

ATTACHMENT 25: xDSL¹

1.0 INTRODUCTION²

- 1.1 SBC MISSOURI agrees to provide CLEC with access to UNEs (including the unbundled xDSL Loop offerings) in accordance with the terms and conditions set forth in this xDSL Attachment and the FCC's Triennial Review Order and associated lawful and effective implementing rules, 47 C.F.R. § 51.319(a)(1)(i), (iii) and (iv) and (b)(1), as such rules may be modified from time to time and the general terms and conditions applicable to UNEs under this Agreement, and at the rates set forth in the Pricing Schedule, for CLEC to use in conjunction with its desired xDSL technologies and equipment to provide xDSL services to its end user customers.
- 1.2 Nothing in this Attachment 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 Attachment 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.

2.0 DEFINITIONS

- 2.1 An "xDSL-Capable Loop" is a loop that supports the transmission of DSL technologies.
- 2.1.1 For purposes of this Attachment, an "xDSL Loop" or "loop" is defined as a 2-wire or 4-wire copper local loop transmission facility between a distribution frame (or its equivalent) in a central office and the loop demarcation point at an end user customer premises, that may be conditioned at CLEC's request, in order for CLEC to provide xDSL-based service over such loop.
- 2.1.2 For purposes of this Attachment, an "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 the end-user customer's premise, 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 MISSOURI'S outside plant. 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

¹ This Attachment is being submitted by Birch Telecom of MISSOURI, Inc. and ionex Communications, Inc. This Attachment is not being adopted by other members of the CLEC Coalition at this time.

² The inclusion of the provisions noted with asterisks in this Attachment xDSL shall not constitute a waiver by either party as to their respective positions as to whether such provisions are required to be offered under Sections 251(b) or (c) of the Act and are subject or not subject to Section 251/252 negotiation and arbitration. Rather, in agreeing not to dispute the inclusion of the subject provisions in this Attachment xDSL, both Parties do not waive, but instead fully reserve all of their rights, arguments and positions in any pending or future regulatory or judicial proceedings and in any future negotiations or pending negotiations as to whether the subject provisions are or are not subject to Sections 251 and 252 of the Act, including without limitation, negotiation and arbitration under Sections 251/252 of the Act. The inclusion of these provisions in this Attachment xDSL and resolution by the Parties as to these provisions shall not constitute a concession or admission by either Party and may not be introduced by one party as to the other to attempt to show the consent or waiver by one party as to its position(s) in this regard.

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.

- 2.2 The term “conditioning” as used herein shall refer to the conditioning work SBC MISSOURI will perform on CLEC’s behalf, consistent with SBC MISSOURI’S obligations under 47 C.F.R. §51.319(a)(1)(iii), as such rule may be modified from time to time, to remove load coils, bridged tap , and/or repeaters on an xDSL loop or subloop, upon request by CLEC at the conditioning rates set forth in the Pricing Schedule to this Agreement (“Pricing Schedule”), and subject to the terms and conditions set forth herein below.
- 2.3 The term “Digital Subscriber Line” (“DSL”) describes various technologies and services. The “x” in “xDSL” is a place holder for the various types of DSL services, including, but not limited to ADSL (Asymmetric Digital Subscriber Line), HDSL (High-Speed Digital Subscriber Line), IDSL (ISDN Digital Subscriber Line), SDSL (Symmetrical Digital Subscriber Line), UDSL (Universal Digital Subscriber Line), VDSL (Very High-Speed Digital Subscriber Line), and RADSL (Rate-Adaptive Digital Subscriber Line).
- 2.4 The term “excessive bridged tap” as used herein shall refer to bridged tap in excess of 2,500 feet in total length. For the purposes of this Attachment and Schedule 1 to this Attachment, CLEC agrees to the term “excessive bridged tap”. However, CLEC maintains its position that all bridged tap can be harmful to DSL and does not concede (nor does SBC MISSOURI contend) that bridged tap less than 2500 feet is acceptable for all DSL services.
- 2.5 The term “non-excessive bridged tap” as used herein shall refer to bridged tap 2,500 feet in total length or less. For the purposes of this Attachment and Schedule 1 to this Attachment, CLEC agrees to the term “non-excessive bridged tap”. However, CLEC maintains its position that all bridged tap can be harmful to DSL and does not concede (nor does SBC MISSOURI contend) that less than 2500 is acceptable for all DSL services.
- 2.6 A loop technology that is “presumed acceptable for deployment” is one that either 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 Federal Communications Commission (“FCC”), any state commission, or an industry standards body.
- 2.7 A “non-standard xDSL-based technology” is a loop technology that is not presumed acceptable for deployment under Section 2.6 of this Attachment. Deployment of non-standard xDSL-based technologies are allowed and encouraged by this Agreement.
- 2.8* “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 Main Distribution Frame in the SBC MISSOURI central office except in such cases as outlined in 2.9.2, the details of which are set forth below.
- 2.9* “Proof of Continuity” 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 CLEC’s collocation arrangement. If continuity can not be verified, SBC MISSOURI will investigate to determine whether there is any trouble between its MDF and the POI and CLEC will investigate

