent basis to MCI. For number reservations associated with complex services (non-POTS), U S WEST shall provide confirmation of the number reservation within twenty-four (24) hours of MCI's request.

2.1.5.5 To the extent U S WEST remains the administrator, U S WEST will manage NPA/NXX splits in its region. Any splits and overlays will be considered an industry wide issue and will be discussed before the appropriate state regulatory body(ies).

2.1.5.6 U S WEST shall maintain sufficient numbers to meet the needs of all local service providers for long term NPA/NXX assignment and Administration.

2.1.5.7 Where MCI_m has obtained its own NXX, and has purchased U S WEST services for resale or Network Elements, U S WEST agrees to install MCI_m NXX in U S WEST's switch according to the local calling area defined by MCI_m and approved by the Commission.

2.1.6 OBF Compliance(Guidelines):

2.1.6.1 In accordance with OBF standards, U S WEST and MCI_m shall follow the OBF-developed ordering and provisioning process standards. These processes include, but are not limited to, pre-order service inquiry, pre-order service inquiry response, firm order, acknowledgment/rejection, firm order confirmation, delay notification, and completion notification. U S WEST agrees to work cooperatively to implement future OBF-developed processes related to ordering and provisioning.

2.1.6.1 U S WEST agrees to implement OBF-developed ordering and provisioning standards within ninety (90) days of completion of those standards.

2.1.7 Service Migrations and New Customer Additions:

2.1.7.1 For resale services, U S WEST shall not require a disconnect order from a subscriber, another local service provider, or any other entity, to process a MCI_m order to establish MCI_m local service and/or migrate a subscriber to MCI_m local service.

2.1.7.2 For resale services, U S WEST shall not disconnect any subscriber service or existing features at any time during the migration of that subscriber to MCI_m service, unless otherwise specified by MCI_m.

2.1.7.3 For services provided through unbundled Network Elements, U S WEST shall recognize MCI_m as an agent for the subscriber in coordinating the disconnection of services provided by another MCI_m or U S WEST. In addition, U S WEST shall not disconnect any U S WEST services provided to the subscriber until MCI_m notifies U S WEST that MCI_m's unbundled Network Elements are installed and operational.

2.1.7.4 Unless otherwise directed by MCI_m, when MCI_m orders resale services or Network Elements, 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 for those services or features U S WEST controls and which are available under this Agreement.

2.1.8 Intercept Treatment and Transfer of Service Announcements: U S WEST shall provide unbranded intercept treatment and transfer of service announcements to MCI_m Customers. U S WEST shall provide such treatment and transfer of service announcement for all service disconnects, suspensions, or transfers, at parity with what U S WEST provides its own end users. U S WEST's current standard time

periods for providing such announcements are three (3) months for residential service and twelve (12) months for business service. MCI_m may request extensions at parity with what U S WEST provides its end-users.

2.1.9 General Service and Network Related Information Requirements:

2.1.9.1 U S WEST shall provide to MCI_m a list of all intraLATA and interLATA carriers available for subscriber selection on a Central Office level.

2.1.9.2 Upon request, U S WEST shall provide to MCI_m a listing at the street address level of the service coverage area of each switch CLLI.

2.1.9.3 U S WEST shall provide to MCI_m a list of all Telecommunications Services features and functions, including new services, trial offers, and promotions, within thirty (30) days of the Effective Date of this Agreement and shall provide updates to such list as soon as new features and functions become available. Such detail shall also provide definitions and explanations of the features and functions available.

2.1.9.4 U S WEST shall provide to MCI_m, upon request, a list of all current or planned services and features technically available from each switch, by switch CLLI.

2.1.9.5 U S WEST shall provide to MCI_m, upon request, a listing of all technically available functionalities for Network Elements.

2.1.9.6 U S WEST shall provide MCI_m with a complete list of service order rejection scenarios and criteria.

2.1.10 Retention of Phone Numbers: U S WEST will allow existing U S WEST subscribers to retain their phone number in the event they change local exchange carriers.

2.1.11 Lifeline and Link-Up Service:

2.1.11.1 U S WEST will provide information about the certification process for the provisioning of Lifeline, Link-Up, and similar services. U S WEST will forward to MCI_m, in electronic format, all information regarding a customer's program eligibility, status and certification when a U S WEST customer currently on any U S WEST telephone assistance program changes service to MCI_m as their local exchange carrier.

2.1.11.2 U S WEST will cooperate in attaining any subsidy associated with a customer transfer to MCI_m.

2.1.12 Service Assurance Warranties and Incentives: U S WEST shall provide MCI_m and MCI_m's subscribers with service assurance warranties and incentives. Such warranties and incentives may take the form of cellular service vouchers in the case of held orders or some other form acceptable to MCI_m.

2.1.13 Non-discriminatory Training: All U S WEST employees or contractors who perform provisioning services for MCIIm subscribers shall be trained in non-discriminatory behavior and shall follow procedures, supplied by MCIIm, in all their communications with MCIIm subscribers. Such training shall conform to MCIIm specifications and shall comply with the branding requirements of this Agreement.

2.1.14 Availability of Network Capacity: U S WEST shall deploy and keep deployed network transport and switching facilities in all its serving areas as necessary to provide on a timely basis resale services and Network Elements U S WEST is required to offer to MCIIm pursuant to this Agreement.

2.1.15 Workcenter Interface Agreements: U S WEST and MCIIm shall in good faith negotiate and finalize interface agreements between their respective work centers detailing systems and processes for ordering and provisioning. In addition, a change control process will be established between the Parties. Such agreements shall be completed within ninety (90) days after the written request of either Party.

2.1.16 Incremental General Requirements for UNE:

2.1.16.1 U S WEST shall provide to MCIIm, upon request, all engineering design and layout information for Network Elements.

2.1.16.2 Combinations shall be identified and described by MCIIm so that they can be ordered and provisioned together and shall not require the enumeration of each Network Element within that Combination on each provisioning order. When ordered in combination, Network Elements which are interconnected and working shall remain interconnected and working; those which are not interconnected and working shall be made so by U S WEST.

2.1.16.3 U S WEST shall make engineering support available to MCIIm for all special services which are covered under an unbundled offer.

2.1.17 Escalation Process: U S WEST and MCIIm shall mutually develop escalation procedures to be followed if, in MCIIm's judgment, any performance standard defined in this Agreement is not met for any individual service order. The escalation procedures to be provided shall include names and telephone numbers of U S WEST management personnel who are responsible for service order issues and who will be contacted for a service order escalation.

2.1.18 Expedite Process: U S WEST and MCIIm shall mutually develop expedite procedures to be followed when MCIIm determines an expedite is required to meet subscriber service needs.

2.1.19 Customer Proprietary Network Information: U S WEST shall provide MCIIm with access to Customer Proprietary Network Information (CPNI) without requiring MCIIm to produce a signed Letter of Authorization (LOA), based on MCIIm's blanket representation that the customer has authorized MCIIm to obtain such CPNI.

Information shall be in a format which is acceptable to MCI_m at the line and/or trunk group level.

2.1.20 Fulfillment Process: MCI_m shall conduct all activities associated with the account fulfillment process for all MCI_m subscribers.

2.1.21 Service/Operation Readiness Testing

2.1.21.1 U S WEST and MCI_m shall jointly test the systems and processes used to provide local service. These tests shall be performed prior to provisioning local service, in order to establish system and process readiness capabilities. The testing shall include, but not be limited to: all interfaces between MCI_m and U S WEST work centers for Service Order, Provisioning, Maintenance, Billing and Customer Usage Data; the process for U S WEST to provide customer profiles; the installation scheduling process; network alarm reporting; telephone number assignment; procedures for communications and coordination between the MCI_m SPOC and the U S WEST SPOC; procedures for transmission of Customer Usage Data; and procedures for transmitting bills to MCI_m for local service.

2.1.21.2 The functionalities identified above shall be tested in order to determine whether U S WEST performance meets the applicable service parity requirements and other performance standards set forth herein. U S WEST shall make available sufficient technical staff to perform such testing. U S WEST technical staff shall be available to meet with MCI_m as necessary to facilitate testing. U S WEST and MCI_m shall mutually agree on the schedule for such testing.

2.1.21.3 At MCI_m's request, U S WEST shall provide to MCI_m any results of the testing performed pursuant to the terms of this Attachment. MCI_m may review such results and may notify U S WEST of any failures to meet the requirements of this Agreement.

2.1.21.4 During the term of this Agreement, U S WEST shall participate in cooperative testing requested by MCI_m whenever it is deemed necessary by MCI_m to ensure service performance, reliability and customer serviceability.

2.1.22 U S WEST interfaces shall provide MCI_m with the same process and system capabilities for both residence and business ordering and provisioning. MCI_m shall not be required to develop distinct processes or interfaces by class of service.

2.2 Service Order Process Requirements

2.2.1 Customer Profile:

2.2.1.1 U S WEST shall provide MCI_m with access to Customer Profile Information (CPI) without requiring MCI_m to produce a signed Letter of Authorization (LOA) subject to proof of authorization requirements contained

in this Agreement, based on MCIm's blanket representation that Customer has authorized MCIm to obtain such CPI.

2.2.1.1.1 CPI shall be in a mutually agreed to format at the line and/or trunk level. U S WEST shall provide to MCIm a real-time, electronic interface to U S WEST Customer information systems which will allow MCIm to obtain the Customer profile, including Customer name, billing address and service addresses, billed telephone number(s), and identification of features and services provided by U S WEST on the Customer accounts, and to obtain information on all features and services available in the end office where the Customer's services are currently provisioned. The preceding information may not include services deemed not to be Telecommunications Services by the Commission.

2.2.1.1.1 Until access is available via a real-time, electronic interface for CPI, U S WEST agrees that MCIm can obtain CPI in an interim mutually agreed to manner to facilitate the service order process.

2.2.2 Address Verification: U S WEST shall provide MCIm capability to verify subscribers address, including format.

2.2.3 Telephone Number Assignment: U S WEST shall provide MCIm the capability to assign telephone numbers while the subscriber is on the line with MCIm's representative.

2.2.4 Dispatch Required: U S WEST shall provide MCIm the capability to determine if dispatch is required to install service while the subscriber is on the line with MCIm's representative.

2.2.5 Dispatch and Installation Appointments: U S WEST shall provide MCIm the capability to schedule dispatch and installation appointments while the subscriber is on the line with MCIm's representative. The appointments shall be scheduled within a four (4) hour block of time, or equivalent to what U S WEST provides for its own subscribers if less than four (4) hours.

2.2.6 Service Availability Dates: U S WEST shall provide MCIm the capability to determine service availability dates while the subscriber is on the line with MCIm's representative.

2.2.7 Pending or Held Orders: U S WEST shall provide MCIm information regarding a subscribers previous pending or held orders. If the subscriber has a pending or held order, the status of the order shall not be negatively impacted as a result of the subscriber changing local service providers (i.e., due date for pending service changed to later date).

2.2.8 Special Construction: When U S WEST determines that special construction is required, U S WEST shall immediately notify MCIm of special construction requirements and charges, and obtain MCIm's authorization before beginning such construction.

2.2.9 Service Order: U S WEST shall provide MCI_m the capability to issue a service order for unbundled Network Elements, Combinations, and resale services.

2.2.10 PLOC Changes: U S WEST shall provide MCI_m the capability to transfer a customer with no feature changes to MCI_m through a streamlined PLOC (Primary Local Carrier) transfer process.

2.2.11 Soft Dial Tone: U S WEST shall provide MCI_m subscribers (and potential subscribers) with the ability to access and order MCI_m service through soft dial tone.

2.2.12 Escalation: U S WEST shall provide MCI_m the capability to escalate a service order.

2.2.13 Expedites: U S WEST shall provide MCI_m the capability to expedite a service order. Within two (2) business hours after a request from MCI_m for an expedited order, U S WEST shall notify MCI_m of U S WEST's confirmation to complete, or not complete, the order within the expedited interval.

2.2.14 Directory Listings: U S WEST shall provide MCI_m the capability to establish the appropriate directory listing for the subscriber.

2.2.15 911/E911: U S WEST shall provide MCI_m the capability to allow updates of the 911 and E911 database information for MCI_m customers with each new service order.

2.2.16 Status: U S WEST shall provide MCI_m status on a service order when the status of the order changes.

2.2.17 Blocking: U S WEST shall provide to MCI_m the functionality of blocking calls (e.g., 800, 900, 976 international calls) by line or trunk group.

2.2.18 Modifies: U S WEST shall provide MCI_m the capability to modify the service order any time after it has been issued.

2.2.19 Cancel: U S WEST shall provide MCI_m the capability to cancel the service order any time after it has been issued.

2.2.20 Coordinated Service Orders: U S WEST shall provide MCI_m the capability to relate coordinated services orders, and identify those service orders that require coordination with MCI_m, or its subscriber, or the subscriber's vendor. When so identified, U S WEST will follow any specific instructions indicated on the service order so that the subscriber's service is not negatively affected by the service turn-up activity.

2.2.21 Due Date:

2.2.21.1 U S WEST and MCI_m shall mutually agree on what services and circumstances are subject to a Desired Due Date process, and which services and circumstances are subject to Standard Intervals.

2.2.21.2 For the Desired Due Date process, MCI shall specify on each order the Desired Due Date (DDD). U S WEST will complete the ordered provisioning activity on the Desired Due Date. U S WEST shall not complete the order prior to the DDD or later than the DDD unless authorized by MCI.

2.2.21.3 For the Standard Interval process, U S WEST shall provide service within the intervals defined within this Agreement.

2.2.21.4 U S WEST shall provide MCI the capability to revise the due date after a service order has been issued, including instances where the revised date is earlier than the minimum defined interval. U S WEST will notify MCI within two (2) business hours after a request by MCI to revise the due date.

2.2.21.5 MCI shall be notified of any special or preferred scheduling options available, internally or externally to U S WEST, for ordering and provisioning services. These options shall be made available to MCI.

2.2.21.6 Subsequent to an initial order submission, MCI may request a new/revised due date that is earlier than the minimum defined interval, in which event expedite charges may apply.

2.2.22 Firm Order Confirmation (FOC):

2.2.22.1 U S WEST shall provide to MCI a Firm Order Confirmation (FOC) for each MCI service order. The FOC shall contain, but not be limited to, on a per line and/or trunk group basis, an enumeration of MCI's ordered unbundled Network Elements (and the specific U S WEST naming convention applied to that Network Element or Combination), features, functions, resale services, options, physical interconnection, quantity, order identifiers, information regarding the need for a service dispatch for installation, and U S WEST Committed Due Date for order completion. The FOC will be returned to MCI within four (4) business hours from U S WEST's receipt of local service request, or within a different interval mutually agreed upon by the Parties.

