

XDSL

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1. INTRODUCTION

- 1.1 This Appendix xDSL sets forth the terms and conditions that SBC MISSOURI will offer xDSL Loops and xDSL Subloops to MCI for MCI to use in conjunction with its desired xDSL technologies and equipment to provision xDSL services to its end user customers. The associated rates are set forth in Appendix Pricing of this Agreement.
- 1.2 Nothing in this Appendix xDSL shall constitute a waiver by either Party of any positions it may have taken or will take in any pending regulatory or judicial proceeding or any subsequent interconnection agreement negotiations. This Appendix xDSL also shall not constitute a concession or admission by either Party and shall not foreclose either Party from taking any position in the future in any forum addressing any of the matters set forth herein.
- 1.3 The recognized standards shall include but not be limited to American National Standards Institute (ANSI) standards and those developed within the International Telecommunications Union (ITU).
- 1.4 SBC MISSOURI shall provide MCI with the UNEs and reporting associated with UNEs, described in this Appendix xDSL in compliance with the performance standards set forth in Appendix Performance Measures of this Agreement and those set forth in CC Docket No. 96-98, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, FCC 99-238, (released November 5, 1999), Plan of Record for Pre-Ordering and Ordering of xDSL and other Advanced Services (Plan of Record or POR), the Uniform and Enhanced OSS POR (OSS POR) and any specific state commission or FCC rule, order, or mandated industry standard proceeding.

2. DEFINITIONS

- 2.1 "Actual Loop Length" for purposes of this Appendix refers to the total physical length of a copper loop as between the SBC MISSOURI Main Distribution Frame (MDF) and the terminal location serving the end-user customer, reported at parity with SBC's advanced services affiliate and other CLECs. Any additional length attributed to central office wiring, drop wiring, bridge tap, and inside wiring ("wiring") at the end-user customer's location is not included in the calculation of Actual Loop Length.
- 2.2 "Conditioning" as used herein shall refer to the removal by SBC MISSOURI of load coils, Excessive Bridged Tap, and/or repeaters on an xDSL Loop or Subloop.
- 2.3 "Continuity" shall be defined as a single, uninterrupted path along a circuit, from the Minimum Point of Entry (MPOE) or other demarcation point to the Point of Interface (POI) located on the horizontal side of the Main Distribution Frame (MDF) or its equivalent, which may include the Intermediate Distribution Frame (IDF).
- 2.4 "Excessive Bridged Tap" as used herein shall refer to bridged tap in excess of 2,500 feet in total length.
- 2.5 Intentionally Omitted.
- 2.6 "Non-standard xDSL-based Technology" is a loop technology that is not Presumed Acceptable for Deployment. Deployment of Non-standard xDSL-based Technologies are allowed as provided in this Appendix xDSL.

- 2.7 “Plan of Record” as used herein refers to SBC MISSOURI’s December 7, 1999 filing with the FCC, including any subsequent modifications or additions.
- 2.8 “Presumed Acceptable for Deployment” as used herein means an xDSL technology that complies with existing industry standards, has been successfully deployed by any carrier in any state without significantly degrading the performance of other services, or has been approved by the FCC, any state commission, or an industry standard body. Loop technologies Presumed Acceptable for Deployment include, but are not limited to those referenced in Attachment A.
- 2.9 * “Proof of Continuity” performed during Acceptance Testing shall be determined by performing a physical fault test, from the MPOE or other demarcation point to the POI located on the horizontal side of the MDF by providing a short across the circuit on the tip and ring, and registering whether it can be received at the far end. The loop will be tested to meet basic metallic loop parameters, pair balance, and electrical characteristics such as electrical conductivity and capacitive and resistive balance. This test will be referred to as “Proof of Continuity” or “Continuity Test.”
- 2.10 “xDSL Loop” means a Local Loop transmission facility between a distribution frame (or its equivalent) in SBC MISSOURI’s Central Office and the loop demarcation point at an end user customer premise. “xDSL Loop” includes two-wire and four-wire copper loops conditioned to transmit the digital signals needed to provide DSL services, regardless of whether the copper loops are in service or held as spares. The ‘x’ in xDSL is a placeholder for the various types of DSL services, including, but not limited to ADSL (Asymmetric Digital Subscriber Line), HDSL (High-bit rate Digital Subscriber Line), HDSL2 (high bit rate digital subscriber line 2-wire), IDSL (ISDN Digital Subscriber Line), SDSL (Symmetrical Digital Subscriber Line), UDSL (Universal Digital Subscriber Line), VDSL (Very High-Speed Digital Subscriber Line), RADSL (Rate-Adaptive Digital Subscriber Line), MVL (multiple virtual lines), and G.Lite.
- 2.11 “xDSL Subloop” is defined as any distribution portion of a copper xDSL Loop that is comprised entirely of copper wire or copper cable, that acts as a transmission facility between any distribution point of technically feasible access in SBC MISSOURI’s outside plant and the demarcation point at an end user customer’s premises, as more specifically addressed in the subloop provisions set forth elsewhere in this Agreement and subject to the collocation provisions applicable to this Agreement. A technically feasible point of access for purposes of an xDSL subloop is a point in the distribution portion of an xDSL Loop where an SBC MISSOURI technician can access the copper at a terminal in SBC CALIFORNIA’s/MISSOURI’s outside plant.