- whether there is any trouble between the MDF and CLEC's collocation arrangement. Once isolated, the responsible Party will resolve the trouble as outlined in 2.9.1-2.9.4 below.
- 2.9.1* SBC MISSOURI loop issue: Trouble identified between the MDF and the demarcation point at the end user customer's premises will be resolved by SBC MISSOURI. The circuit will not be deemed to have met the Proof of Continuity test until the trouble is resolved. Upon SBC MISSOURI'S resolution of the trouble, CLEC and SBC MISSOURI will perform the physical fault test again to validate CLEC registers the short across the circuit.
- 2.9.2* SBC MISSOURI-provided collocation cabling: Trouble isolated to between the MDF and CLEC's collocation arrangement will be resolved by SBC MISSOURI if the collocation cabling was originally installed and maintained by SBC MISSOURI. The circuit will not be deemed to have met the Proof of Continuity test until the trouble is resolved. CLEC will cooperate with SBC MISSOURI in resolving the collocation cabling issues including changing the assigned cable pair if requested. Once the trouble is resolved, CLEC and SBC MISSOURI will perform the physical fault test again to validate CLEC registers the short across the circuit.
- 2.9.3* Vendor provided collocation cabling: Trouble identified between the MDF and CLEC'S collocation arrangement will be resolved by CLEC's SBC MISSOURI'S approved vendor if the collocation cabling was originally installed and maintained by CLEC's SBC MISSOURI'S Approved vendor. SBC MISSOURI will cooperate with CLEC in resolving the collocation cabling issues including changing the assigned cable pair if requested. In those instances where the initial trouble ticket has been left open (and e.g., the CFA is not changed to restore service), once the trouble is resolved, CLEC and SBC MISSOURI will perform the physical fault test again to validate CLEC registers the short across the circuit.
- 2.9.4* To the extent there are any conflicts herein between the provisions set forth above in Subsections 2.8-2.9.3 and the collocation provisions set forth elsewhere in this Agreement, the collocation provisions shall supersede and control.
- 2.10* "Acceptance Testing" shall be defined as the joint testing for xDSL loops between SBC MISSOURI'S Technician, its Local Operations Center ("LOC"), and the CLEC's designated test representative for the purpose of verifying Continuity as more specifically described in Section 7.0 below during the provisioning phase of the xDSL Loop.
- 2.11* "Cooperative Testing" shall be defined as the joint testing for xDSL loops between SBC MISSOURI'S Technician, its Local Operations Center ("LOC"), and the CLEC's designated test representative for the purpose of verifying Continuity as more specifically described in Section 8.0 below during the maintenance phase of an xDSL Loop.
- 2.12 "Actual Loop Length" refers to the total physical length of a copper loop between the SBC MISSOURI MDF and the terminal location serving the end-user customer. Any additional length attributed to central office wire, 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.

- 2.13 "Plan of Record" as used herein refers to SBC MISSOURI'S December 7, 1999 filing with the FCC, including any subsequent modifications or additions relating to loop makeup information since this filing.