2.2.22.2 For a revised FOC, U S WEST shall provide order detail on a per line or per trunk group level as well as the order detail from the prior FOC. U S WEST shall submit to MCI a complete revised list of features, functions and services ordered.

2.2.23 Order Rejections

2.2.23.1 U S WEST shall provide immediate notification of Rejections/Errors contained in any of the data fields on the local service order. Before the order is rejected, U S WEST shall review the entire order for any other errors, and, in its reject notification, shall provide a complete list of all rejectable errors on the order. For those services subject to the Desired Due Date process, U S WEST shall not reject any orders on account of the Desired Due Date.

2.2.23.2 If any portion of a service order, as submitted by MCI, is not correct, U S WEST shall make all reasonable attempts to complete any portion of the work that can be completed, while awaiting correction of error conditions by MCI.

2.2.24 Jeopardy Situations: As soon as identified, U S WEST shall provide notification of any instances when U S WEST's Committed Due Dates are in jeopardy, appointments are missed, or any other delay or problem in completing work specified on MCI's service order is encountered, as reflected on the FOC. U S WEST shall concurrently indicate its new committed due date.

2.2.25 Service Suspensions/Restorations: Upon MCI's request through a Suspend/Restore service order, U S WEST shall suspend or restore the functionality of any Network Element, feature, function, or resale service. U S WEST shall provide restoration priority on a per Network Element, Combination or service basis in a manner that conforms with MCI requested priorities and any applicable regulatory rules and regulations or government requirements.

2.2.26 Coordinated Cut-overs:

2.2.26.1 For customer conversions requiring coordinated cut-over activities, on a per order basis, U S WEST and MCI shall agree on a scheduled conversion time, which shall be a designated two-hour time period within a designated date.

2.2.26.2 U S WEST shall coordinate activities of all U S WEST work groups involved with the coordinated cut-over. This coordination shall 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).

2.2.26.3 U S WEST shall notify MCI immediately upon completion of coordinated cut-over activity. Notification will not exceed one (1) hour following completion of the cut-over activity.

2.2.26.4 End user service interruptions related to cut over activity shall not exceed five (5) minutes.

2.2.27 Service Testing

2.2.27.1 U S WEST shall perform all pre-service testing prior to the completion of the order, including testing on local service facilities and switch translations. This switch testing shall include, but not be limited to, verification of features, functions, and services ordered by MCI. All test and turnup results will be provided by U S WEST as directed by MCI. The service order shall be considered complete only when all test criteria has been met and service has been accepted by MCI.

2.2.27.2 U S WEST shall participate in cooperative testing requested by MCI_m whenever it is deemed necessary by MCI_m to ensure service performance, reliability and customer serviceability. Within twenty-four (24) hours of MCI_m's request for scheduled cooperative testing, U S WEST shall perform said testing with MCI_m (including trouble shooting to isolate any problems) to test services subscribed to by MCI_m in order to identify any problems.

2.2.27.3 U S WEST shall provide MCI_m capability to perform MLT on MCI_m subscribers line. The results shall be provided within two (2) minutes of test completion.

2.2.28 Order Completion Requirements:

2.2.28.1 If U S WEST determines additional work or material is required that was not already authorized by MCI_m, U S WEST shall notify MCI_m to obtain authorization advance of performing the installation or other work. At that time, U S WEST shall provide MCI_m an estimate of additional labor hours and/or materials. After all installation or other work is completed, U S WEST shall immediately notify MCI_m of work completion and actual labor hours and/or materials used.

2.2.28.2 If a service order is partially completed, notification must identify the work that was done and the work remaining to be done in order to complete the service order.

2.2.28.3 If an MCI_m subscriber requests a service change at the time of installation while U S WEST is at the subscriber's premises, U S WEST shall direct the MCI_m subscriber to contact MCI_m to authorize additional work. If authorized, U S WEST shall then complete additional work prior to leaving the subscriber's premises.

2.2.28.4 If additional work is completed on a service order, as approved by MCI_m, the cost of the additional work must be reported immediately to MCI_m.

2.2.29 Order Completion Notification: Upon work completion, U S WEST shall submit to MCI_m a service order completion which details the work performed (including a list of features and functions installed), the date completed, and the charges associated with the order (up to a previously agreed upon limit associated with that order). Notification shall be provided within thirty (30) minutes after the subscriber's service is turned up.

2.2.30 Specific Unbundling Requirements:

2.2.30.1 MCI_m may order and U S WEST shall provision unbundled Network Elements either individually or in any combination on a single order. Network Elements ordered as combined shall be provisioned as combined by U S WEST unless MCI_m specifies that the Network Elements ordered in combination be provisioned separately.

2.2.30.2 Prior to providing service in a specific geographic area, or when MCIm requires a change of network configuration, MCIm may place an order with U S WEST requiring U S WEST to prepare Network Elements and switch translations in advance of orders for additional Network Elements from MCIm.

2.2.30.3 When MCIm orders Network Elements or Combinations that are currently interconnected and functional, such Network Elements and Combinations shall remain interconnected and functional without any disconnection or disruption of functionality. This shall be known as Contiguous Network Interconnection of Network Elements. There shall be no charge for such interconnection.

2.2.30.4 U S WEST shall provide MCIm the capability to order Network Elements either individually or in combinations. Combinations of Contiguous Network Elements can be ordered: (a) on a case-by-case basis for those Network Elements that are subscriber-specific; or (b) on a common-use basis for those Network Elements that are shared by multiple subscribers.

2.2.30.5 Network Elements shall be identified and ordered by MCIm so that they can be provisioned together. MCIm may specify the functionality of a Combination without the need to specify the configuration of the individual Network Elements needed to provide that functionality.

2.2.30.6 When ordering a Combination, MCIm shall have the option of ordering all features, functions and capabilities of each Network Element.

2.2.30.7 When MCIm orders Network Elements, U S WEST shall provision all features, functions, and capabilities of the Network Elements which include, but are not limited to: 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 U S WEST's subscribers, such as telephone number, white page listing, and dial tone. In addition, U S WEST shall provide all other features 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.

2.2.30.8 When MCIm orders Network Elements, U S WEST shall provide technical assistance to ensure compatibility between Network Elements.

2.2.30.9 MCIm and U S WEST shall agree upon the appropriate ordering and provisioning codes to be used for Network Elements per industry standards.

2.2.30.10 These ordering and provisioning codes shall apply to all aspects of the unbundling of that Network Element or Combination of Network Elements and shall be known as data Network Elements as defined by the Telecommunications Industry Forum ELECTRONIC Data Interchange Service Order Subcommittee (TCIF-EDI-SOSC).

2.2.31 Customer Premises Inspections and Installations

2.2.31.1 MCIm shall perform or contract for all needs assessments, including equipment and installation requirements, at the customer's premises.

2.2.31.2 U S WEST shall provide MCIm with the ability to schedule customer premises installations.

2.2.31.3 U S WEST shall provide extended demarcation beyond the NID, at MCIm's request, using intrabuilding riser and lateral beyond the NID.

2.3 Systems Interfaces and Information Exchanges

2.3.1 Electronic Interfaces:

2.3.1.1 U S WEST shall provide to MCIm real-time, electronic interface(s) for transferring and receiving information and executing transactions for all business functions directly or indirectly related to Service Ordering and Provisioning of Network Elements, features, functions and resale services. This electronic real-time interface(s) shall provide capability that allows MCIm personnel to perform all of the functions described in Section 2.2 of this Attachment 5. The interface(s) shall be developed/designed as a gateway to gateway interface for the transmission of data from MCIm to U S WEST, and from U S WEST to MCIm.

2.3.1.2 U S WEST shall develop with MCIm a mutually agreeable System Change Control process within ninety (90) days of the Effective Date of this Agreement. The System Change Control process will allow coordinated updates to system interfaces between U S WEST and MCIm based on existing and future industry standards.

2.3.1.3 MCIm to U S WEST real-time electronic interfaces and U S WEST provisioning systems/databases shall be on-line and operational twenty-four (24) hours a day, seven (7) days a week.

2.3.2 Interim Interfaces:

2.3.2.1 U S WEST and MCIm shall agree on and implement interim solutions for each interface within thirty (30) days after the Effective Date of this Agreement.

2.3.2.2 Interim interfaces or processes may be modified, if so agreed by MCIm and U S WEST, during the interim period.

2.3.2.3 Until the real-time, electronic interface is available, U S WEST agrees that the Local Carrier Service Center (LCSC) or similar function will accept MCIm orders. Orders will be transmitted to the LCSC via an interface or method agreed upon by MCIm and U S WEST.

2.3.2.4 U S WEST shall provide a real-time, electronic interface to perform all of the steps in the OBF-developed ordering and provisioning process by January 1, 1997. These steps include pre-order service inquiry, pre-order service inquiry response, firm order acknowledgment/rejection, firm order confirmation, delay notification, and completion notification.

2.3.2.5 Until such standards are completed, U S WEST and MCIIm agree to use an interim, mutually agreed upon order format and interface which will be defined and negotiated between the Parties no later than forty-five (45) days after the Effective Date of this Agreement.

2.4 Performance Measurements and Reporting

2.4.1 Within ninety (90) days of the Effective Date of this Agreement, the Parties shall develop mutually acceptable performance measurements and reporting processes.²

3. Connectivity Billing and Recording

This Section 3 describes the requirements for U S WEST to bill and record all charges MCIIm incurs for purchasing services under this Agreement.

3.1 Procedures

3.1.1 The Parties recognize that deviations and discrepancies may occur from the various industry standards and other standards referenced in this Agreement. Subject to such discrepancies and deviations, U S WEST shall comply with these various standards. Discrepancies and deviations will be documented and reviewed.

3.1.1.1 Within forty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which U S WEST will inform MCIIm of deviations from standards for billing. The Parties agree that they will negotiate discrepancies and deviations in good faith. Further, the Parties agree that those documented deviations from such standards documented by U S WEST to MCIIm shall supersede sections of technical standards applicable to such deviations referenced in this Agreement.

3.1.2 U S WEST shall record and bill in accordance with this Agreement those charges MCIIm incurs as a result of MCIIm purchasing from U S WEST services, as set forth in this Agreement (hereinafter "Connectivity Charges").

3.1.3 U S WEST shall format each bill for Connectivity Charges (hereinafter "Connectivity Bill") in accordance with the CRIS, CABS, or SECAB standard as appropriate to the services billed. In the event MCIIm desires a different or alternate standard, it may request such standard via the BFR process.³

² Agreed to by the parties on August 13, 1997, to comply with Mediator's Recommendations, pp. 7-9.

³ Mediator's Recommendations, p. 10.

3.1.4 Each service purchased by MCI shall be assigned a separate and unique billing code or identifier in the form agreed to by the Parties and such code or identifier shall be provided to MCI on each Connectivity Bill in which charges for such services appear. Each such billing code or identifier shall enable MCI to identify the service as purchased by MCI.

3.1.5 Each Connectivity Bill shall set forth the quantity and description of each such service provided and billed to MCI. All Connectivity Charges billed to MCI shall indicate the state from which such charges were incurred.

3.1.6 U S WEST shall bill MCI for each service supplied by U S WEST to MCI pursuant to this Agreement at the rates set forth in Attachment 1 to this Agreement.

3.1.7 U S WEST shall bill MCI for the Connectivity Charges incurred; provided however, that, for those usage-based Connectivity Charges where actual charge information is not determinable by U S WEST because the jurisdiction (i.e., interstate, interstate/interLATA, intrastate, intrastate/ intraLATA, local) of the traffic is unidentifiable, or for any other reason, the Parties shall jointly develop a process to determine the appropriate charges.

3.1.8 Measurement of usage-based Connectivity Charges shall be in actual conversation seconds. For Local Interconnection traffic provided under Attachments 3 and 4 of this Agreement, the total conversation time per chargeable traffic types shall be totaled for the entire monthly bill cycle, rounded to the next whole minute and then billed at the contract rate. For Resale services provided under Attachment 2 of this Agreement the total conversation time shall be measured in accordance with U S WEST's retail tariff and billed at the contract rate.

3.1.9 U S WEST shall provide to MCI, at no additional charge, a Single Point of Contact for handling any Connectivity Billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.

3.1.10 U S WEST shall provide a Single Point of Contact for the handling of any data exchange questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.

3.1.11 As soon as possible after the Effective Date of this Agreement, each Party shall provide the other Party written notice of which form of the monthly Connectivity Bill is to be deemed 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.

3.1.12 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.

3.1.13 When sending Connectivity Bills via electronic transmission, to avoid transmission failures or the receipt of Connectivity Billing information that cannot be processed, MCI shall provide U S WEST process specifications. U S WEST shall comply with mutually agreed upon processing specifications when U S WEST transmits Connectivity Billing data

to MCI. MCI shall provide to U S WEST notice if a Connectivity Billing transmission is received that does not meet mutually agreed upon MCI specifications. Faulty or failed transmissions shall be corrected and resubmitted to MCI, at U S WEST's sole expense.

3.1.14 U S WEST shall deliver to a location specified by MCI, billing information via Connect Direct, magnetic tape or paper, as agreed to by MCI and U S WEST. In the event of an emergency, system failure or other such condition which prevents U S WEST from transmitting via Connect Direct, U S WEST shall notify MCI of such difficulties within two (2) hours of detection. U S WEST shall deliver to, a location specified by MCI, billing information via magnetic tape or paper, as agreed to by MCI and U S WEST. The Parties acknowledge that all tapes transmitted to the other Party via U.S. Mail or overnight delivery service and which contain Connectivity Billing data shall not be returned to the sending party.

3.1.15 [Intentionally left blank for numbering consistency]

3.1.16 Billed amounts which are being reasonably disputed or reasonably queried, or for which reasonable claims have been filed are not due for payment until such disputes, claims or queries have been fully resolved by both MCI and U S WEST.

3.1.18 Bill Reconciliation

3.1.18.1 Each Party agrees to notify the other Party upon the discovery of a billing discrepancy ("Notice of Discrepancy").

3.1.18.2 In the event of such Notice of Discrepancy, the Parties shall endeavor to resolve the discrepancy within sixty (60) calendar days after the Notice of Discrepancy is issued using normal business procedures. If the discrepancy is disputed, resolution of such dispute is expected to occur at the first level of management resulting in a recommendation for settlement of the dispute and closure of a specific billing period.

3.1.18.3 Closure of a specific billing period shall occur by joint agreement of the Parties whereby the Parties agree that such billing period is closed to any further analysis and financial transactions, except those resulting from an Audit. Closure shall take place within nine (9) months of the Bill Date. The month being closed represents those Connectivity Charges that were billed or should have been billed by the applicable bill date.