3. GENERAL TERMS AND CONDITIONS RELATING TO XDSL LOOPS

- 3.1 SBC MISSOURI agrees to provide xDSL Loops and Subloops for MCIm to deploy xDSL technologies Presumed Acceptable for Deployment or Non-standard xDSL Technology as defined in this Appendix xDSL. SBC MISSOURI will provision xDSL Loops and Subloops on a non-discriminatory basis and at a level at least equal in performance and quality with what it provides to itself, or to any of its affiliates in MISSOURI providing advanced services. SBC MISSOURI will not impose limitations on the transmission speeds of xDSL services; provided, however, SBC MISSOURI does not guarantee transmission speeds, available bandwidth nor imply any service level.
- 3.2 MCIm’s use of any SBC MISSOURI network element, or of its own equipment or facilities in conjunction with any SBC MISSOURI network element, will not materially interfere with or impair service over any facilities of SBC MISSOURI, or any of its affiliates in MISSOURI providing advanced services or connecting carriers involved in SBC MISSOURI services, cause damage to

SBC MISSOURI's plant, impair the privacy of any communications carried over SBC MISSOURI's facilities or create hazards to employees or the public. Upon reasonable written notice and after a reasonable opportunity to cure, SBC MISSOURI may discontinue or refuse service if MCIm violates this provision, provided that such termination of service will be limited to MCIm's use of the element(s) causing the violation. SBC MISSOURI will not disconnect the elements causing the violation if, after receipt of written notice and opportunity to cure, MCIm demonstrates that its use of the network element is not the cause of the network harm. If SBC MISSOURI does not believe MCIm has made the sufficient showing of harm, or if MCIm contests the basis for the disconnection, either Party must first submit the matter to dispute resolution as described in the General Terms and Conditions of this Agreement. Any claims of network harm by SBC MISSOURI must be supported with specific and verifiable supporting information.

- 3.3 SBC MISSOURI shall not impose its own standards for provisioning xDSL services, through Technical Publications or otherwise, until and unless approved by the Commission or the FCC prior to use. However, SBC MISSOURI will publish non-binding Technical Publications to communicate current standards and their application where required by Applicable Law.
- 3.4 Intentionally Omitted
- 3.5 The provision of xDSL services is subject to a variety of technical constraints, including loop length and the current design of the loop, which must be free of Excessive Bridged Taps, and loading coils. In addition, clear spectral compatibility standards and spectrum management rules and practices are necessary to ensure the quality, integrity, and reliability of SBC MISSOURI's network and its existing services.
- 3.6 To ensure spectral compatibility, industry standards bodies such as American National Standards Institute (ANSI) have developed or are in the process of developing Power Spectrum Density (PSD) mask standards to enable multiple technologies to coexist within binder groups. The Parties shall abide by the FCC and/or T1E1.4 spectral management rules and guidelines pertinent for the designated PSD mask type at all times.
- 3.7 Intentionally Omitted
- 3.8 Intentionally Omitted

4. XDSL LOOP OFFERINGS

- 4.1 xDSL Loops should be provisioned to meet basic electrical standards such as metallic conductivity and capacitive and resistance balance. Use of shielded cross connect cable for ADSL will be at the option of MCIm.
- 4.2 For each xDSL Loop described below, MCIm will at the time of ordering, notify SBC MISSOURI as to the Power Spectrum Density (PSD) mask of the technology that MCIm will deploy. If and when a change in PSD mask is made, MCIm will immediately notify SBC MISSOURI. Likewise, SBC MISSOURI will disclose to MCIm, upon request, information with respect to the number of xDSL Loops using advanced service technology within the binder and the type of technology employed on those loops. SBC MISSOURI will use the PSD provided by MCIm for the sole purpose of maintaining an inventory of advanced services present in the cable sheath. If the technology does not fit within a national standard PSD mask, MCIm shall provide SBC MISSOURI with a technical description of the technology including power masks for inventory purposes.