3.0 GENERAL TERMS AND CONDITIONS RELATING TO UNBUNDLED XDSL-CAPABLE LOOPS

- 3.1 SBC MISSOURI is not in any way permitted to limit xDSL capable loops to the provision of ADSL.
- 3.2 SBC MISSOURI will not impose limitations on the transmission speeds of xDSL services. SBC MISSOURI will not restrict the CLECs services or technologies to a level at or below those provided by SBC MISSOURI.
- 3.3 SBC MISSOURI will provide a loop capable of supporting a technology presumed acceptable for deployment or non-standard xDSL technology as defined in this Attachment.
- 3.4 SBC MISSOURI shall not deny CLEC's request to deploy any loop technology that is presumed acceptable for deployment unless it has demonstrated to the Commission that CLEC's deployment of the specific loop technology will significantly degrade the performance of other advanced services or traditional voice band services in accordance with FCC orders. SBC MISSOURI will provide CLEC with notice prior to seeking relief from the Commission under this Section.
- 3.5 In the event the CLEC wishes to introduce a technology that has been approved by another state commission or the FCC, or successfully deployed elsewhere, the CLEC will provide documentation describing that action to SBC MISSOURI and the Commission before or at the time of their request to deploy that technology in 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.
- 3.6 The Parties to this Attachment agree that unresolved disputes arising under this Attachment will be handled under the Dispute Resolution procedures set forth in this Agreement.
- 3.7 Liability
- 3.7.1 Each Party, whether a CLEC or SBC MISSOURI, agrees that should it cause any non-standard xDSL technologies to be deployed or used in connection with or on SBC MISSOURI facilities, that Party ("Indemnifying Party") will pay all costs associated with any damage, service interruption or other telecommunications service degradation, or damage to the other Party's ("Indemnitee") facilities.
- 3.7.2 For any technology, CLEC'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, its affiliated companies or connecting and concurring 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 CLEC violates this provision, provided that such termination of service will be limited to CLEC'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, the CLEC demonstrates that their use of the network element is not the cause of the network harm. If SBC MISSOURI does not believe the CLEC has made the sufficient showing that it is not the cause of the harm, or if CLEC contests the basis for the disconnection, either Party must first submit the matter to dispute resolution under the Dispute Resolution Procedures set forth in this Agreement. Any claims of network harm by SBC MISSOURI must be supported with specific and verifiable supporting information.

3.8 Indemnification

3.8.1 Covered Claim: Each Party ("Indemnifying Party") will indemnify, defend and hold harmless the other Party ("Indemnitee") from and against any loss, liability, or claim for damages, including but not limited to direct, indirect or consequential damages, made against Indemnitee by any telecommunications service provider or telecommunications user (other than claims for damages or other losses made by an end-user of Indemnitee for which Indemnitee has sole responsibility and liability), caused, in whole or substantial part, by arising from, the use of such non-standard xDSL technologies by the Indemnifying Party.

3.8.2 Indemnifying Party is permitted to fully control the defense or settlement of any Covered Claim, including the selection of defense counsel. Notwithstanding the foregoing, Indemnifying Party will consult with Indemnitee on the selection of defense counsel and consider any applicable conflicts of interest. Indemnifying Party is required to assume all costs of the defense and any loss, liability, claim or damage indemnified pursuant to Section 3.8.1 above and Indemnitee will bear no financial or legal responsibility whatsoever arising from such claims.

3.8.3 Indemnitee agrees to fully cooperate with the defense of any Covered Claim. Indemnitee will provide written notice to Indemnifying Party of any Covered Claim at the address for notice assigned herein within ten days of receipt, and, in the case of receipt of service of process, will deliver such process to Indemnifying Party not later than 10 business days prior to the date for response to the process. Indemnitee will provide to Indemnifying Party reasonable access to or copies of any relevant physical and electronic documents or records related to the deployment of non-standard xDSL technologies used by Indemnitee in the area affected by the claim, all other documents or records determined to be discoverable, and all other relevant documents or records that defense counsel may reasonably request in preparation and defense of the Covered Claim. Indemnitee will further cooperate with Indemnifying Party's investigation and defense of the Covered Claim by responding to reasonable requests to make its employees with knowledge relevant to the Covered Claim available as witnesses for preparation and participation in discovery and trial during regular weekday business hours. Indemnitee will promptly notify Indemnifying Party of any settlement communications, offers or proposals received from claimants.

3.8.4 Indemnitee agrees that Indemnifying Party will have no indemnity obligation under Section 3.8.1 above, and Indemnitee will reimburse Indemnifying Party's defense costs, in any case in which Indemnifying Party's technology is determined not to be the cause of any of Indemnitee's liability.

3.9 Claims Not Covered: No Party hereunder agrees to indemnify or defend any other Party against claims based on the other Party's gross negligence or intentional misconduct.