3.1.18.4 If the dispute is not resolved within the allotted time frame, the following resolution procedure shall begin:

3.1.18.4.1 If the dispute is not resolved within sixty (60) days of the Notice of Discrepancy, the dispute shall be escalated to the second level of management for resolution.

3.1.18.4.2 If the dispute is not resolved within ninety (90) days of Notice of Discrepancy, the dispute shall be escalated to the third level of management for resolution.

3.1.18.4.3 If the dispute is not resolved within one hundred and twenty (120) days of the Notice of Discrepancy, the dispute shall be presumed settled in MCI favor,

or, upon the written request of U S WEST within such one hundred and twenty (120) day period, the dispute may be resolved pursuant to the dispute resolution procedures set forth in Section 27 of Part A of this Agreement.

3.1.19 U S WEST shall reimburse MCI_m for incorrect Connectivity Billing charges, including, without limitation, overcharges, services ordered or requested but not delivered, interrupted services, and services of poor quality and installation problems, if such problems caused by U S WEST. Such reimbursements shall be set forth in the appropriate section of the Connectivity Bill pursuant to appropriate standards.

3.1.20 The Parties agree to record call information in accordance with this Section 3.1. To the extent technically feasible, each Party shall record all call detail information associated with every call that one Party bills to the other Party. MCI_m may request, through the Bona Fide Request process the recording of call records and/or call detail information that is not currently recorded by U S WEST. These records shall be provided and retained pursuant to Section 5 of this Attachment.

3.1.21 When MCI_m collocates with U S WEST in U S WEST's facility as described in this Agreement, capital expenditures (e.g., costs associated with building the "cage"), shall not be included in the Connectivity Bill provided to MCI_m pursuant to this Attachment 5. 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 MCI_m for payment. All other non-capital recurring collocation expenses shall be billed to MCI_m in accordance with this Agreement. The CABS/SECABS Billing Output Specifications (BOS) documents provide the guidelines on how to bill the Connectivity Charges associated with collocation.

3.1.22 Local Number Portability

3.1.22.1 In accordance with the terms and conditions set forth in this Agreement, U S WEST shall record and provide to MCI_m all detail information associated with an alternately billed call to an MCI_m local exchange customer whose telephone number has been ported from U S WEST under INP as further described in this Agreement.

3.1.23 Meet Point Billing

3.1.23.1 MCI_m and U S WEST will establish meet-point billing (MPB) arrangements in accordance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as otherwise mutually agreed to by the Parties. 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 National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, in MECAB and in MECOD.

3.1.23.2 The Parties will agree on a meet point percentage to enable the joint provisioning and billing of Switched Access Services to third parties in conformance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents and referenced in U S WEST's Switched Access Tariffs. The Parties understand and agree that MPB arrangements are available and functional only to/from IXCs who directly connect with the tandem(s) that MCI_m sub-tends in each LATA.

3.1.23.3 The Parties will use reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff, sufficient to reflect this MPB arrangement, including MPB percentages.

3.1.23.4 MCI and U S WEST will implement the "Multiple Bill/Single Tariff" option in order to bill any interexchange carrier (IXC) for that portion of the network elements provided by MCI and U S WEST. For all traffic carried over the MPB arrangement, MCI and U S WEST shall bill IXCs for all applicable elements at the rates specified in their respective tariffs.

3.1.23.5 U S WEST shall provide to MCI the billing name, billing address, and carrier identification code (CIC) of the IXCs that may utilize any portion of MCI network in an MCI/U S WEST MPB arrangement in order to comply with the MPB notification process as outlined in the MECAB document. Such information shall be provided to MCI in the format and via the medium that the Parties agree. If U S WEST does not have a CIC for any IXC that will utilize a portion of MCI network in an MCI/U S WEST MPB arrangement, and for whom U S WEST must supply to MCI MPB billing information, then until such carrier has obtained a CIC, U S WEST will submit the LEC's CIC on those MPB records provided to MCI for MPB. U S WEST understands and agrees that it will be solely responsible for obtaining any reimbursements from such carriers who have utilized the jointly provided networks of U S WEST and MCI.

3.1.23.6 U S WEST and MCI agree that in an 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 residual interconnection charges (RIC) and common carrier line (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 in only entitled to bill the access tandem fee and any associated local transport charges. The Parties also agree that the party who provides the end office switching is entitled to bill end office switching fees, local transport charges, RIC and CCL charges, as appropriate, and such other applicable charges.

3.1.23.7 U S WEST and MCI will record and transmit MPB information in accordance with the standards and in the format set forth in this Attachment. U S WEST and MCI 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.

3.1.23.8 If MPB data is not processed and delivered by either U S WEST or MCI and sent to the other party within ten (10) calendar days of their recording and in turn such party is unable to bill the IXC for the appropriate charges, the party who failed to deliver the data will be held liable for the amount of the unbillable charges.

3.1.23.9 If MPB data is not submitted within ten (10) calendar days of the recording or is not in the proper format as set forth in this Attachment, and if, as a result, the other party is delayed in billing the IXC for the appropriate charges it incurs, the delaying party shall pay the other party a late MPB data delivery charge which will be the total amount of the

delayed charges times the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the date the MPB charges should have been received to and including the date the MPB charge information is actually received.

3.1.23.10 Errors in MPB data exchange by the Parties may be discovered by MCIIm, U S WEST or the billable IXC. Both MCIIm and U S WEST agree to provide the other party with notification of any discovered errors within two (2) Business Days of the discovery. The other party shall correct the error within eight (8) Business Days of notification and resubmit the data. In the event the errors cannot be corrected within the time period specified above, the erroneous data shall be considered lost. If MPB data is lost due to uncorrectable errors or otherwise, the Parties shall follow the procedures set forth in this Attachment and compensate the other for the lost MPB billing data.

3.1.23.11 In the event MCIIm purchases from U S WEST Network Elements, or Combination thereof, in a LATA other than the LATA to or from which the MPB services are homed and in which U S WEST operates an access tandem, U S WEST shall, except in instances of capacity limitations, permit and enable MCIIm to sub-tend the U S WEST access tandem switch(es) nearest to the MCIIm rating point(s) associated with the NPA-NXX(s) to/from which the MPB services are homed. In instances of capacity limitation at a given access tandem switch, MCIIm shall be allowed to subtend to the next nearest U S WEST 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.

3.2 Information Exchange and Interfaces

3.2.1 U S WEST shall provide MCIIm a monthly Connectivity Bill that includes all Connectivity Charges incurred by and credits and/or adjustments due to MCIIm for those services ordered, established, utilized, discontinued or performed pursuant to this Agreement. For each account, U S WEST shall issue one (1) bill per month and the billing cycle shall be on a calendar basis. Each Connectivity Bill provided by U S WEST to MCIIm shall include:

3.2.1.1 all non-usage sensitive charges incurred for the current bill period;

3.2.1.2 any known unbilled non-usage sensitive charges for prior periods;

3.2.1.3 usage sensitive charges for the current relevant bill period (from the last bill date and extending up to, and including, the current bill date);

3.2.1.4 any known unbilled usage sensitive charges for prior periods; and

3.2.1.5 any known unbilled adjustments.

3.2.2 [Intentionally left blank for numbering consistency]

3.2.3 The bill date must be present on each bill transmitted by U S WEST to MCIIm, must be a valid calendar date, and not more than ninety (90) days old. Connectivity Bills shall not be rendered for any Connectivity Charges which are incurred under this Agreement on or

before two hundred and seventy (270) days preceding the bill date, except as otherwise permitted by law.

3.2.4 On each bill where "Jurisdiction" is identified, local and local toll charges shall be identified as "Local" and not as interstate, interstate/interLATA, intrastate, or intrastate/intraLATA. U S WEST shall provide from and through dates for charges rendered on all Connectivity Bills.

3.2.5 U S WEST shall separately identify business charges from residence charges, as appropriate and shall assign a specific adjustment or reference number provided by MCI_m to each adjustment and credit included on the Connectivity Bill.

3.2.6 U S WEST and MCI_m shall issue all Connectivity Bills in accordance with the terms and conditions set forth in this Section 4. On Connectivity Bills U S WEST renders to MCI_m, Billing Account Numbers (BANs) shall be thirteen (13) character alpha/numeric and there shall only be one (1) BAN per State unless otherwise agreed to by the Parties. The Bill Date shall be the same day 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. The Parties shall provide one (1) Connectivity Billing invoice associated with each BAN. Each invoice must contain an invoice number, which will vary from month to month. On each bill associated with a BAN, the appropriate invoice number and the charges contained on such invoice must be reflected. All Connectivity 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 Part A of this Agreement), whichever is earlier. Any Connectivity 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 Connectivity Billing data and information within the time period specified above, then the payment due date will be extended by the number of days receipt has been delayed.

3.2.7 U S WEST shall issue all Connectivity Bills containing such billing data and information in accordance with the most current version of CRIS or CABS/SECABS published by Bellcore, or its successor, or such later versions as are adopted by Bellcore, or its successor, as appropriate to the services being billed. To the extent that there are no CRIS, CABS, or SECAB standards governing the formatting of certain data, such data shall be issued in the format mutually agreed to by U S WEST and MCI_m. In the event MCI_m desires a different or alternate standard, it may request such standard via the BFR process.⁴

3.2.8 As detailed in the MECAB document, MCI_m and U S WEST will exchange all information necessary to bill third parties for switched access services traffic jointly handled by MCI_m and U S WEST via the meet point arrangement in a timely fashion. Information shall be exchanged in Exchange Message Record ("EMR") format (Bellcore Standard BR 010-200-010, as amended) on magnetic tape or via a mutually acceptable electronic file transfer protocol. The Parties will exchange records pursuant to this paragraph without additional compensation.

⁴ Mediator's Recommendations, p. 10.

3.2.9 U S WEST and MCIIm agree that each Party shall transmit Connectivity Billing information and data in the appropriate CABS or SECAB format electronically via CONNECT DIRECT to the other Party at the location specified by such Party. MCIIm data centers will be responsible for originating the calls for data transmission. U S WEST shall transmit in accordance with the technical specifications set by MCIIm. MCIIm will supply to U S WEST its RACF ID and password before the first transmission of data via CONNECT DIRECT. Any changes to either Party's CONNECT DIRECT Node ID must be sent to the other Party no later than thirty (30) calendar days before the changes take effect.

3.2.10 In emergency situations, when tape transmittal has been used, U S WEST shall adhere to the tape packaging requirements set forth in this Agreement. Where magnetic tape shipping containers are transported in freight compartments, adequate magnetic field protection shall be provided by keeping a 6-inch distance from any magnetic field generating device (except a magnetron-tape device). U S WEST shall only use those shipping containers that contain internal insulation to prevent damage. U S WEST shall clearly mark on the outside of each shipping container its name, contact and return address. U S WEST shall not ship any Connectivity Billing tapes in unprotected tape canisters.

3.2.11 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 extended binary-coded decimal interchange code (EBCDIC). Each reel of tape must be one hundred percent (100%) tested at twenty percent (20%) or better "clipping" level with full width certification and permanent error free at final inspection. MCIIm reserves the right to destroy a tape that has been determined to have unrecoverable errors. MCIIm also reserves the right to replace a tape with one of equal or better quality.

3.2.12 The header record will be formatted in accordance with the appropriate IBM, CABS or EDI standards as mutually agreed upon by the Parties.

3.2.13 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 shall consist of the character "V" followed by the reporting location's four digit Originating Company Code and a numeric character chosen by the sending Party. The external and internal label shall be the same. The dataset name shall appear on the flat side of the reel and also in the "data set name field" on the first header record of the IBM standard tape label. U S WEST's name, address, and contact shall appear on the flat side of the cartridge or reel.

3.2.14 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.

3.2.15 U S WEST shall conform to the Standard Volume Label Format which will be mutually agreed upon by the Parties.

3.2.16 U S WEST shall use The IBM Standard Dataset Label Format which will be mutually agreed upon by the Parties.

3.2.17 U S WEST shall use test and production dataset format which will be mutually agreed upon for all Connectivity Bills.

3.3 Standards

3.3.1 At least thirty (30) calendar days prior to U S WEST sending MCI_m a mechanized bill for the first time via electronic transmission, U S WEST shall send to MCI_m Connectivity Bill data in the appropriate mechanized format (e.g., CABS or SECAB) for testing to ensure that bills can be processed and that bills comply with the requirements of this Attachment. After receipt of the test data from U S WEST, MCI_m will notify U S WEST if the connectivity billing transmission meets MCI_m testing specifications. If the transmission fails to meet the mutually agreed upon test and production dataset format, then, U S WEST shall make the necessary corrections within a mutually agreeable time frame. At least three (3) sets of testing data must meet MCI_m testing specifications prior to U S WEST sending MCI_m a mechanized production Connectivity Bill for the first time via electronic transmission or tape. Thereafter, U S WEST may begin sending MCI_m production Connectivity Bills via electronic transfer on the next bill date, or within ten (10) calendar days, whichever is later.

3.3.2 U S WEST shall also provide to MCI_m's designated point of contact, U S WEST's applicable operating company number ("OCN") at least thirty (30) days prior to testing and at least thirty (30) days prior to a change of OCN.

3.3.3 At least ninety (90) days prior to any change in existing formats or change to a different format, U S WEST shall send to MCI_m Connectivity 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. U S WEST agrees that it shall not send to MCI_m bill data in the new mechanized format until such bill data has met the testing specifications as set forth in this subsection.

3.3.4 During the testing period, in addition to CONNECT DIRECT, U S WEST shall also transmit to MCI_m Connectivity Billing data and information via paper or tape as specified by MCI_m. Test tapes shall be sent to an MCI_m specified location.

3.3.5 For Connectivity Bills issued in CABS or SECAB format, U S WEST agrees that if it transmits data to MCI_m in a mechanized format, U S WEST shall also comply with the following specifications which are not contained in CABS or SECAB guidelines but which are necessary for MCI_m to process Connectivity Billing information and data:

3.3.5.1 The bill date shall not contain spaces or non-numeric values.

3.3.5.2 Each Connectivity Bill must contain at least one (1) detail record.

3.3.5.3 Any "from" date should be less than or equal to the associated "thru" date and neither date can contain spaces.

3.3.5.4 The invoice number must not have embedded spaces or low values.

3.3.6 U S WEST agrees that in order to ensure the proper performance and integrity of the entire Connectivity Billing process, U S WEST shall be responsible and accountable for transmitting to MCI_m an accurate and current bill. U S WEST agrees to implement control

mechanisms and procedures to render a bill that accurately reflects the services ordered and used by MCI.

4. Provision Of Customer Usage Data

This Section 4 sets forth the terms and conditions for U S WEST's provision of Recorded Usage Data (as defined in this Attachment 5) to MCI and for information exchange regarding long distance billing.