- 4.3 2-Wire xDSL Loop: A 2-wire xDSL Loop for purposes of this Appendix shall be defined as a copper loop over which MCI may provision various DSL technologies. A copper loop used for such purposes will meet basic electrical standards such as metallic connectivity and capacitive and resistive balance, and based upon industry standards, should not include load coils, mid-span repeaters or Excessive Bridged Tap. However, Conditioning on loops that are 12,000 feet in Actual Length or greater is optional, subject to Conditioning charges, and will be performed by SBC MISSOURI at MCI's request as more specifically provided herein below. The rates set forth in the Appendix Pricing shall apply to this 2-Wire xDSL Loop.
- 4.4 A 2-Wire Digital Loop for purposes of this section is 160Kbps and supports Basic Rate ISDN (BRI) digital exchange services. The terms and conditions for the 2-Wire Digital Loop are set forth in the Appendix UNE and the rates in the Appendix Pricing.
- 4.5 4-Wire xDSL Loop: A 4-wire xDSL Loop for purposes of this Appendix shall be defined as a copper loop over which MCI may provision various DSL technologies. A copper loop used for such purposes will meet basic electrical standards such as metallic connectivity and capacitive and resistive balance, and based upon industry standards, should not include load coils, mid-span repeaters or Excessive Bridged Tap. However, Conditioning on loops that are 12,000 feet in Actual Loop Length or greater is optional, subject to Conditioning charges, and will be performed by SBC MISSOURI at MCI's request as more specifically provided herein below. The rates set forth in the Appendix Pricing shall apply to this 4-Wire xDSL Loop.
- 4.6 IDSL Loop: An IDSL Loop for purposes of this Section is a 2-Wire Digital loop transmission facility which supports IDSL-based services. The terms and conditions for the 2-Wire Digital Loop are set forth in the Attachment UNE to this Agreement. This loop also includes additional acceptance testing to insure the IDSL technology is compatible with the underlying Digital Loop Carrier system if present. IDSL is not compatible with all Digital Loop Carrier Systems and therefore this offering may not be available in all areas. SBC MISSOURI has advised MCI, through the Accessible Letter or alternate process, which SBC MISSOURI central offices are IDSL-capable. The rates set forth in the Pricing Schedule shall apply to this IDSL Loop. MCI may order 2-Wire Digital ISDN Loops if available elsewhere in this Agreement.
- 4.7 xDSL Subloop: An xDSL Subloop for purposes of this Appendix is the distribution portion of an xDSL Loop, that is comprised entirely of copper wire or copper cable, that acts as a transmission facility between any distribution point of technically feasible access in SBC MISSOURI outside plant and the demarcation point at an end user customer premises, as more specifically defined above, over which MCI may provision DSL technologies. An xDSL Subloop will meet basic electrical standards such as metallic connectivity and capacitive and resistive balance, and based upon industry standards, should not include load coil(s), mid-span repeater(s) or Excessive Bridged Tap(s). However, Conditioning on an existing xDSL Subloop is optional and will be performed by SBC MISSOURI at MCI's request as more specifically provided herein below. The rates set forth in the Appendix Pricing shall apply to this xDSL Subloop.
- 4.7.1 The subloop and collocation provisions set forth elsewhere in this Agreement (e.g., the Appendix UNE and Appendix Collocation) will also apply to the xDSL Subloop. If there is any conflict between the provisions set forth in this Appendix as to the xDSL Subloop and the provisions set forth elsewhere in this Agreement specific to subloops, the subloop-specific language set forth elsewhere in this Agreement (e.g., the Appendix UNE), shall control.

5. LOOP TECHNOLOGY PRESUMED ACCEPTABLE FOR DEPLOYMENT

SBC MISSOURI shall not deny MCI's request to deploy any DSL technology that is Presumed Acceptable for Deployment by MCI, unless it has been demonstrated by SBC MISSOURI to the Commission in accordance with FCC orders that MCI's deployment of the specific DSL technology will significantly degrade the performance of other advanced services or traditional voice band services. For the purpose of this section, "significantly degrade" means to noticeably impair a service from a user's perspective as caused by technology. In the event that MCI wishes to introduce a new technology that does not conform to existing industry standards, and has not been approved by an industry standards body, the FCC, or a state commission, MCI shall provide documentation that demonstrates that its proposed deployment meets the threshold for presumption of acceptability. The documentation should include the date of approval or deployment, any limitations included in its deployment, and a sworn attestation that the deployment did not significantly degrade the performance of other services. In the event that MCI wishes to introduce a technology that has been approved by another state commission or the FCC, or successfully deployed elsewhere, MCI will provide documentation describing that action to SBC MISSOURI and the Commission before or at the time of its request to deploy such technology within SBC MISSOURI. The documentation should include the date of approval or deployment, any limitations included in its deployment, and a sworn attestation that the deployment did not significantly degrade the performance of other services. In the event that SBC MISSOURI rejects a request by MCI for provisioning of advanced services, SBC MISSOURI will disclose to MCI information with respect to the number of loops using advanced services technology within the binder and type of technology deployed on those loops, including the specific reason for the denial, within three to five (3-5) days of the denial.

5.1 If an xDSL Loop technology is successfully deployed without significant degradation for twelve (12) months, or industry standards for the technology are established, whichever occurs first, the Parties will consider the technology to be Presumed Acceptable for Deployment and treated accordingly. If there is dispute as to the successful deployment of the technology, either Party may submit the dispute for resolution under the Dispute Resolution procedures set forth in this Agreement.

5.1.1 Intentionally Omitted.

5.1.2 If MCI can demonstrate to the Commission that the loop technology will not significantly degrade the performance of other advanced services or traditional voice band services, SBC MISSOURI will not deny MCI's right to deploy new loop technologies that do not conform to the industry standards and have not yet been approved by a standards body (or otherwise authorized by the FCC, any state Commission or which have not been successfully deployed by any carrier without significantly degrading the performance of other services).

5.2 If it is demonstrated that the new xDSL technology will not significantly degrade the other advanced services or traditional voice based services, SBC MISSOURI will provide a loop to support the new technology for MCI as follows:

5.2.1 If the technology requires the use of a 2-Wire or 4-Wire xDSL Loop that meets the engineering design criteria of a 2-Wire or 4-Wire xDSL Loop already provisioned by SBC MISSOURI, then SBC MISSOURI will provide MCI an xDSL Loop capable of supporting the new xDSL technology at the same rates listed for the appropriate 2-Wire and 4-Wire xDSL Loops and associated Loop Conditioning as needed.

5.2.2 In the event that an xDSL technology requires a loop type that differs from the engineering design criteria of a 2-Wire or 4-Wire xDSL Loop already provisioned by SBC MISSOURI,

the Parties shall expend diligent efforts to arrive at an agreement as to the rates, terms and conditions for an unbundled loop capable of supporting the proposed xDSL technology and infrastructure. If negotiations fail, any dispute between the Parties concerning the rates, terms and conditions for an unbundled loop capable of supporting the proposed xDSL technology shall be resolved pursuant to the dispute resolution process.

- 5.3 If a Party claims that a service is significantly degrading the performance of other advanced services or traditional voice band services, then that Party must notify the other Party and allow the other Party a reasonable opportunity to correct the problem. Any claims of network harm must be supported with specific and verifiable supporting information. In the event that a Party demonstrates to the Commission that a deployed technology is significantly degrading the performance of other advanced services or traditional voice band services, the other Party shall discontinue deployment of that technology and migrate its customers to technologies that will not significantly degrade the performance of other such services.

6. PROVISIONING

- 6.1 SBC MISSOURI will not guarantee that the xDSL loop(s) ordered will perform as desired by MCIm for xDSL-based services, but will guarantee, at the time of installation, basic metallic loop parameters, including continuity and pair balance. For loops under 12,000 feet in Actual Loop Length, SBC MISSOURI will remove load coils, repeaters, and/or Excessive Bridged Taps at no charge to MCIm. Provisioning shall include Conditioning for xDSL loops less than 12,000 feet in Actual Loop Length and any Conditioning requested by MCIm for loops 12,000 feet in Actual Loop Length or greater.
- 6.2 *SBC MISSOURI shall provide Acceptance and Cooperative Testing as outlined in Section 9 of this Appendix xDSL.
- 6.3 MCIm shall designate, at MCIm's sole option, what Conditioning SBC MISSOURI is to perform in provisioning the xDSL loop(s) and subloop(s) on the loop order. Conditioning may be ordered on loop(s) and subloop(s) of any length at the Conditioning rates set forth in the Appendix Pricing. The loop and subloop will be provisioned to meet the basic metallic and electrical characteristics such as electrical conductivity and capacitance and resistive balance. The provisioning intervals are applicable to every xDSL loop regardless of the loop length. The Parties will meet to negotiate and agree upon subloop provisioning intervals.
- 6.4 The provisioning and installation interval for xDSL-capable loops where no Conditioning is requested (including outside plant rearrangements that involve moving a working service to an alternate pair as the only possible solution to provide a DSL Loop) on orders for 1-20 loops per order or per end user customer location, will be three to five (3-5) business days, or the provisioning and installation interval applicable to SBC MISSOURI's tariffed xDSL-based services, or any of its affiliates in MISSOURI providing advanced services, whichever is shorter.
- 6.5 The provisioning and installation intervals for xDSL Loops, where Conditioning is requested or outside plant rearrangements are necessary, as defined above, on orders for 1-20 loops per order or per end user customer location, will be ten (10) business days, or the provisioning and installation interval applicable to (i) SBC MISSOURI's tariffed xDSL-based services or; (ii) any of its affiliates in MISSOURI providing advanced services xDSL-based services where Conditioning is required, whichever is shorter.

- 6.6 Orders for more than 20 xDSL Loops per order or per end user customer location, where no Conditioning is requested will have a provisioning and installation interval of ten (10) business days, or as agreed upon by the Parties. In the event MCIm's end user customer require Conditioning during non-working hours, the due date may be adjusted consistent with end user customer release of circuit and out-of-hours charges may apply at the rates referenced in Section 9.4.2 below.
- 6.7 Orders for more than 20 xDSL Loops per order which require Conditioning will have a provisioning and installation interval agreed by the Parties in each instance.
- 6.8 Subsequent to the initial order for an xDSL Loop or xDSL Subloop, additional Conditioning may be requested on such loop(s) at the rates set forth in the Appendix Pricing and the applicable service order charges will apply; provided, however, when requests to add or modify Conditioning are received for a pending xDSL Loop(s) order, no additional service order charges shall be assessed, but the due date may be adjusted if necessary to meet standard offered provisioning intervals. The provisioning interval for additional requests for Conditioning pursuant to this subsection will be the same as set forth above.
- 6.9 MCIm, at its sole option, may request shielded cabling between network elements and frames within the central office for use with 2-wire xDSL Loop when used to provision ADSL over a DSL Loop provided for herein at the rates set forth in the Appendix Pricing. Tight Twist cross-connect wire will be used on all identified DSL services on all central office frames.

7. MAINTENANCE

- 7.1 On xDSL Loops where MCIm has requested that no Conditioning be performed, SBC MISSOURI's maintenance will be limited to verifying loop suitability based on POTS design criteria. For xDSL Loops having had partial or extensive Conditioning performed at MCIm's request, SBC MISSOURI will verify continuity, the completion of all requested Conditioning, and will repair at no charge to MCIm any gross defects which would be unacceptable based on current POTS design criteria and which do not result from the loop's modified design. For xDSL Loops under 12,000 feet in Actual Loop Length, SBC MISSOURI will remove load coils, repeaters, and Excessive Bridged Taps at no charge to MCIm.
- 7.2 SBC MISSOURI shall provide, on a nondiscriminatory basis, physical loop test access points to MCIm through a cross-connection to MCIm's collocation space, for the purpose of testing, maintaining, and repairing copper xDSL Loops and copper xDSL Subloops.
- 7.3 SBC MISSOURI and MCIm agree to coordinate in good faith any testing, repair and maintenance that will significantly impact service provided by the other Party. If trouble occurs with unbundled Network Elements provided by SBC MISSOURI, MCIm will first determine whether the trouble is in MCIm's own equipment and/or facilities or those of the end user customer. If MCIm determines the trouble is in SBC MISSOURI's equipment and/or facilities, MCIm will issue a trouble ticket to SBC MISSOURI.