4.1 Procedures

4.1.1 General

4.1.1.1 U S WEST shall comply with various industry, OBF, and other standards referred to throughout this Agreement. To satisfy these requirements, the Parties agree to a mutual interpretation of all standards referred to in this Section.

4.1.1.2 The Parties shall mutually agree to OBF standards and the additional standards outlined in this Agreement when recording and transmitting Usage Data.

4.1.1.3 As new standards are developed and adopted by industry, U S WEST and MCI shall negotiate mutually agreeable implementation of those standards.

4.1.1.4 U S WEST shall record all usage to be billed to MCI originating from, terminating to or billed to MCI Customers using U S WEST services ordered by MCI. Recorded Usage Data includes, but is not limited to, the following categories of information:

- Call attempts
- Completed calls
- Use of CLASS/LASS/custom Features
- Calls to information providers reached via U S WEST facilities and contracted by U S WEST
- Calls to directory assistance where U S WEST provides such service to an MCI customer
- Calls completed via U S WEST-provided Operator Services where U S WEST provides such service to MCI local service customer
- For U S WEST-provided Centrex Service, station level detail records shall include complete call detail and complete timing information

4.1.1.5 Retention of Records: U S WEST shall maintain a machine readable back-up copy of the message detail provided to MCI for a minimum of forty-five (45) calendar days. U S WEST shall provide any data back-up to MCI upon the request of MCI.

4.1.1.6 U S WEST shall provide to MCI Recorded Usage Data for MCI Customers only. U S WEST shall not submit other carrier local usage data as part of the MCI recorded usage data.

4.1.1.7 U S WEST shall not bill to MCI Customers any recurring or non-recurring charges for service provided by U S WEST to MCI except where explicitly permitted to do so within a written agreement between U S WEST and MCI.

4.1.1.8 The Parties shall record and rate all calls to information service providers (e.g., 976 service calls) and shall bill such calls directly the calling party's local service provider. In the event a Party's end-user disputes such a call, that Party may recourse consistent with the recourse arrangement the billing Party has with its information service provider.

4.1.1.9 U S WEST shall provide Recorded Usage Data to MCIIm billing locations as designated by MCIIm.

4.1.1.10 U S WEST shall establish a Interconnect Service Center (ISC) or similar function to serve as MCIIm's single point of contact to respond to MCIIm call usage, data error, and record transmission inquiries.

4.1.1.10.1 U S WEST shall provide MCIIm with a single point of contact and remote identifiers (IDs) for each sending location.

4.1.1.11 MCIIm shall provide a single point of contact responsible for receiving usage transmitted by U S WEST and receiving usage tapes from a courier service in the event of a facility outage.

4.1.1.12 U S WEST shall bill and MCIIm shall pay the charges for Recorded Usage Data. Billing and payment shall be in accordance with the applicable terms and conditions set forth in the Connectivity Billing and Recording Section of this Attachment 5.

4.1.1.13 Without waiver of, and in addition to the Audit and Examination rights set forth in Part A of this Agreement, upon reasonable notice and at reasonable times, a Party or its authorized representatives may examine the recording Party's AMA records which relate to perceived problems with the recordings of the usage data relating to the billed Party under this Attachment.

4.1.2 Charges

4.1.2.1 The Parties may charge fees for recording, rating or transmitting usage data. For the six (6) months following the initial recording, rating or transmitting of non-test usage data, the Parties shall not charge each other.

4.1.2.2 No charges shall be assessed for incomplete call attempts.

4.1.3 Central Clearinghouse & Settlement

4.1.3.1 U S WEST shall support and participate with MCIIm to develop a neutral third-party in and out-collect process developed for intra-region alternately billed messages.

4.1.3.2 U S WEST shall settle with MCIIm for both intra-region and inter-region billing exchanges of calling card, bill-to-third party, and collect calls, including settlement through the CMDS CATS system for inter-region billing.

4.1.4 Lost Data

4.1.4.1 Loss of Recorded Usage Data - MCIIm recorded usage data determined to have been lost, damaged or destroyed as a result of an error or omission by U S WEST in its

performance of the recording function shall, upon MCI's request, be recovered by U S WEST at no charge to MCI. In the event the data cannot be recovered by U S WEST, U S WEST shall estimate the messages and associated revenue, with assistance from MCI, based upon the method described below. This method shall be applied on a consistent basis, subject to modifications agreed to by U S WEST and MCI. This estimate shall be used to adjust amounts MCI owes U S WEST for services U S WEST provides in conjunction with the provision of recorded usage data.

4.1.4.2 Partial Loss - U S WEST 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 the estimated total for such day.

4.1.4.3 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, loss after receipt, degaussed before processing, receipt of a blank or unreadable tape, or lost for other causes, shall be reported.

4.1.4.4 Estimated Volumes - From message and minute volume reports for the entity experiencing the loss, U S WEST 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. U S WEST shall apply the appropriate average revenue per message ("ARPM") mutually agreed upon to the estimated message volume to arrive at the estimated lost revenue.

4.1.4.5 If the day of loss is not a holiday but one (1) (or more) of the preceding corresponding days is a holiday, U S West shall 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.

4.1.4.6 If the loss occurs on a weekday that is a holiday (except Christmas and Mother's Day), U S WEST shall use volumes from the two (2) preceding Sundays.

4.1.4.7 If the loss occurs on Mother's Day or Christmas, U S WEST shall use volumes from that day in the preceding year multiplied by a growth rate mutually agreed upon by the Parties.

4.1.4.8 MCI may also request data be provided that has previously been successfully provided by U S WEST to MCI. U S WEST shall re-provide such data, if available, at a charge mutually agreed to by the Parties.

4.1.5 Testing, Changes and Controls

4.1.5.1 The Recorded Usage Data, EMR format, content, and transmission process shall be tested as mutually agreed to by the Parties.

4.1.5.2 Interface Testing: The purpose of this test is to ensure that the usage records can be sent by U S WEST to MCI and can be accepted and processed by MCI. U S WEST

shall provide a test file to MCI_m designated Regional Processing Center (RPC) in the format that shall be used for live day-to-day processing. The file's test content and volume shall be mutually agreed to by the Parties. MCI_m shall review the file and verify that it conforms to its data center requirements. MCI_m shall notify U S WEST in writing whether the format is acceptable. MCI_m shall also provide U S WEST with the agreed-upon control reports as part of this test.

4.1.5.3 Operational Test: The purpose of this test is to ensure that volumes of usage in consecutive sequence can be extracted, distributed, and processed by U S WEST and MCI_m.

4.1.5.4 For testing purposes, U S WEST shall provide MCI_m with U S WEST recorded usage for a minimum of five (5) consecutive days. MCI_m shall provide U S WEST with the message validation reports associated with test usage.

4.1.5.5 Test File: Test data should be transported via CONNECT DIRECT whenever possible. In the event that courier service must be used to transport test media, the physical tape characteristics to be used are described in this Attachment.

4.1.5.6 Periodic Review: Control procedures for all usage transferred between U S WEST and MCI_m shall require periodic review. This review may be included as part of an annual Audit of U S WEST by MCI_m or as part of the normal production interface management function. Breakdowns which impact the flow of usage between U S WEST and MCI_m must be identified and jointly resolved as they occur. The resolution may include changes to control procedures, as similar problems would be avoided in the future. Any changes to control procedures shall be mutually agreed upon by MCI_m and U S WEST.

4.1.5.7 U S WEST Software Changes

4.1.5.7.1 When U S WEST plans to introduce any software changes which impact the format or content structure of the usage data feed to MCI_m, designated U S WEST personnel shall notify MCI_m no less than one hundred twenty (120) calendar days before such changes are implemented.

4.1.5.7.2 U S WEST shall communicate the projected changes to the appropriate groups in MCI_m so that potential impacts on MCI_m processing can be determined.

4.1.5.7.3 MCI_m personnel shall review the impact of the change on the entire control structure and the post conversion test plan, as described herein. MCI_m shall negotiate any perceived problems with U S WEST and shall arrange to have the data tested utilizing the modified software.

4.1.5.7.4 If it is necessary for U S WEST to request changes in the schedule, content or format of usage data transmitted to MCI_m, U S WEST shall notify MCI_m.

4.1.5.8 MCI_m Requested Changes

4.1.5.8.1 MCI_m may request changes in the schedule, content, format of the usage data transmitted from U S WEST, as deemed necessary by MCI_m.

4.1.5.8.2 When the negotiated changes are to be implemented, MCIm and/or U S WEST 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 U S WEST to MCIm and the methods of transmission for that data.

4.1.5.9 U S WEST System Change Description

4.1.5.9.1 For a U S WEST system change, U S WEST shall provide MCIm with an overall description of the change, stating the objective and a brief explanation of the reasons for the change.

4.1.5.9.2 During the initial negotiations regarding the change, U S WEST shall provide a list of the specific records and/or systems impacted by the change to designated MCIm personnel.

4.1.5.9.3 U S WEST 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 the changes and to design tests to verify the accuracy of the implementation.

4.1.5.10 Change Negotiations

4.1.5.10.1 MCIm shall be notified in writing of all proposed change negotiations initiated by U S WEST. In turn, MCIm shall notify U S WEST in writing of proposed change negotiations initiated by MCIm.

4.1.5.10.2 After formal notification of planned changes, whether originated by U S WEST or MCIm, designated MCIm personnel shall schedule negotiation meetings as required with designated U S WEST personnel. The first meeting should produce the overall change description (if not previously furnished) and the list of records and/or systems affected.

4.1.5.10.3 In subsequent meetings, U S WEST 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 U S WEST.

4.1.5.11 Changes to controls: MCIm may request changes to the control structure. The Parties shall mutually agree on the requested changes.

4.1.5.12 Verification Of Changes

4.1.5.12.1 Based on the detailed description of changes furnished by U S WEST, MCIm and U S WEST personnel shall:

- determine the type of change(s) to be implemented;
- develop a comprehensive test plan;
- negotiate scheduling and transfer of modified data with U S WEST;
- negotiate testing of modified data with the appropriate MCIm RPC;

negotiate processing of verified data through the MCIm billing system with the RPC;
arrange for review and verification of testing with appropriate MCIm groups; and
arrange for review of modified controls, if applicable.

4.1.5.13 Introduction of Changes:

4.1.5.13.1 When all the testing requirements have been met and the results reviewed and accepted, designated MCIm and U S WEST personnel shall:

negotiate an implementation schedule;
verify the existence of a contingency plan with the appropriate MCIm personnel;
arrange for the follow-up review of changes with appropriate MCIm personnel;
arrange for appropriate changes in control program, if applicable; and
arrange for long-term functional review of impact of changes on the MCIm billing system, i.e., accuracy, timeliness, and completeness.

4.2 Information Exchange and Interfaces

4.2.1 Core Billing Information

4.2.1.1 Recorded Usage Data includes all intraLATA toll and local usage. U S WEST shall provide MCIm with unrated EMR records associated with all intraLATA toll and local usage which it records on MCIm's behalf. Any category, group and/or record types approved in the future for U S WEST shall be included if they fall within the definition of Local Resale. MCIm shall be given notification thirty (30) days prior to implementation of a new type, category and/or record.

4.2.1.2 U S WEST shall provide rated EMR records only when explicit consent for sending such records has been obtained from MCIm.

4.2.1.3 All messages recorded by a Party and billed to the other Party are to be transmitted to the billed Party. Recorded usage includes all usage billable to the other Party.

4.2.1.4 Data Delivery Schedules: Data shall be delivered to MCIm by U S WEST daily (Monday through Friday, except holidays) unless otherwise negotiated by the Parties. MCIm and/or U S WEST Data Center holidays are excluded. U S WEST and MCIm shall exchange schedules of designated Data Center holidays.

4.2.2 Local Account Maintenance

4.2.2.1 When MCIm purchases local service from U S WEST, and, as appropriate, when MCIm purchases certain unbundled Network Elements, U S WEST shall provide MCIm with local account maintenance as described herein.

4.2.2.2 When notified by a CLEC that an MCIm customer has switched to CLEC's service, U S WEST shall provision the change and notify MCIm via CONNECT:Direct, within twenty-four (24) hours of the provisioning, that the customer has changed to another service provider ("OutPLOC").

4.2.2.3 When notified by MCI_m that a customer has changed its PIC only from one interexchange carrier to another, U S WEST shall provision the PIC only change.

4.2.2.4 If notified by an IXC using a '01' PIC order record that a MCI_m Customer has changed its PIC only, U S WEST shall reject the order and notify that IXC using an industry standard '3148' record with the operating company number of MCI_m indicated, that a '01' care PIC record should be sent to MCI_m for processing.

4.2.3 Product/Service Specific

4.2.3.1 Subject to conditions specified in Section 4.1.1(c) of this Attachment 5, U S WEST shall provide a Specialized Service/Service Provider Charge record to support the Special Features Star Services if these features are part of U S WEST's offering. Such record shall be an EMR 10-01-18 record or industry standard record as may subsequently be mutually agreed to by the Parties. Such record shall be a 10-01-18 record or Bellcore assigned record as may subsequently agreed to by the Parties.

4.2.4 Emergency Information

4.2.4.1 U S WEST shall provide the transport facility for transmitting usage and billing data between the U S WEST location and the MCI_m location. U S WEST shall transmit via CONNECT DIRECT whenever possible. In the event usage transfer cannot be accommodated by CONNECT DIRECT because of extended (one (1) business day or longer) facility outages, U S WEST shall contract for a courier service to transport the data via tape

4.2.4.2 The Parties shall mutually agree to the following standards when emergency data is transported to MCI_m on tape or cartridge via a courier. The data shall be in fixed or variable block format as mutually agreed to:

Tape: 9-track, 6250 (or 1600) BPI (Bytes per inch)
Cartridge: 38,000 BPI (Bytes per inch)
LRECL: 2,472 Bytes
Parity: Odd
Character Set: Extended Binary Coded Decimal Interchange Code (EBCDIC)
External labels: Exchange Carrier Name, Dataset Name (DSN) and volume serial number
Internal labels: IBM Industry OS labels shall be used. They consist of a single volume label and two sets of header and trailer labels.

4.2.4.2.1 To the extent the above standards are changed or revised, the Parties may agree to negotiate the incorporation of such new standards.

4.2.5 Rejected Recorded Usage Data

4.2.5.1 At the discretion of MCI_m, any messages that cannot be rated and/or billed by MCI_m may be returned to U S WEST via CONNECT DIRECT. Returned messages shall be sent directly to U S WEST in EMR format. Standard EMR return codes shall be utilized.