- 7.4 A Party shall pay Time and Material Charges (maintenance of service charges/additional labor charges) when it reports a failure of an unbundled Network Element and the other Party dispatches personnel to the end user customer's premises or a Central Office and to the extent that the trouble was not caused by the other Party's facilities or equipment. *Time and Material Charges will include all technicians dispatched, including technicians dispatched to other locations for purposes of testing. Rates of Time and Material charges will be billed at amounts equal to those referenced in FCC No. 73, Section 13.4.4.
- 7.5 Intentionally Omitted.
- 7.6 Repair Intervals: SBC MISSOURI will provide resolution of MCIm-referred trouble tickets for xDSL Loops at parity with the interval SBC MISSOURI provides itself, other CLECs or any of its affiliates in MISSOURI providing advanced services, and pursuant to the terms and conditions set forth below.
- 7.7 Line and Station Transfer or "LST": For an xDSL Loop currently in service where trouble ticket resolution has identified that excessive bridged tap(s), load coil(s) and/or repeater(s) are on the loop and transferring to a new loop is a solution identified by SBC MISSOURI to resolve a MCIm-initiated xDSL Loop trouble ticket or a trouble identified by SBC MISSOURI, SBC MISSOURI, at its sole option, may perform an LST to resolve and close out the identified trouble. In the event that a request for Conditioning is received from the MCIm on an xDSL Loop currently in service and SBC MISSOURI determines that an LST can be performed, SBC MISSOURI will contact MCIm to inform that a LST will be performed in lieu of MCIm's requested Conditioning. In such cases that SBC MISSOURI elects to perform an LST to resolve the identified trouble, MCIm will be billed and shall pay for such LST at the rates set forth in Appendix Pricing. If, however, the LST does not resolve the reported trouble and the trouble is determined to be an SBC MISSOURI network-related problem, then MCIm will not be charged the LST rate or for SBC MISSOURI' resolution of the trouble. If, however, the trouble is found to be a customer premises equipment ("CPE") or MCIm network or data equipment, or otherwise is found not to be an SBC MISSOURI network-related problem, then MCIm shall pay Maintenance of Service charges at the rates set forth in Appendix Pricing, in addition to the LST charge in the Appendix Pricing.

8. SPECTRUM MANAGEMENT

- 8.1 SBC MISSOURI agrees that MCIm's order for xDSL-capable Loops will not be delayed by any lack of availability of a specific binder group or "spectrum exhaust." If SBC MISSOURI initiates a reconfiguration of loops into a different binder group, it shall do so in a competitively neutral manner consistent with all relevant industry standards and at no cost to MCIm.
- 8.2 SBC MISSOURI agrees that as a part of spectrum management, it will maintain an inventory of the existing services provisioned on the cable. SBC MISSOURI will use commercially reasonable efforts to assign loops so as to minimize interference between and among advanced services, including xDSL-based services, and other services. SBC MISSOURI will not use Selective Feeder Separation (SFS). SBC MISSOURI has opened binder groups to all xDSL services and all xDSL providers, and will not deny any loops on the basis of binder group management designations or business rules, or limit the deployment of xDSL services to certain pair ranges (with the exception of binder groups containing AMI T1 services). SBC MISSOURI may not segregate xDSL technologies into designated binder groups without specific Commission or FCC review and approval, or approved industry standard. SBC MISSOURI shall not deny MCIm a loop based upon spectrum management issues in the absence of review and approval from the Commission(s). In all cases, SBC MISSOURI will manage the spectrum in a competitively neutral manner consistent

with all relevant industry standards regardless of whether the service is provided by MCIm or by SBC MISSOURI as well as competitively neutral as between different xDSL services. Where disputes arise, SBC MISSOURI and MCIm will put forth a good faith effort to resolve such disputes in a timely manner. As a part of spectrum management, SBC MISSOURI will maintain an inventory with respect to the number of loops using advanced services technology within a binder group and the type of technology deployed on those loops, using the PSD mask information provided by MCIm to SBC MISSOURI. Upon request from MCIm, SBC MISSOURI will disclose within 3-5 business days spectrum management information with respect to the number of loops using advanced services technology within the binder group and the type of technology deployed on those loops so that the involved Parties may examine the deployment of services within the affected loop plant. If there is any dispute between the Parties with respect to this Section, SBC MISSOURI will not deny the loop(s), but will continue to provision the loop(s) until the dispute is resolved in accordance with the dispute resolution procedures set forth in this Agreement.

- 8.3 In the event that a loop technology without industry standards for spectrum management is deployed, SBC MISSOURI, MCIm and the specific state commission shall jointly establish long-term competitively neutral spectral compatibility standards and spectrum management rules and practices so that all carriers know the rules for loop technology deployment. The standards, rules and practices shall be developed to maximize the deployment of new technologies within binder groups while minimizing interference, and shall be forward-looking and able to evolve over time to encourage innovation and deployment of advanced services based on the FCC, T1E1.4, and ITU spectral management rules and guidelines. These standards are to be used until such time as industry standards exist. When MCIm offers xDSL-based service consistent with mutually agreed-upon standards developed by the industry in conjunction with the specific state commission, or by the specific state commission in the absence of industry agreement, it may order local loops based on agreed-to performance characteristics. SBC MISSOURI will assign the local loop consistent with the agreed-to spectrum management standards.

8.3.1 In the event that a relevant Commission, the FCC or the industry establishes long-term standards and practices and policies relating to spectrum compatibility and spectrum management that differ from those established in this Appendix, SBC MISSOURI and MCIm shall comply with the FCC and/or industry standards, practices and policies and will establish a mutually agreeable transition plan and timeframe for achieving and implementing such industry standards, practices and policies and shall negotiate any conforming modifications which may be needed to this Appendix.

8.3.2 Within thirty (30) days after general availability of equipment conforming to applicable industry standards or the mutually agreed upon standards developed by the industry in conjunction with the applicable Commission(s) or FCC, then SBC MISSOURI and/or MCIm, must begin the process of bringing its deployed xDSL technologies and equipment into compliance with such standards at its own expense.

9. * ACCEPTANCE TESTING

9.1 Intentionally Omitted

9.2 * Should MCIm desire Acceptance Testing, it shall request such testing on a per xDSL loop basis upon issuance of the Local Service Request (LSR). Acceptance Testing will be conducted at the time of installation of the service request.

9.2.1 * If the LSR was placed without a request for Acceptance Testing, and MCIm should determine that it is desired or needed during any subsequent phase of provisioning, the

request may be added at any time; however, this may cause a new standard due date to be calculated for the service order.

9.3 * Acceptance Testing Procedure:

9.3.1 * Upon delivery of a loop to/for MCIm, SBC MISSOURI's field technician will call the LOC and the LOC tester will call a toll free number provided by MCIm so MCIm can initiate performance of a series of Acceptance Tests.

9.3.1.1 * For IDSL or 2-wire digital loops that are not provisioned through repeaters or digital loop carriers, the SBC MISSOURI field technician will provide a solid short across the tip and ring of the circuit and then open the loop circuit.

9.3.1.2 * For IDSL or 2-wire digital loops that are provisioned through repeaters or Digital Loop Carrier, the SBC MISSOURI field technician will not perform a short or open circuit due to technical limitations.

9.3.2 * If the loop passes the "Proof of Continuity" parameters, as defined by this Appendix for DSL loops, MCIm will provide SBC MISSOURI with a confirmation number and SBC MISSOURI will complete the order. MCIm will be billed and shall pay for the Acceptance Test at the applicable rates as referenced in section 9.4.2 below.

9.3.2.1 * SBC MISSOURI will be relieved of the obligation to perform Acceptance Testing on a particular loop and will assume acceptance of the loop by MCIm when MCIm cannot provide a "live" representative (through no answer or placement on hold) for over ten (10) minutes. SBC MISSOURI may then close the order utilizing existing procedures, document the time and reason, and may bill MCIm and MCIm shall pay the minimum charges as if the Acceptance Test had been completed and the loop accepted, as referenced in section 9.4.2 below.

9.3.3 * If the Acceptance Test fails loop Continuity test parameters, as defined by this Appendix for DSL loops, the LOC technician will take any or all reasonable steps to immediately resolve the problem with MCIm on the line including, but not limited to, calling the central office to perform work or troubleshooting for physical faults. If the problem cannot be resolved in an expedient manner, the technician will release the MCIm representative, and perform the work necessary to correct the situation. Once the loop is correctly provisioned, SBC MISSOURI will re-contact the MCIm representative to repeat the Acceptance Test. When the aforementioned test parameters are met, MCIm will provide SBC CALIFORNIA with a confirmation number and SBC MISSOURI will complete the order. If MCIm xDSL service does not function as desired, yet test parameters are met, SBC MISSOURI will still close the order. SBC MISSOURI will not complete an order that fails Acceptance Testing.

9.3.4 * Until such time as MCIm and SBC MISSOURI agree, or industry standards establish, that their test equipment can accurately and consistently send signals through repeaters or Digital Loop Carriers, MCIm agrees to accept IDSL or 2-wire digital loops, designed with such reach extenders, without testing the complete circuit. Consequently, SBC MISSOURI agrees that should MCIm open a trouble ticket and an SBC MISSOURI network fault be found by standard testing procedures on such a loop within ten (10) business days (in which it is determined by standard testing to be an SBC MISSOURI

fault), SBC MISSOURI, upon MCIm request, will adjust MCIm's bill to refund the recurring charge of such a loop until the fault has been resolved and the trouble ticket is closed.

9.3.5 Intentionally Omitted.

9.3.6 * If, however, a trouble ticket is opened on the loop within twenty-four (24) hours and the trouble resulted from SBC MISSOURI error as determined through standard testing procedures, MCIm will be credited for the cost of the Acceptance Test. Additionally, MCIm may request SBC MISSOURI to re-perform the Acceptance Test at the conclusion of the repair phase again at no charge

9.3.7 * Both Parties declare they will work together, in good faith, to implement Acceptance Testing procedures that are efficient and effective. If the Parties mutually agree to additional testing, procedures and/or standards not covered by this Appendix or any Public Utilities Commission or FCC ordered tariff, the Parties will negotiate terms and conditions to implement such additional testing, procedures and/or standards. Additional charges may apply if any accepted changes in Acceptance Testing procedures require additional time and/or expense.