4.2.6 Interfaces

4.2.6.1 The Parties shall transmit formatted Recorded Usage Data via Connect Direct.

4.2.6.2 MCI shall notify U S WEST of resend requirements if a pack or entire dataset must be replaced due to pack rejection, damage in transit, dataset name failure, etc.

4.2.6.3 Critical edit failure on the Pack Header or Pack Trailer records shall result in pack rejection (e.g., detail record count not equal to grand total included in the pack trailer). Notification of pack rejection shall be made by MCI within one (1) business day of processing. Rejected packs shall be corrected by U S WEST and retransmitted to MCI within twenty-four (24) hours or within an alternate time frame negotiated on a case by case basis.

4.2.6.4 A pack shall contain a minimum of one (1) message record or a maximum of 9,999 message records plus a pack header record and a pack trailer record. A file transmission contains a maximum of 99 packs. A dataset shall contain a minimum of one (1) pack. U S WEST shall provide MCI one (1) dataset per sending location, with the agreed upon RAO/OCN populated in the Header and Trailer records.

4.2.7 Formats & Characteristics

4.2.7.1 Rated in collect messages should be transmitted via the CONNECT DIRECT and can be intermingled with the unrated messages. No special packing is needed.

4.2.7.2 EMR: U S WEST shall provide Recorded Usage Data in the EMR format and by category, group and record type, and shall be transmitted, via a direct feed, to MCI. The types of EMR records that MCI can expect to receive from U S WEST, includes, but is not limited to the following:

Header Record	20-21-01 or 20-20-01
Trailer Record	20-21-02 or 20-20-02
Detail Records *	01-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82, 10-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37
Credit Records	03-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Rated Credits	41-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Cancel Records	51-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Correction Records	71-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,

* Category 01 is utilized for Rated Messages; Category 10 is utilized for Unrated Messages. Category 10 records are to have indicator 13 populated with a value of 5.

4.2.7.2.1 To the extent the above standards are changed or revised, the Parties may agree to incorporate such new standards.

4.2.7.3 U S WEST shall comply with the most current version of Bellcore standard practice guidelines for formatting EMR records.

4.2.7.4 The Interfacing Bell RAO, OCN, and Remote Identifiers shall be used by MCI to control invoice sequencing and each shall have its own invoice controls. The OCN shall

also be used to determine where the message returns file, containing any misdirected and unguidable usage, shall be sent.

4.2.7.5 The file's Record Format (RECFM) shall be Variable Block or fixed as negotiated, Size and the Logical Record Length (LRECL) shall be as mutually agreed to by the Parties.

4.2.7.6 [Intentionally left blank for numbering consistency]

4.2.7.7 U S WEST shall transmit the usage to MCIm using dataset naming conventions mutually agreed upon by the Parties.

4.2.8 Controls

4.2.8.1 MCIm shall test and certify the CONNECT DIRECT interface to ensure the accurate receipt of Recorded Usage Data.

4.2.8.2 Header and trailer records shall be populated in positions 13-27 with the following information:

	Position	
13-14		Invoice numbers (1-99)
15-16		Bell Co. ID number
17-19		Interfacing Bell RAO Code
20-23		MCIm OCN - value 7229
24-27		Reseller OCN

The trailer grand total record count shall be populated with total records in pack (excluding header & trailer)

4.2.8.3 Control Reports: MCIm accepts input data provided by U S WEST in EMR format in accordance with the requirements and specifications detailed in this Attachment 5. In order to ensure the overall integrity of the usage being transmitted from U S WEST to MCIm, data transfer control reports shall be required. These reports shall be provided by MCIm to U S WEST on a daily or otherwise negotiated basis and reflect the results of the processing for each pack transmitted by U S WEST.

4.2.8.4 Control Reports - Distribution: Since U S WEST is not receiving control reports, dataset names shall be established during detailed negotiations.

4.2.8.5 Message Validation Reports: MCIm shall provide the following once per day (or as otherwise negotiated) Message Validation reports to the designated U S WEST System Control Coordinator. These reports shall be provided for all data received within U S WEST Local Resale Feed and shall be transmitted Monday through Friday.

4.2.8.6 Incollect Pack Processing: This report provides vital statistics and control totals for packs rejected and accepted and dropped messages. The information is provided in the following report formats and control levels:

U S WEST Name;
Reseller Total Messages processed in a pack;
Packs processed shall reflect the number of messages initially erred and accepted within a pack; and

Reseller Total Packs processed.

4.3 Standards

4.3.1 When requested for security purposes and on an exception basis when a reasonable need is demonstrated, a Party shall provide the other Party with Recorded Usage Data within two (2) hours of the call completion or within the same period that the recording Party would have that data for itself under similar circumstances. If not available in EMR format, the Recorded Usage Data may be provided in AMA format.

4.3.2 U S WEST shall include the Working Telephone Number (WTN) of the call originator on each EMR call record.

4.3.3 End user Customer usage records and station level detail records shall be in packs in accordance with EMR standards or applicable industry standards as defined in 4.3.1 of this Section.

4.3.4 U S WEST shall provide Recorded Usage Data once a day to MCIm on a schedule to be determined by the Parties, Monday through Friday excluding holidays. The Parties shall work together to reach agreement on an acceptable holiday schedule. U S WEST shall provide to MCIm the Recorded Usage Data not more than one business day after termination of the call for which usage data is to be provided.

4.3.5 U S WEST shall segregate and organize the Recorded Usage Data in accordance with 4.2.7 of this Section.

4.4 Performance Measurements and Reporting

4.4.1 **Within ninety (90) days of the Effective Date of this Agreement, the Parties shall develop mutually acceptable performance measurements and reporting processes.**⁵

Section 5. Maintenance⁶

5.1 General Requirements

5.1.1 U S WEST shall provide repair, maintenance, testing, and surveillance for all local services and unbundled Network Elements and Combinations in accordance with the terms and conditions of this Agreement.

5.1.1.1 U S WEST shall provide MCIm with the same level of maintenance support as U S WEST provides itself in accordance with standards and performance measurements that U S WEST uses and/or which are required by law, regulatory agency, or by U S WEST's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including,

⁵ Agreed to by the parties on August 13, 1997, to comply with Mediator's Recommendations, pp. 10-11.

⁶ Order, p. 61 at Issue 46.

but not limited to, such new architecture, equipment, facilities, and interfaces as U S WEST may deploy) that U S WEST provides to MCI_m under this Agreement.

5.1.1.2 U S WEST shall provide a SPOC (Single Point of Contact) for Residence, and a SPOC for Business for MCI_m to report via a toll free telephone maintenance issues and trouble reports twenty four (24) hours a day and seven (7) days a week. The SPOC Residence toll free number, and SPOC Business toll free number, will be the numbers for all of U S WEST's fourteen (14) states.

5.1.1.3 U S WEST shall provide MCI_m maintenance dispatch personnel on the same schedule that it provides its own Customers.

5.1.2 MCI_m shall handle all interaction with MCI_m Customers including all calls regarding service problems, scheduling of technician visits, and notifying the Customer of trouble status and resolution. When a U S WEST technician is on site, the customer will be statused in accordance with standard U S WEST procedures.

5.1.3 MCI_m and U S WEST will provide their respective customers with the correct telephone numbers to call for access to their respective repair bureaus.

5.1.4 Customers of MCI_m shall be instructed to report all cases of trouble to MCI_m. Customers of U S WEST shall be instructed to report all cases of trouble to U S WEST. MCI_m and U S WEST will provide their respective repair contact numbers to one another on a reciprocal basis.

5.1.5 U S WEST shall cooperate with MCI_m to meet maintenance standards for all Telecommunications Services, unbundled Network Elements and Combinations ordered under this Agreement. Such maintenance standards shall include, without limitation, standards for testing, network management, call gapping, and notification of upgrades as they become available.

5.1.6 All U S WEST employees or contractors who perform repair service for MCI_m subscribers shall be trained in non-discriminatory behavior, and shall follow procedures, supplied by MCI_m, in all their communications with MCI_m subscribers. At a minimum, these procedures and protocols shall ensure that: (a) U S WEST employees or contractors shall perform repair service that is at least equal in quality to that provided to U S WEST subscribers; and (b) trouble calls from MCI_m subscribers shall receive response time priority that is at least equal to that of U S WEST subscribers and shall be handled on a "first come first served" basis regardless of whether the subscriber is an MCI_m subscriber or a U S WEST subscriber.

5.1.7 In responding to repair calls, neither Party shall make disparaging remarks about each other, nor shall they use repair calls as the basis for internal referrals or to solicit customers to market services. Either Party may respond with accurate information in answering customer questions.

5.1.8 U S WEST shall perform scheduled maintenance, including, without limitation, required and recommended maintenance intervals and procedures, for all Telecommunications Services, Network Elements and Combinations provided to MCI_m under this Agreement equal in quality to that currently provided by U S WEST in the maintenance of its own network.

5.1.8.1 U S WEST shall exercise its best efforts to provide the designated MCI_m SPOC at least sixty (60) days' advance notice of any scheduled activity which will likely impact MCI_m customers.

5.1.8.2 Plans for scheduled maintenance shall include, at a minimum, the following information: location and type of facilities, specific work to be performed, date and time work is scheduled to commence, work schedule to be followed, date and time work is scheduled to be completed, and estimated number of work-hours for completion. Examples of such activities include, but are not limited to, office conversions, cable facility rolls, and tandem re-homes.

5.1.9 U S WEST shall exercise its best efforts to notify MCI_m of all non-scheduled activities to be performed by U S WEST on any Network Element, including, without limitation, any hardware, equipment, software, or system, providing service functionality which will likely impact MCI_m subscribers.

5.1.9.1 U S WEST shall provide to the designated SPOC maximum advance notice of such non-scheduled activities in the same time and manner that it provides to its operation service centers.

5.1.9.2 U S WEST shall provide emergency maintenance as promptly as possible to maintain or restore service and shall advise MCI_m promptly of any such actions it takes.

5.1.10 U S WEST shall provide MCI_m a detailed description of any and all emergency restoration plans and disaster recovery plans which are in place during the term of this Agreement. Such plans shall include, at a minimum, the following: (a) provisions for immediate notification to MCI_m of the existence, location, and source of any emergency network outage potentially affecting an MCI_m Customer; (b) establishment of a SPOC responsible for initiating and coordinating the restoration of all local services and Network Elements or Combinations; (c) methods and procedures to provide MCI_m with real-time access to information relating to the status of restoration efforts and problem resolution during the restoration process; (d) an inventory and description of mobile restoration equipment, by location; (e) methods and procedures for reprovisioning of all Telecommunications Services and Network Elements or Combinations after initial restoration, (f) equal priority, as between MCI_m Customers and U S WEST Customers, for restoration efforts, consistent with FCC Service Restoration guidelines, including, without limitation, deployment of repair personnel, and access to spare parts and components, and (g) a mutually agreeable process for escalation of maintenance problems, including a complete, up-to-date list of responsible contacts, each available twenty-four (24) hours per day, seven (7) days per week.

5.1.10.1 For purposes of this Section 6, an emergency network outage is defined as 5,000 or more blocked call attempts in a ten (10) minute period for all subscribers in a single exchange.

5.1.10.2 MCIm and U S WEST will work cooperatively to assess up chain (end office to tandem calls), down chain (tandem to end office calls), and overall customer impact. U S WEST categorizes, reports and reacts to network outages using FCC reporting criteria and U S WEST Abnormal Condition Report Criteria.

5.1.11 U S WEST and MCIm shall establish mutually acceptable methods and procedures for the immediate handling of misdirected calls from MCIm customers to U S WEST requesting repair. The Customer shall be informed that MCIm is its local service provider (LSP), and the U S WEST representative will provide the MCIm customer with the appropriate telephone number of the MCIm repair center. If the LSP screen indicator is not available, the U S WEST representative will ask the MCIm Customer if it knows the name of its LSP. The U S WEST representative will provide the MCIm Customer with the appropriate number of the MCIm repair center. These calls are limited to repair information only, and are not to be used for marketing purposes.

5.1.12 When electronic interface is available, U S WEST shall inform MCIm of repair completion and trouble reason within ten (10) minutes upon completion. If no electronic interface is available, MCIm will provide a SPOC for U S WEST to call as soon as possible after repair completion. U S WEST shall notify MCIm that the trouble has been cleared. This is done on a real-time basis. Therefore the technician will notify MCIm in a similar manner, for both dispatched-in and dispatched-out troubles. The report shall not be considered closed until such notification is made. MCIm will contact its Customer to determine if repairs were completed and confirm the trouble no longer exists.

5.1.13 U S WEST and MCIm shall mutually develop escalation procedures to be followed if, in MCIm's judgment, any performance standard defined in this Agreement is not met for any individual trouble report. The escalation procedures to be provided shall include names and telephone numbers of U S WEST management personnel who are responsible for maintenance issues and who will be contacted when a trouble condition is escalated.

5.1.14 In the event U S WEST fails to conform to any specified performance and service quality standards, MCIm may request, and U S WEST shall perform and deliver to MCIm, a root cause analysis of the reasons for U S WEST's failure to conform, and U S WEST shall correct said cause as soon as possible, at its own expense.

5.1.15 Dispatching of U S WEST technicians to MCIm subscriber premises shall be accomplished by U S WEST pursuant to a request received from MCIm. MCIm shall be able to schedule maintenance appointments in intervals at parity with U S WEST upon opening of a trouble report.

5.1.16 [Intentionally left blank for numbering consistency]

5.1.17 U S WEST shall supply MCIm with a unique number to identify each MCIm initial trouble report opened.

5.1.17.1 U S WEST and MCIm agree to a trouble priority and severity coding format for all trouble reports handled between the two companies. Troubles are prioritized according to appointment schedules:

5.1.17.1.1 Priority 1 = Out of Service

5.1.17.1.2 Priority 2 = Affecting Service

5.1.17.1.3 Priority 3 = Feature Trouble

5.1.17.2 Customer has the ability to escalate.

5.1.18 U S WEST shall provide for resale any maintenance/protection plans for services offered under this Agreement to MCIm that it offers U S WEST's own Customers.

5.1.19 U S WEST's current trouble reporting system does not provide the capability to reopen a closed trouble report. Therefore, U S WEST shall allow MCIm to designate that a trouble report is associated with the initial trouble report which was closed in the past twenty-four (24) hours without repairs being performed to the Customer's satisfaction. U S WEST shall measure the frequency of these types of repeated reports and will demonstrate non-discriminatory treatment to MCIm.

5.1.20 Additional Unbundling Requirements

5.1.20.1 When trouble is reported by a subscriber served through unbundled Network Elements, MCIm will test its network to identify and isolate any problems. If no problems are identified with the MCIm network, MCIm will open a trouble report with U S WEST. U S WEST shall then test its portion of the network and perform repairs as required in the time frames set forth in this Attachment.

5.1.20.1.1 If U S WEST tests the unbundled loop and no trouble found ("NTF"), the same shall be reported back to MCIm. If, upon testing the unbundled loop, the trouble is isolated to the Customer side of the NID (inside wire, CPE, etc.), MCIm shall be billed a trouble isolation charge ("TIC"). If, after MCIm has opened a trouble ticket, they cancel the trouble ticket before a U S WEST technician has been dispatched on the trouble, no charges will apply. If the U S WEST technician has been dispatched on the reported trouble before the trouble ticket is canceled by MCIm, a TIC will be applied.

5.1.20.1.2 MCIm will coordinate combined testing and/or repair activities until the trouble is resolved. U S WEST shall provide repair updates to MCIm. For trouble isolation, the Parties will cooperatively test to isolate the trouble as required.

5.2 Systems Interfaces and Information Exchanges⁷

5.2.1 U S WEST shall cooperate with MCI_m to establish real-time, electronic interface by MCI_m to U S WEST's maintenance systems and databases. This system shall be based on existing and future uniform industry standards being worked in T1M1 standards committee and Electronics Communications Implementation Committee ("ECIC") industry forum.

5.2.1.1 An electronic bond will be a system to system connection with immediate update capability. In no way shall this interface cause MCI_m personnel to use U S WEST systems via remote hook up or any other means of access.

5.2.1.2 This interface shall allow MCI_m personnel to perform the following functions for MCI_m Customers: (a) enter trouble reports in the U S WEST maintenance systems for an MCI_m Customer; (b) retrieve and track current status on all MCI_m Customer trouble report; (c) receive "estimated time to repair" (ETTR) on a real-time basis; (d) receive immediate notification in the event a repair person is unable to be present for, or anticipates missing, a scheduled repair appointment; (e) retrieve all time and material charges that apply to MCI_m at the time of ticket closure (itemized by time spent, price of materials used, procedures employed, amounts incurred in each such category, and total by Customer, per event; and (f) receive automated notification of case closure.

5.2.1.3 Automated interfaces must be provided into a centralized operations support systems database for real time network monitoring to proactively identify potential service degradation. Such systems must monitor and report on the integrity of the U S WEST network, isolate trouble, and where applicable (e.g., when an unbundled loop is connected to an unbundled port or when an unbundled loop includes such equipment as DCS, D4, etc.) initiate repair operations, test individual unbundled loops and generate maintenance and repair notices that impact any end user's ability to complete calls. Ongoing maintenance practices on such unbundled loops must be equal to or exceed the practices employed by U S WEST for facilities used to provide Services for Resale.

5.2.1.4 U S WEST agrees to develop and implement, as soon as possible with a target date of November 1, 1997 the electronic interfaces described above.

5.2.2 U S WEST agrees that MCI_m may report troubles directly to a single U S WEST Repair/Maintenance Center for both residential and business Customers. The Repair Center will have two separate numbers, one for residence and one for business. MCI_m's Customers will be treated in the same manner as U S WEST Customers.

⁷ Order at Issue 47.

5.2.3 U S WEST shall perform all testing for Resale Services. U S WEST shall provide the capability for MCIm to receive MLT test results while MCIm customer is on line during the initial trouble report when technically feasible in the U S WEST network.

5.2.3.1 U S WEST shall provide test results to MCIm, if appropriate, for trouble clearance. In all instances, U S WEST will provide MCIm with the disposition of the trouble.

5.2.4 U S WEST shall provide to MCIm the ability to obtain the status on open maintenance trouble reports via telephone or by another interface as agreed to by the Parties. U S WEST agrees to provide the status of residence and small business trouble reports upon MCIm request.

5.2.5 U S WEST agrees to provide to MCIm the status for open maintenance trouble reports for large business Customers anytime the status of the trouble report changes or upon MCIm's request.

5.2.6 U S WEST agrees that MCIm may call U S WEST to verify central office features and functions as they relate to an open trouble report. U S WEST agrees to work with MCIm on the initial trouble report to isolate the cause of the trouble and, where possible, resolve the feature/function related trouble at that time.

5.2.7 U S WEST agrees to proactively advise MCIm of any central office failure that is known at the time of any inquiry or trouble report. U S WEST agrees to continue to work with MCIm toward implementing a process to meet MCIm requirements for notification of switch failures as soon as possible.

5.2.8 U S WEST agrees to provide an Estimated Time To Repair (ETTR) on all residence and small business trouble reports.

5.2.9 U S WEST agrees to develop, with MCIm's cooperation, mutually acceptable workcenter interface agreements to document methods and procedures for interim and final interfaces for each service within (30) thirty days after MCIm's notice to U S WEST of its initiation of that service.

5.2.9.1 After the initial deployment of the workcenter processes, U S WEST agrees to continue working with MCIm to further develop, improve and refine the operational process described in this Agreement.

5.2.10 U S WEST agrees to provide MCIm with repair history of previous trouble reports on customer service of open trouble report.

5.2.11 U S WEST shall provide with the capability to cancel a trouble report.

5.2.12 U S WEST shall provide the capability to modify a trouble report.

5.3 Standards

5.3.1 Maintenance charges for premises visits by U S WEST employees or contractors shall be billed by MCI to its Customer.

5.3.1.1 U S WEST employees or contractors shall present the Customer with an MCI provided, MCI-branded form detailing the time spent, the materials used and an indication that the trouble has either been resolved, or that additional work will be necessary in accordance with the provisions of this Agreement.

5.3.1.2 If additional work is required, U S WEST employees or contractors shall call MCI from the Customer premises so that MCI can schedule a new appointment with U S WEST and Customer at the same time.

5.3.2 U S WEST agrees to work with MCI to support expeditious development of an industry standard trouble report entry format and agrees to implement such standard within sixty (60) days after final resolution by the Network Operation Forum (NOF).

5.4 Performance Measurements and Reporting

[Intentionally left blank for numbering consistency]

Section 6. Miscellaneous Services & Functions

6.1 Basic 911 and E911 General Requirements

6.1.1 Basic 911 and E911 provides a caller access to the appropriate emergency service bureau by dialing a 3-digit universal telephone number (911). Basic 911 and E911 access from Local Switching shall be provided to MCI in accordance with the following:

6.1.2 Each Party will be responsible for those portions of the 911 System for which it has reasonable control, including any necessary maintenance to each Party's portion of the 911 System.

6.1.3 E911 shall provide additional routing flexibility for 911 calls. E911 shall use Customer data, contained in the Automatic Location Identification/Data Management System ("ALI/DMS"), to determine to which Public Safety Answering Point (PSAP) to route the call.

6.1.4 If available in the U S WEST network, U S WEST shall offer a third type of 911 service, S911. All requirements for E911 also apply to S911 with the exception of the type of signaling used on the interconnection trunks from the local switch to the E911 Tandem.

6.1.5 Basic 911 and E911 functions provided to MCI shall be at least at parity with the support and services that U S WEST provides to its Customers for such similar functionality.

6.1.6 Basic 911 and E911 access from Local Switching shall be provided to MCI in accordance with the following:

6.1.6.1 U S WEST shall conform to all state regulations concerning emergency services.

6.1.6.2 For E911 provided to resold lines or in association with unbundled switching, U S WEST shall use its service order process to update and maintain Customer information in the ALI/DMS data base. Through this process, U S WEST shall provide and validate Customer information resident or entered into the ALI/DMS data base.

6.1.7 U S WEST shall provide for overflow 911 traffic consistent with U S WEST policy and procedure.

6.1.8 Basic 911 and E911 access from the MCIm local switch shall be provided to MCIm in accordance with the following:

6.1.8.1 If required by MCIm, U S WEST shall interconnect direct trunks from the MCIm network to the E911 Tandem for connection to the PSAP. Such trunks to the E911 Tandem may alternatively be provided by MCIm.

6.1.8.2 In government jurisdictions where U S WEST has obligations under existing agreements as the primary provider of the 911 System to the county, MCIm shall participate in the provision of the 911 System as follows:

(a) Each Party shall be responsible for those portions of the 911 System for which it has control, including any necessary maintenance to each Party's portion of the 911 System.

(b) U S WEST shall be responsible for maintaining the E-911 database.

6.1.8.3 If a third party is the primary service provider to a government agency, MCIm shall negotiate separately with such third party with regard to the provision of 911 service to the agency. All relations between such third party and MCIm are totally separate from this Agreement and U S WEST makes no representations on behalf of the third party.

6.1.8.4 If MCIm or an Affiliate is the primary service provider to a government agency, MCIm and U S WEST shall negotiate the specific provisions necessary for providing 911 service to the agency and shall include such provisions in an amendment to this Agreement.

6.1.8.5 Interconnection and database access shall be priced as specified in Attachment 1 to this Agreement or at any rate charged to other interconnected carriers, whichever is lower.

6.1.8.6 MCIm will separately negotiate with each county regarding the collection and reimbursement to the county of applicable Customer taxes for 911 service.

6.1.8.7 U S WEST shall comply with established, competitively neutral intervals for installation of facilities, including any collocation facilities, diversity requirements, etc.

6.1.8.8 In a resale situation, where it may be appropriate for U S WEST to update the ALI database, U S WEST shall update such database with MCIIm data in an interval no less than is experienced by U S WEST Customers, or than for other carriers, whichever is faster, at no additional cost.

6.1.9 The following are Basic 911 and E911 Database Requirements:

6.1.9.1 The ALI database shall be managed by U S WEST, but is the property of U S WEST and any participating telephone company and CLEC for those records provided by the company.

6.1.9.2 U S WEST, or its agent, will be responsible for maintaining the E-911 Data Base. U S WEST, or its agent, will provide a copy of the Master Street Address Guide ("MSAG"), and periodic updates, to MCIIm.

6.1.9.3 Copies of the MSAG shall be provided within twenty-one (21) calendar days from the time requested and shall be provided on diskette, magnetic tape, or in a format suitable for use with desktop computers.

6.1.9.4 MCIIm assumes all responsibility for the accuracy of the data that MCIIm provides to U S WEST for MSAG preparation and E-911 Database operation.

6.1.9.5 MCIIm shall be solely responsible for providing MCIIm database records to U S WEST for inclusion in U S WEST's ALI database on a timely basis.

6.1.9.6 MCIIm will provide end user data to the U S WEST ALI database that are Master Street Address Guide (MSAG) valid.

6.1.9.7 MCIIm will update its end user records provided to the U S WEST ALI database to agree with the 911 MSAG standards for its service areas.

6.1.9.8 U S WEST and MCIIm shall arrange for the automated input and periodic updating of the E911 database information related to MCIIm end users for resold lines in accordance with Section 10.1 of Attachment 2 to this Agreement. MCIIm may request, through the BFR process, similar arrangements for MCIIm customers served on a non-resale basis. U S WEST will furnish MCIIm any variations to NENA recommendations required for ALI database input. The cost of magnetic tape transfer shall be borne by MCIIm.

6.1.9.9 U S WEST and MCIIm shall arrange for the automated input and periodic updating of the E911 database information related to MCIIm end users. For resold services, U S WEST shall work cooperatively with MCIIm to ensure the accuracy of the data transfer by verifying it against the Master Street Address Guide (MSAG). For MCIIm's customers served by unbundled Network Elements or through MCIIm's own facilities, MCIIm shall ensure the accuracy of its 911 data by verifying it against the MSAG.

6.1.9.10 MCIIm shall assign an E911 database coordinator charged with the responsibility of forwarding MCIIm end user ALI record information to U S WEST or via a third-party entity, charged with the responsibility of ALI record transfer. MCIIm

assumes all responsibility for the accuracy of the data that MCIIm provides to U S WEST.

6.1.9.11 The Parties shall maintain a single point of contact to coordinate all E911 activities under this Agreement.

6.1.9.12 For resold services, MCIIm shall provide information on new Customers to U S WEST within one (1) Business Day of the order completion. U S WEST shall update the database within two (2) Business Days of receiving the data from MCIIm. If U S WEST detects an error in the MCIIm provided data, the data shall be returned to MCIIm within two (2) business days from when it was provided to U S WEST. MCIIm shall respond to requests from U S WEST to make corrections to database record errors by uploading corrected records within two (2) business days. Manual entry shall be allowed only in the event that the system is not functioning properly. MCIIm may request, through the BFR process, similar services from U S WEST for their customers who are served on a non-resale basis.

6.1.9.13 The Parties will cooperate to implement the adoption of a Carrier Code (NENA standard five-character field) on all ALI records received from MCIIm, when those standards, NENA-02-00N, are adopted by the industry standards process. U S WEST will furnish MCIIm any variations from NENA recommendations required for ALI database input. The Carrier Code will be used to identify the carrier of record in INP configurations.

6.1.9.14 MCIIm will provide end user data to the U S WEST ALI database utilizing NENA-02-001 Recommended Formats For Data Exchange, and Recommended Standard For Street Thoroughfare Abbreviations and Protocols For Data Exchange and Data Quality utilizing NENA Recommended Formats for Data Exchange document dated June 1993.

6.1.9.15 U S WEST shall identify which ALI databases cover which states, counties or parts thereof, and identify and communicate a point of contact for each.

6.1.9.16 U S WEST will provide MCIIm with the identification of the U S WEST 911 controlling office that serves each geographic area served by MCIIm.

6.1.9.17 U S WEST shall provide to MCIIm, for MCIIm Customers, E911/911 call routing to the appropriate Public Safety Answering Point ("PSAP") for resold lines. U S WEST shall provide and validate MCIIm Customer information to the PSAP in the same fashion as it does for its own Customers. U S WEST shall use its service order process to update and maintain, on the same schedule that it uses for its end users, the MCIIm Customer service information in the ALI/DMS used to support E911/911 services. MCIIm may request, through the BFR process, similar services from U S WEST for their customers who are served on a non-resale basis.

6.1.9.18 MCIIm exchanges to be included in U S WEST's E-911 Database will be indicated via written notice and will not require an amendment to this Agreement.

6.1.10 The following are Basic 911 and E911 Network Requirements:

6.1.10.1 U S WEST, at MCIIm option, shall provide a minimum of two (2) E911 trunks per jurisdictional area, or that quantity which will maintain P.01 transmission grade of service, or the level of service provided by U S WEST to itself, whichever is the higher grade of service. These trunks will be dedicated to routing 911 calls from MCIIm switch to a U S WEST E911 tandem.

6.1.10.2 U S WEST shall provide MCIIm a data link to the ALI/DMS database or permit MCIIm to provide its own data link to the ALI/DMS database. U S WEST shall provide error reports from the ALI/DMS database to MCIIm immediately after MCIIm inputs information into the ALI/DMS database. Alternately, MCIIm may utilize U S WEST or a third party entity to enter Customer information into the database on a demand basis, and validate Customer information on a demand basis.