9.4 * Acceptance Testing Billing

MCIm will be billed for Acceptance Testing of this Appendix for xDSL Loops that are installed correctly by the committed interval without the benefit of corrective action due to Acceptance Testing.

9.4.1 Intentionally Omitted.

9.4.2 MCIm shall pay Maintenance of Service charges on a time and material basis, in 30-minute increments, for the SBC MISSOURI technician time involved, pursuant to the applicable, regional FCC tariffed rates set forth in Sections 13.3.4 (c)(1)(a) of FCC No. 2; provided, however, the tariffed rates shall be deemed to be automatically revised and updated in the event that the referenced tariffed rates are modified during the term of this Agreement. If requested by MCIm, Overtime or Premium time charges will apply for requests in off-hours at overtime time charges calculated at one and one half times the standard price and premium time being calculated at two times the standard price.

10. * COOPERATIVE TESTING

10.1 Intentionally Omitted.

10.2 * Should MCIm desire Cooperative Testing it shall request such testing on a trouble ticket on each xDSL capable loop upon issuance of the trouble ticket.

10.3 * If the trouble ticket was opened without a request for Cooperative Testing, and MCIm should determine that it is desired or needed during any subsequent phase of maintenance and repair, the request may be added; however, a new due date will be calculated to account for the additional work.

10.4 * Cooperative Testing Procedure

- 10.4.1 * The SBC MISSOURI field technician will call the LOC and the LOC will contact MCI for test and resolution of the trouble ticket and to verify basic metallic loop parameters including proof of continuity and pair balance.
- 10.4.2 * If the loop passes the "Proof of Continuity" parameters, as defined by this Appendix for DSL capable loops, the technician will close out the trouble report and the LOC will bill and MCI will pay for the cooperative testing as referenced in section 9.4.2 above.
- 10.4.3 * If the Cooperative testing fails "Proof of Continuity" parameters, as defined by this Appendix for DSL capable loops, the LOC technician will take any reasonable steps to immediately resolve the problem with MCI on the line including, but not limited to, calling the central office to perform work or troubleshooting for physical faults. If the problem cannot be resolved in an expedient manner, the technician will release the MCI representative, and perform the work reasonably necessary to bring the loop to standard continuity parameters as defined by this Appendix for xDSL capable loops. When the aforementioned test parameters are met, the LOC will contact MCI for another cooperative testing.
- 10.4.4 * SBC MISSOURI will be relieved of the obligation to perform Cooperative Testing on a particular loop and will assume acceptance of the loop by MCI when MCI cannot provide a "live" representative (through no answer or placement on hold) for over ten (10) minutes. SBC MISSOURI may then close the order utilizing existing procedures, document the time and reason, and may bill MCI and MCI shall pay the minimum charges as if the Cooperative Test had been completed and the loop accepted, as referenced in section 9.4.2.

11. RATES

- 11.1 See Appendix Pricing. Conditioning for xDSL loops less than 12,000 feet in Actual Loop Length are at no charge.

12. INTENTIONALLY OMITTED

13. OPERATIONAL SUPPORT SYSTEMS: LOOP MAKEUP INFORMATION AND ORDERING

- 13.1 General: SBC MISSOURI will provide MCI with nondiscriminatory access by electronic or manual means, to its loop makeup information set forth in its Plan of Record. Loop makeup data will be provided as set forth below. MCI will be given nondiscriminatory access to the same loop makeup information that SBC MISSOURI is providing any other CLEC and/or SBC MISSOURI's retail operations or its advanced services affiliate in MISSOURI.
- 13.2 Intentionally Omitted.
- 13.3 Loop Qualification: Subject to Section 13.1 above, SBC MISSOURI's uniform GUI (e.g., Verigate and DataGate in regions where Verigate/DataGate are generally available for use with xDSL-based or other advanced services) and application to application OSS interfaces allow MCI, as well as SBC MISSOURI's retail operations or its advanced services affiliate(s), to have near real time electronic access to the loop makeup information. As more particularly described below, this loop makeup information will be categorized by two separate pricing elements: mechanized and manual. SBC MISSOURI shall also provide MCI with access to electronic loop qualification information during the preorder process, at no charge. However, if MCI submits a service order the appropriate loop qualification charges set forth in the Appendix Pricing shall apply.

- 13.4 Mechanized Loop Qualification: Mechanized loop qualification includes data that is available electronically and provided via an electronic system. Electronic access to loop makeup data through the OSS enhancements described above will return information in all fields described in SBC's Plan of Record when such information is contained in SBC MISSOURI's electronic databases. MCIIm will be billed and shall pay a mechanized loop qualification charge for each xDSL capable loop order submitted at the rates set forth in Appendix Pricing.
- 13.5 Manual Loop Qualification: Manual loop qualification includes all fields as described in SBC MISSOURI's Plan of Record, when available. MCIIm will be billed a manual loop qualification charge for each manual loop qualification requested at the rates set forth in the Pricing Schedule.
- 13.6 Both categories of Loop qualification (mechanized and manual) are subject to the following:
- 13.6.1 Loops Less Than 12,000 Feet in Actual Loop Length: If load coils, repeaters or excessive bridged tap are present on a loop less than 12,000 feet in Actual Loop Length, Conditioning to remove these elements will be performed without request and at no charge to MCIIm.
- 13.6.2 If MCIIm elects to have SBC MISSOURI provide loop makeup through a manual process for information not available electronically, then the loop qualification interval will be not more than three (3) business days, or the interval provided to any of its affiliates in SBC MISSOURI providing advance services, whichever is less.
- 13.6.3 Loops 12,000 Feet or Greater in Actual Loop Length: If the results of the loop qualification indicate that Conditioning is available on a loop that is 12,000 feet in actual loop length or greater, MCIIm may request that none of the recommended loop Conditioning be performed or that SBC MISSOURI perform some or all of the recommended loop Conditioning to remove Excessive Bridged Tap(s), load coil(s) and/or repeater(s) at the rates set forth in the Pricing Schedule.
- 13.7 Where actual loop make-up information is not available, SBC MISSOURI will provide designed loop provisioning information via Verigate, DataGate, EDI and CORBA.
- 13.8 The Parties agree that in accordance with FCC requirements and Advanced Services POR collaboratives, SBC MISSOURI will provide MCIIm with non-discriminatory access to SBC MISSOURI's loop make-up information as set forth in this section 13.8. The loop qualification data elements provided by SBC MISSOURI shall be provided at parity with what SBC MISSOURI provides itself, any of its affiliates in MISSOURI providing advanced services and other CLECs and shall include but not limited to the following fields:
- 13.8.1 Loop length
- 13.8.2 Loop length by segment
- 13.8.3 Length by gauge
- 13.8.4 26 gauge equivalent loop length (calculated)
- 13.8.5 Presence of load coils
- 13.8.6 Quality of load coils (if applicable)
- 13.8.7 Presence of bridged taps
- 13.8.8 Length of bridged taps (if applicable)
- 13.8.9 Presence of pair gain devices, DLC, and/or DAML
- 13.8.10 Qualification status of the loop based on specified PSD, if no PSD class is specified, the default PSD is class 5 (ADSL)

- 13.8.11 Presence of repeaters
- 13.8.12 Location of repeaters
- 13.8.13 Type of repeaters
- 13.8.14 Quantity of repeaters
- 13.8.15 Type of Plant (aerial or buried)
- 13.8.16 Type of Loop (copper or fiber)
- 13.8.17 Portion that is copper or fiber
- 13.8.18 Length that is copper or fiber
- 13.8.19 Availability of spare facilities
- 13.8.20 Quantity of bridged tap by occurrence
- 13.8.21 Location of bridged tap by occurrence
- 13.8.22 Quantity of Low pass filters
- 13.8.23 Location of Low pass filters
- 13.8.24 Quantity of Range extenders
- 13.8.25 Location of Range extenders
- 13.8.26 Number of gauge changes
- 13.8.27 Location of pair gain devices
- 13.8.28 Location of DLC
- 13.8.29 Quantity of DLCs
- 13.8.30 Location of RSU (Remote Switching Unit)
- 13.8.31 Type of RSU (Remote Switching Unit)
- 13.8.32 Resistance Zone

14. RESERVATION OF RIGHTS/INTERVENING

- 14.1 The Parties acknowledge and agree that the intervening law language set forth in Section 23 of the General Terms and Conditions of this Agreement shall apply to all the rates, terms and conditions set forth in this Appendix.

* SBC MISSOURI's Position: It is SBC MISSOURI's position that the provisions noted above with asterices are voluntary, non-251(b) or (c) provisions/offers that were not subject to the Parties' negotiations under Sections 251 and 252 of the Act and are not subject to arbitration under Section 252 of the Act. SBC MISSOURI disputes MCI's submission of the issues for arbitration under Section 252 of the Act. Without waiving said objection, SBC MISSOURI has shown in this section the language it can agree to and the substantive disputes between the Parties as to the language itself in the event that the Commission does not exclude the issues associated with SBC MISSOURI non-251(b) and (c) offerings from this Section 252 arbitration proceeding. SBC CALIFORNIA does not waive, but instead reserves all of its rights, arguments and positions that the provisions noted with asterices (including disputed and non-disputed provisions) are not subject to Sections 251 and 252 of the Act, including without limitation, negotiations under Sections 251/252 of the Act and Section 252 arbitration. Nothing herein shall constitute a concession by SBC MISSOURI that the provisions are subject to negotiation and arbitration under Sections 251/252 of the Act.

Attachment A

xDSL Technologies Presumed Acceptable for Deployment

The technologies listed in this Attachment A are Presumed Acceptable for Deployment. This list should be expanded as additional services are deployed, or industry standards developed. As standards are developed or updated, these standards shall automatically be incorporated by a reference as if fully set forth herein.

The following technologies currently have a national standard in place:

Technology	Standard
ADSL	ATIS T1.413 1998 (Issue 2), T1.423, ITU 992.1
SHDSL	ATIS T1.422, ITU G.991.2
SDSL	(2B1Q) ITU 991.1
IDSL	ATIS T1.601
HDSL	ATIS TR28/ITU 991.1
HDSL2	ATIS T1.418
VDSL	ATIS T1.424
RADSL	no national standard
MVL	no national standard
G.Lite	ATIS T1.419/ITU G.991.2

The following technologies have been successfully deployed with no apparent degradation of the performance of other services although speeds are not guaranteed by SBC MISSOURI.

SDSL	160 kb/s - 784 kb/s
SDSL	1.0 – 1.5 Mb/s