6.1.10.3 U S WEST shall provide the selective routing of E911 calls received from MCIIm switching office. This includes the ability to receive the ANI of the MCIIm Customer, selectively route the call to the appropriate PSAP, and forward the Customer's ANI to the PSAP. U S WEST shall provide MCIIm with the appropriate CLLI codes and specifications regarding the tandem serving area associated addresses and meet points in the network.

6.1.10.4 Copies of E911 Tandem Boundary Maps shall be available to MCIIm. Each map shows the areas served by that E911 tandem. The map provides MCIIm the information necessary to set up its network to route E911 callers to the correct E911 tandem.

6.1.10.5 MCIIm shall ensure that its switch provides an eight-digit ANI consisting of an information digit and the seven-digit exchange code. MCIIm shall also ensure that its switch provides the line number of the calling station. In the event of a change in industry standards, the Parties shall cooperate to incorporate the changed standards in their respective networks.

6.1.10.6 Each ALI discrepancy report shall be jointly researched by U S WEST and MCIIm. Corrective action shall be taken immediately by the responsible party.

6.1.10.7 Technical specifications for E911 network interface are available through U S WEST technical publication 77338. Technical specifications for database loading and maintenance are available through the third party database manager -- SCC.

6.1.10.8 U S WEST shall begin restoration of E911 and/or E911 trunking facilities immediately upon notification of failure or outage. U S WEST must provide priority restoration of trunks or networks outages on the same terms/conditions it provides itself and without the imposition of Telecommunications Service Priority (TSP).

6.1.10.9 U S WEST shall identify any special operator-assisted calling requirements to support 911.

6.1.10.10 Trunking shall be arranged to minimize the likelihood of central office isolation due to cable cuts or other equipment failures. There will be an alternate means of transmitting a 911 call to a PSAP in the event of failures.

6.1.10.11 Circuits shall have interoffice, loop and carrier system diversity when such diversity can be achieved using existing facilities. Circuits will be divided as equally as possible across available carrier systems. Diversity will be maintained or upgraded to utilize the highest level of diversity available in the network.

6.1.10.12 Equipment and circuits used for 911 shall be monitored at all times. Monitoring of circuits shall be done to the individual circuit level. Monitoring shall be conducted by U S WEST for trunks between the tandem and all associated PSAPs.

6.1.10.13 Repair service shall begin immediately upon receipt of a report of a malfunction. Repair service includes testing and diagnostic service from a remote location, dispatch of or in-person visit(s) of personnel. Technicians will be dispatched without delay.

6.1.10.14 All 911 trunks must adhere to the Americans with Disabilities Act requirements.

6.1.10.15 The Parties will cooperate in the routing of 911 traffic in those instances where the ALI/ANI information is not available on a particular 911 call.

6.1.10.16 MCIIm is responsible for network management of its network components in compliance with the Network Reliability Council Recommendations and meeting the network standard of U S WEST for the 911 call delivery.

6.1.11 Basic 911 and E911 Additional Requirements

6.1.11.1 All MCIIm lines that have been ported via INP shall reach the correct PSAP when 911 is dialed. U S WEST shall send both the ported number and the MCIIm number (if both are received from MCIIm). The PSAP attendant shall see both numbers where the PSAP is using a standard ALI display screen and the PSAP extracts both numbers from the data that is sent.

6.1.11.2 U S WEST shall work with the appropriate government agency to provide MCIIm the ten-digit POTS number of each PSAP which sub-tends each U S WEST E-911 Tandem to which MCIIm is interconnected.

6.1.11.3 U S WEST will provide MCIIm with the ten-digit telephone numbers of each PSAP agency, for which U S WEST provides the 911 function, to be used by MCIIm operators for handling emergency calls in those instances where the MCIIm Customer dials "O" instead of "911."

6.1.11.4 MCIIm will provide U S WEST with the ten-digit telephone numbers of each PSAP agency, for which MCIIm provides the 911 function, to be used by U S WEST operators for handling emergency calls in those instances where the U S WEST Customer dials "O" instead of "911."

6.1.11.5 U S WEST shall notify MCIIm forty-eight (48) hours in advance of any scheduled testing or maintenance affecting MCIIm 911 service, and provide

notification as soon as possible of any unscheduled outage affecting MCI 911 service.

6.1.11.6 MCI shall be responsible for reporting all errors, defects and malfunctions to U S WEST. U S WEST shall provide MCI with the point of contact for reporting errors, defects, and malfunctions in the service and shall also provide escalation contacts.

6.1.11.7 MCI may enter into subcontracts with third parties, including MCI affiliates, for the performance of any of MCI duties and obligations stated herein.

6.1.11.8 U S WEST shall provide sufficient planning information regarding anticipated moves to SS7 signaling for the next twelve (12) months.

6.1.11.9 U S WEST shall provide notification of any pending tandem moves, NPA splits, or scheduled maintenance outages, with enough time to react.

6.1.11.10 U S WEST shall provide "reverse ALI" inquiries by public safety entities, consistent with U S WEST's practices and procedures.

6.1.11.11 U S WEST shall manage NPA splits by populating the ALI database with the appropriate new NPA codes, consistent with U S WEST's practices and procedures for resold services.

6.1.11.12 U S WEST must provide the ability for MCI to update 911 database with end user information for lines that have been ported via INP or NP.

6.1.11.13 The data in the ALI database shall be managed by U S WEST but is the property of U S WEST and all participating telephone companies.

6.1.12 Performance Criteria. E-911 Database accuracy shall be as set forth below:

6.1.12.1 Accuracy of ALI (Automatic Location Identification) data submitted by MCI to U S WEST will be measured jointly by the PSAPs and U S WEST. All such reports shall be forwarded to MCI by U S WEST and will indicate incidents when incorrect or no ALI data is displayed. A report regarding any inaccuracy shall be prepared by U S WEST.

6.1.12.2 Each discrepancy report will be jointly researched by U S WEST and MCI. Corrective action will be taken immediately by the responsible party.

6.1.12.3 Each party will be responsible for the accuracy of the Customer records it provides.

6.2 Directory Assistance Service

6.2.1 U S WEST shall provide for the routing of directory assistance calls (including but not limited to 411, 555-1212, NPA-555-1212) dialed by MCI Customers directly to either the MCI Directory Assistance service platform or U S WEST Directory Assistance service platform as specified by MCI.

6.2.2 MCI_m Customers shall be provided the capability by U S WEST to dial the same telephone numbers for access to MCI_m Directory Assistance that U S WEST Customers use to access U S WEST Directory Assistance.

6.2.3 U S WEST shall provide Directory Assistance functions and services to MCI_m for its Customers as described below until, at MCI_m's discretion, U S WEST routes calls to the MCI_m Directory Assistance Services platform.

6.2.3.1 U S WEST agrees to provide MCI_m Customers with the same Directory Assistance service available to U S WEST Customers.

6.2.3.2 U S WEST shall notify MCI_m in advance of any changes or enhancements to its Directory Assistance service, and shall make available such service enhancements on a non-discriminatory basis to MCI_m.

6.2.3.3 U S WEST shall provide Directory Assistance to MCI_m Customers in accordance with U S WEST's internal operating procedures and standards, which shall, at a minimum, comply with accepted professional and industry standards.

6.2.3.4 U S WEST shall provide MCI_m with the same level of support for the provisioning of Directory Assistance as U S WEST provides itself.

6.2.3.5 Service levels shall comply, at a minimum, with Commission requirements for Directory Assistance.

6.2.3.6 U S WEST agrees to maintain an adequate operator work force based on a review and analysis of actual call attempts and abandonment rate.

6.2.3.7 Subject to the applicable provisions of the applicable collective U S WEST bargaining agreements, MCI_m shall be permitted to participate in all call monitoring activities available to U S WEST and to remote call monitor as customarily practiced by the outsource customers of call centers.⁸

6.2.3.8 U S WEST shall provide the following minimum Directory Assistance capabilities to MCI_m Customers:

(a) A maximum of two (2) Customer listings and/or addresses or U S WEST parity per MCI_m Customer request.

(b) Name and address to MCI_m Customers upon request, except for unlisted numbers, in the same states where such information is provided to U S WEST Customers.

(c) For MCI_m customers who are served exclusively through resold U S WEST retail services, MCI_m may resell U S WEST's Directory Assistance call completion services to the extent U S WEST offers call Directory Assistance completion to its own end users. For MCI_m customers who are served from an

⁸ Mediator's Recommendations, p. 11.

MCIm switch, MCIm may request Directory Assistance call completion services through the BFR process. Such BFR process shall address the identification of the MCIm end user at the U S WEST Directory Assistance platform for purposes of routing and billing of intraLATA and interLATA toll calls.

(d) The U S WEST mechanized interface with the U S WEST subscriber listing database is not available for MCIm as of the Effective Date of this Agreement. When the mechanized interface is available, U S WEST will populate the Directory Assistance Database in the same manner and in the same time frame as for U S WEST Customers.

(e) Any information provided by a Directory Assistance Automatic Response Unit (ARU) shall be repeated the same number of times for MCIm Customers as for U S WEST Customers.

(f) When an MCIm Customer served on a resale or unbundled switching basis requests a U S WEST directory assistance operator to provide instant credit on a directory assistance call, the U S WEST directory assistance operator shall inform the MCIm Customer to call an 800 number for MCIm Customer service to request a credit. The accurate identification of MCIm as the customer's local service provider by the U S WEST directory assistance operator requires the use of separate MCIm trunks to the Directory Assistance Platform.

6.2.3.9 For resold lines and unbundled switching, U S WEST shall provide data regarding billable events as requested by MCIm.

6.2.3.10 U S WEST agrees to (a) provide to MCIm operators, on line access to U S WEST's directory assistance database equivalent to the access provided to U S WEST operators; (b) allow MCIm or an MCIm designated operator bureau to license U S WEST's subscriber listings database on terms and conditions equivalent to the terms and conditions upon which U S WEST utilizes such databases; and (c) in conjunction with branded or unbranded directory assistance services pursuant to Section 8 of this Part A, provide caller-optional directory assistance call completion service which is comparable in every way to the directory assistance call completion service U S WEST makes available to its own users. MCIm may, at its option, request U S WEST not to provide call completion services to MCIm.

6.2.3.11 In addition to charges for directory assistance, when call completion for an intraLATA toll call is requested, the applicable charge for the completion of such intraLATA toll call will apply.

6.3 Operator Services

6.3.1 U S WEST shall provide, for the routing of local Operator Services calls (including, but not limited to, 0+, 0-) dialed by MCIm Customers directly to either the MCIm operator service platform or U S WEST operator service platform as specified by MCIm

6.3.2 MCI_m Customers shall be provided the capability by U S WEST to dial the same telephone numbers to access MCI_m operator service that U S WEST Customers dial to access U S WEST operator service.

6.3.3 U S WEST shall provide Operator Services to MCI_m as described below until, at MCI_m's discretion, U S WEST routes calls to the MCI_m local Operator Services platform.

6.3.3.1 U S WEST agrees to provide MCI_m Customers the same Operator Services available to U S WEST Customers. U S WEST shall make available its service enhancements on a non-discriminatory basis.

6.3.3.2 U S WEST shall provide the following minimum Operator Service capabilities to MCI_m Customers:

(a) U S WEST shall complete 0+ and 0- dialed local calls, including O-Coin, Automatic Coin Telephone Service (ACTS) and the completion of coin calls, the collection of coins, and the provision of coin rates.

(b) U S WEST shall complete 0+ intraLATA and, when offered, interLATA toll calls. The Parties will cooperate to develop industry standards to include the end user's PIC in operator services signaling and the development of associated routing procedures.

(c) U S WEST shall complete calls for MCI_m's Customers that are billed to calling cards and other commercial cards on the same basis as provided to U S WEST own customers and MCI_m shall designate to U S WEST the acceptable types of special billing.

(d) U S WEST shall complete person-to-person calls.

(e) U S WEST shall complete collect calls.

(f) U S WEST shall provide the capability for callers to bill to a third party and complete such calls.

(g) U S WEST shall complete station-to-station calls.

(h) U S WEST shall process emergency calls.

(i) U S WEST shall process Busy Line Verify and Busy Line Interrupt requests.

(j) U S WEST shall process emergency call trace in accordance with its normal and customary procedures.

(k) U S WEST shall process operator-assisted directory assistance calls.

(l) U S WEST operators shall provide MCI_m Customers with long distance rate quotes to the extent U S WEST provides such rate quotes to its own end users. Based on technology available as of the Effective Date of this Agreement,

the provision of rate quotes to MCI_m Customers requires a separate MCI_m trunk group to the U S WEST operator services platform to identify the caller as an MCI_m Customer.

(m) U S WEST operators shall provide MCI_m Customers with time and charges to the extent U S WEST provides such time and charges to its own end users. Based on technology available as of the Effective Date of this Agreement, the provision of time and charges to MCI_m Customers requires a separate MCI_m trunk group to the U S WEST operator services platform to identify the caller as an MCI_m Customer.

(n) U S WEST shall route 0- traffic to a "live" operator team.

(o) When a MCI_m customer requests a U S WEST operator to provide instant credit on an operator services call, the U S WEST operator will record the request, similar to the way U S WEST records such requests for its own customers, and the request for credit shall be passed on to MCI_m through the AMA record. U S WEST will not credit the MCI_m account, except as may be provided by the Commission's service quality rules and regulations.⁹

(p) U S WEST shall provide caller assistance for the disabled in the same manner as provided to U S WEST Customers.

(q) When available to U S WEST end users, U S WEST shall provide operator-assisted conference calling to MCI_m.

6.3.3 U S WEST shall exercise at least the same level of fraud control in providing Operator Service to MCI_m that U S WEST provides for its own operator service, where the MCI_m fraud control data is in U S WEST's LIDB database.

6.3.4 U S WEST shall perform billed number screening when handling collect, third party, and calling card calls, both for station to station and person to person call types.

6.3.5 Subject to the applicable provisions of the applicable collective U S WEST bargaining agreements, MCI_m shall be permitted to participate in all call monitoring activities available to U S WEST and to remote call monitor as customarily practiced by the outsource customers of call centers.¹⁰

6.3.6 U S WEST shall direct Customer account and other similar inquiries to the Customer service center designated by MCI_m.

6.3.7 U S WEST shall provide an electronic feed of Customer call records in "EMR" format to MCI_m in accordance with the time schedule mutually agreed between the Parties.

⁹ Mediator's Recommendations, pp. 12-13.

¹⁰ Mediator's Recommendations, p. 11.

6.3.8 U S WEST shall update the Line Information Data Base ("LIDB") for MCI_m Customers. Additionally, U S WEST must provide access to LIDB for validation of collect, third party billed, and LEC card billed calls.

6.3.9 Where INP is deployed and when a BLV/BLI request for a ported number is directed to a U S WEST operator and the query is not successful (i.e., the request yields an abnormal result), MCI_m may request, through the BFR process, that the operator confirm whether the number has been ported and direct the request to the appropriate operator.

6.3.10 U S WEST shall allow MCI_m to order provisioning of Telephone Line Number ("TLN") calling cards and BNS, in its LIDB, for ported numbers, as specified by MCI_m. U S WEST shall continue to allow MCI_m access to its LIDB.

6.3.11 Toll and Assistance ("T/A") refers to functions Customers associate with the "O" operator. Subject to availability and capacity, access may be provided via operator services trunks purchased from U S WEST or provided by MCI_m via collocation arrangements to route calls to MCI_m's platform.

6.3.12 Automated Branding - ability to announce the carrier's name to the Customer during the introduction of the call.

6.3.13 Interconnection to the U S WEST Toll and Assistance Operator Services from an end office to U S WEST T/A is technically feasible at least at three (3) distinct points on the trunk side of the switch. The first connection point is an operator services trunk connected directly to the T/A host switch. The second connection point is an operator services trunk connected directly to a remote T/A switch. The third connection point is an operator services trunk connected to a remote access tandem with operator concentration capabilities.

6.3.14 All trunk interconnections will be digital.

6.3.15 The technical requirements of operator services type trunks and the circuits to connect the operator positions to the host are covered in the Operator Services Switching Generic Requirements ("OSSGR") Bellcore Document number FR-NWT-000271.

6.3.16 Busy Line Verify and Interrupt

6.3.16.1 At the request of MCI_m operators or Customers, U S WEST operators will perform Busy Line Verify ("BLV") and/or Busy Line Interrupt ("BLI") operations where such capacity exists.

6.3.16.2 When possible and where consistent with the service U S WEST provides to its own Customers and/or end users, U S WEST shall engineer its BLV/BLI facilities to accommodate the anticipated volume of BLV/BLI requests during the busy hour. MCI_m may, from time to time, provide its anticipated volume of BLV/BLI requests to U S WEST. In those instances when failures occur to significant portions of the BLV/BLI systems and databases and those systems and databases become unavailable, U S WEST shall promptly inform MCI_m.

6.3.16.3 BLV is performed when one Party's Customer requests assistance from the other Party's operator or operator bureau to determine if the called line is in use; provided, however, that the operator bureau will not complete the call for the Customer initiating the BLV inquiry. Only one (1) BLV attempt will be made per Customer operator bureau call, and a charge shall apply whether or not the called party releases the line.

6.3.16.4 BLI is performed when one Party's Customer requests assistance from the other Party's operator bureau to interrupt a telephone call in progress after BLV has occurred. The operator bureau will interrupt the busy line and inform the called party that there is a call waiting. The operator bureau will only interrupt the call and will not complete the telephone call of the Customer initiating the BLI request. The operator bureau will make only one (1) BLI attempt per Customer operator telephone call and the applicable charge applies whether or not the called party releases the line.

6.3.16.5 Each Party's operator bureau shall accept BLV and BLI inquiries from the operator bureau of the other Party in order to allow transparent provision of BLV/BLI traffic between the Parties' networks.

6.3.16.6 Each Party shall route BLV/BLI Traffic inquiries over direct trunks between the Parties' respective operator bureaus. Unless otherwise mutually agreed, the Parties shall configure BLV/BLI trunks over the Interconnection architecture defined in Attachment 4 to this Agreement.

6.4 Directory Assistance and Listings Service Requests

6.4.1 These requirements pertain to U S WEST's Directory Assistance and Listings Service Request process that enables MCI_m to (a) submit MCI_m Customer information for inclusion in U S WEST Directory Assistance and Directory Listings databases; (b) submit MCI_m Customer information for inclusion in published directories; and (c) provide MCI_m Customer delivery address information to enable U S WEST to fulfill directory distribution obligations.

6.4.1.2 U S WEST will accept the following Directory Listing Migration Orders from MCI_m, valid under all access methods, including but not limited to, Resale, Unbundled Network Elements and Facilities-Based, and will process the orders in a mechanized format:

(a) **Migrate with no Changes:** Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Transfer ownership and billing for listings to MCI_m.

(b) **Migrate with Additions:** Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Incorporate the specified additional listings order. Transfer ownership and billing for the listings to MCI_m.

(c) **Migrate with Deletions:** Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Delete the specified listings from the listing order. Transfer ownership and billing for the listings to MCI_m.

6.4.1.3 The Directory Listings Migration Options should not be tied to migration options specified for a related service order (if any) such that a service order specified as migration with changes may be submitted along with a directory listing order specified as migration with no changes.

6.4.1.4 U S WEST shall enable MCIIm to electronically transmit multi-line listing orders.

6.4.1.5 U S WEST agrees to work cooperatively with MCIIm to define specifications for, and implement a daily summary report of Directory Service Requests. The summary information will include but is not limited to the following information:

(a) White page listings text and format (name, address, phone, title, designation, extra line requirements)

(b) Listing Instruction codes

6.4.1.6 To ensure accurate order processing, U S WEST shall provide to MCIIm the following information, with updates within one (1) Business Day of change and via electronic exchange:

(a) A matrix of NXX to central office

(b) Geographical maps, if available, of U S WEST service area

(c) A description of calling areas covered by each directory, including but not limited to maps of calling areas and matrices depicting calling privileges within and between calling areas

(d) Listing format rules

(e) Listing alphabetizing rules

(f) Standard abbreviations acceptable for use in listings and addresses

(g) Titles and designations

6.4.1.7 Based on changes submitted by MCIIm, U S WEST shall update and maintain Directory Assistance and Directory Listings data for MCIIm Customers who:

(a) Disconnect Service

(b) Change carrier

(c) Install Service

(d) Change any service which affects Directory Assistance information

- (e) Specify Non-Solicitation
- (f) Are Non-Published, Non-Listed, or Listed

6.4.1.8 U S WEST shall not charge for storage of MCI_m Customer information in the Directory Assistance and Directory Listing systems.

6.4.1.9 MCI_m shall not charge for storage of U S WEST Customer information in the Directory Assistance and Directory Listing systems.

6.5 Directory Assistance Data

6.5.1 This Section refers to the residential, business, and government Customer records used by U S WEST to create and maintain databases for the provision of live or automated operator assisted Directory Assistance. Directory Assistance Data is information that enables telephone exchange carriers to swiftly and accurately respond to requests for directory information, including, but not limited to, name, address and phone numbers. Under the provisions of the Act and the FCC's Interconnection Order, U S WEST shall provide unbundled and non-discriminatory access to the residential, business and government Customer records used by U S WEST to create and maintain databases for the provision of live or automated operator assisted Directory Assistance.

6.5.2 U S WEST shall provide an initial load of Customer records and Customer list information to MCI_m, in a mutually-agreed-to format, via electronic transfer, within thirty (30) calendar days of the Effective Date of this Agreement. The initial load shall include all data resident in the U S WEST Databases and/or systems used by U S WEST for housing Directory Assistance data and/or Customer listing data. In addition, The initial load shall be current as of the prior Business Day on which the initial load is provided.

6.5.3 U S WEST shall provide MCI_m daily updates to the Customer records and Customer list information in a mutually-agreed-to format via electronic transfer.

6.5.4 U S WEST shall provide the ability for MCI_m to electronically query the U S WEST Directory Assistance Database and listings Database in a manner at least consistent with and equal to that which U S WEST provides to itself or any other Person.

6.5.5 U S WEST shall provide MCI_m a complete list of ILECs, CLECs, and independent telephone companies that provided data contained in the database.

6.5.6 On a daily basis, U S WEST shall provide updates (end user and mass) to the listing information via electronic data transfer. Updates shall be current as of one (1) Business Day prior to the date provided to MCI_m.

6.5.7 U S WEST shall provide MCI_m access to Directory Assistance support databases. For example, MCI_m requires access to Use Restriction information including but not limited to call completion.

6.5.8 Directory Assistance data shall specify whether the Customer is a residential, business, or government Customer.

6.5.9 Directory Assistance data shall be provided on the same terms, conditions, and rates that U S WEST provides such data to itself or other third parties.

6.5.10 U S WEST shall provide complete refresh of the Directory Assistance data upon request by MCIIm.

6.5.11 U S WEST and MCIIm will cooperate in the designation of a location at which the data will be provided.

7. Directory Listings

7.1 Directory Listings General Requirements

7.1.1 This Section 7 pertains to Directory Listings requirements for the appearance of MCIIm end user directory listings in directory assistance service or directory product.

7.1.2 U S WEST shall include in its master Directory Listing database all list information for MCIIm Customers.

7.1.3 U S WEST shall not sell or license, nor allow any third party, The use of MCIIm Customer Listings without the prior written consent of MCIIm. U S WEST shall not disclose nor allow any third party to disclose non-listed name or address information for any purpose other than what may be necessary to complete directory distribution.

7.1.4 MCIIm Customer listings in the U S WEST Directory Assistance database and directory listing database shall be co-mingled with listings of U S WEST and other CLEC Customers.

7.1.5 Each MCIIm Customer Primary Listing shall be provided, at no charge, The same white page listings that U S WEST provides its Customers.

7.1.6 Each MCIIm business Customer Primary Listing shall be provided, at no charge, The same yellow page classified courtesy listings that U S WEST provides its Customers.

7.1.7 U S WEST shall also ensure that its directory publisher publishes all types of listings for MCIIm Customers that are available to U S WEST Customers under the same terms, and conditions, including, but not limited to:

- (a) Foreign listings
- (b) Reference listings
- (c) Information listings
- (d) Alternate call listings
- (e) Multi-line listings
- (f) Multi-line/Multi-owner listings

7.1.8 MCIIm end user listings properly identified by MCIIm as State, Local, and Federal government listings shall be appropriately coded in the U S WEST Directory Listing database. U S WEST will provide government code information to MCIIm.

7.1.9 The listing and handling of MCIIm listed and non-listed telephone numbers shall be at least at parity with that provided by U S WEST to its own Customers, including MCIIm customers who have ported telephone numbers from U S WEST.

7.1.10 U S WEST shall ensure that its directory publisher publishes MCIIm sales, service, billing, and repair information for business and residential Customers, along with the MCIIm logo in the customer information/guide pages of each directory at no charge to MCIIm.

7.1.11 U S WEST is responsible for maintaining Listings, including entering, changing, correcting, rearranging and removing listings in accordance with MCIIm orders. Upon request, and at least one (1) month prior to a given white page directory close, a method of reviewing and correcting Listings will be provided.

7.1.12 For white pages and yellow pages advertising, U S WEST shall ensure that (a) U S WEST's directory publisher sell such advertising on a nondiscriminatory basis to MCIIm Customers, and (b) charges for such advertising will be billed by U S WEST's directory publisher in the same manner as it bills for U S WEST's customers' advertisements.¹¹

7.1.13 U S WEST will permit MCIIm Customers to place orders for Premium Listings and privacy listings. MCIIm will be charged for Premium Listings and privacy listings at U S WEST's general exchange tariff rates less the wholesale discount rate. The Premium and privacy listing charges will be billed to MCIIm and itemized at the telephone number sub-account level.

7.1.14 U S WEST shall ensure a third party distributes appropriate alphabetical and classified directories (white and yellow pages) and recycling services to MCIIm Customers at parity with U S WEST end users, including providing directories, a) upon establishment of new service; b) during annual mass distribution; and c) upon Customer request.

7.1.15 U S WEST shall ensure that its directory publisher prominently indicates on each directory cover that the directory contains the published subscriber listings for residential and business customers of all local exchange telephone companies in the territory the directory serves as of the closing date for publication of that directory.¹²

7.1.16 U S WEST will provide the option of having CENTREX users listed when MCIIm purchases CENTREX type services for resale.

7.2 Scope

7.2.1 MCIIm grants U S WEST a non-exclusive license to incorporate Listings information into its Directory Assistance database. MCIIm shall select one of two options for U S WEST's use of Listings and dissemination of Listings to third parties.

EITHER:

¹¹ Mediator's Recommendations, pp. 13-14.

¹² Mediator's Recommendations, p. 15.

- (a) Treat the same as U S WEST's end user listings - No prior authorization is needed for U S WEST to release Listings to directory publishers or other third parties. U S WEST will incorporate Listings information in all existing and future Directory Assistance applications developed by U S WEST. MCIIm authorizes U S WEST to sell and otherwise make Listings available to directory publishers. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.

OR:

- (b) Restrict to U S WEST's Directory Assistance services -- Prior authorization required from MCIIm for all other uses. MCIIm makes its own, separate agreements with U S WEST, third Parties and directory publishers for all uses of its listings beyond DA. U S WEST will sell or provide Listings to directory publishers (including U S WEST's publisher affiliate) or other third Parties only after the third party presents proof of MCIIm's authorization. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.
- (c) **U S WEST shall be entitled to retain all revenue associated with any sales pursuant to subparagraphs (a) and (b) above.¹³**

7.3 U S WEST will take reasonable steps in accordance with industry practices to accommodate non-published and non-listed Listings provided that MCIIm has supplied U S WEST the necessary privacy indicators on such Listings.

7.4 MCIIm Responsibilities

7.4.1 MCIIm agrees to provide to U S WEST its end user names, addresses and telephone numbers in a standard mechanized format, as utilized by U S WEST.

7.4.2 MCIIm will supply its ACNA/CIC or CLCC/OCN, as appropriate, with each order to provide U S WEST the means of identifying listings ownership.

7.4.3 MCIIm represents the end user information provided to U S WEST is accurate and correct. MCIIm further represents that it has reviewed all listings provided to U S WEST, including end user requested restrictions on use such as non-published and non-listed.

7.4.4 MCIIm is responsible for dealings with, and on behalf of, MCIIm's end users on the following subjects:

- a) All end user account activity, e.g., end user queries and complaints.
- b) All account maintenance activity, e.g., additions, changes, issuance of orders for Listings to U S WEST.
- c) Determining privacy requirements and accurately coding the privacy indicators for MCIIm's end user information. If end user information provided by MCIIm to U S WEST does not contain a privacy indicator, no privacy restrictions will apply.

¹³ Mediator's Recommendations, p. 14.

CERTIFICATE OF SERVICE
Docket No. UT-960310

I hereby certify that I have this 27th day of August, 1997, served a true and correct copy of the foregoing upon all parties of record in this proceeding via hand delivery, unless otherwise noted, to:

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Dated at Seattle, Washington, this 27th day of August 1997.



Carol Munnerlyn