4.0 UNBUNDLED XDSL-CAPABLE LOOP OFFERINGS

4.1 xDSL-Capable Loops

- 4.1.1 2-Wire xDSL Loop: A 2-wire xDSL loop for purposes of this section is a copper loop that supports the transmission of Digital Subscriber Line (DSL) technologies. The loop is a dedicated transmission facility between a distribution frame, or its equivalent, in an SBC MISSOURI central office and the loop demarcation point at an end-user customer premises. A copper loop used for such purposes will meet basic electrical standards such as metallic conductivity and capacitive and resistive balance and will be conditioned, upon CLEC's request; provided, however, the removal of load coils, repeaters and/or bridged tap on an existing loop greater than 12,000 feet is optional, subject to conditioning charges and will be performed by SBC MISSOURI at CLEC's request as more specifically set forth in Section 6 below. CLEC will not be charged for conditioning to remove excessive bridged tap, load coils and/or repeaters on xDSL Loops less than 12,000 feet in Actual Loop Length. The rates set forth in the Pricing Schedule shall apply to this 2-Wire xDSL Loop.
- 4.1.2 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 supporting ISDN 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 CLEC, through the Accessible Letter or alternate process, which SBC MISSOURI central offices are IDSL-capable. CLEC shall only order IDSL Loops in those central offices which SBC MISSOURI has advised are IDSL-capable. The rates set forth in the Pricing Schedule shall apply to this IDSL Loop.
- 4.1.3 4-Wire xDSL Loop: A 4-wire xDSL loop for purposes of this section, is a copper loop that supports the transmission of Digital Subscriber Line (DSL) technologies. The loop is a dedicated transmission facility between a distribution frame, or its equivalent, in an SBC MISSOURI central office and the loop demarcation point at an end-user customer premises. A copper loop used for such purposes will meet basic electrical standards such as metallic conductivity and capacitive and resistive balance and will be conditioned, upon CLEC's request; provided, however, the removal of load coils, repeaters and/or bridged tap on an existing loop greater than 12,000 feet is optional, subject to conditioning charges and will be performed by SBC MISSOURI at CLEC's request as more specifically set forth in Section 6 below. CLEC will not be charged for conditioning to remove excessive bridged tap, load coils and/or repeaters on xDSL Loops less than 12,000 feet in Actual Loop Length. The rates set forth in the Pricing Schedule shall apply to this 4-Wire xDSL Loop.
- 4.2 xDSL Sub-Loop: 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'S outside plant and the demarcation point at an end-user customer's premise, as more specifically defined above, over which CLEC may provision DSL technologies. An xDSL Subloop will meet basic electrical standards such as metallic connectivity and capacitive and resistive balance, and will be conditioned, upon CLEC's request; provided, however, the removal of load coils, repeaters and/or bridged tap on an existing loop greater than 12,000 feet is optional, subject to conditioning charges and will be performed by SBC MISSOURI at CLEC's request as more specifically set forth in Section 6 below. CLEC will not be charged for conditioning to remove excessive bridged tap, load coils and/or repeaters on xDSL Loops less than 12,000 feet in Actual Loop Length. The rates set forth in the Pricing Schedule shall apply to this xDSLSubloop.

- 4.3 SBC MISSOURI shall be under no obligation to provision xDSL-capable Loops in any instance where physical facilities do not exist. This shall not apply where physical facilities exist, but require conditioning. In that event, CLEC will be given the opportunity to evaluate the parameters of the xDSL service to be provided, and determine whether and what type of conditioning shall be performed at the request of the CLEC as provided in Section 6 below.
- 4.4 SBC MISSOURI will not impose limitations on the transmission speeds of xDSL services. SBC MISSOURI will not restrict the CLEC's services or technologies to a level at or below those provided by SBC MISSOURI. CLEC will not be required to specify a type of xDSL to be ordered. However, for each loop, CLEC should at the time of ordering notify SBC MISSOURI as to the type of PSD mask CLEC intends to use, and if and when a change in PSD mask is made, CLEC will notify SBC MISSOURI upon request. Likewise, upon request by CLEC, SBC MISSOURI should disclose to CLEC information with respect to the number of loops using advanced services technology within the binder and type of technology deployed on those loops. SBC MISSOURI will use this information 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, CLEC shall provide SBC MISSOURI with a technical description of the technology (including power mask) for the inventory purposes. SBC MISSOURI will keep such information confidential and will take all measures to ensure that CLEC deployment information is neither intentionally nor inadvertently revealed to any part of SBC MISSOURI'S retail operations, to any affiliate(s), or to any other CLEC without prior authorization from CLEC. Additional information on the use of PSD masks can be found in Section 10.1 below.
- 4.5 In the event that SBC MISSOURI rejects a request by CLEC for provisioning of advanced services, including, but not limited to denial due to fiber, DLC, or DAML facility issues, SBC MISSOURI will disclose to the requesting CLEC 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 48 hours of the denial. SBC MISSOURI will also file the reason for rejection with the MISSOURI Corporation Commission. In no event shall the denial be based on loop length. If there is any dispute between the Parties with respect to this Section, SBC MISSOURI will not deny the loop (subject to Section 3.4 above), but will continue to provision loops until the dispute is resolved in accordance with the Dispute Resolution procedures set forth in this Agreement.
- 4.5.1 If national standards for a technology are established, the parties should 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.
- 4.6 SBC MISSOURI will not deny a requesting CLEC's right to deploy new xDSL technologies that do not conform to the national 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) if the requesting CLEC can demonstrate to the Commission that the loop technology will not significantly degrade the performance of other advanced services or traditional voice band services.

- 4.6.1 Upon request by CLEC, SBC MISSOURI will cooperate in the testing and deployment of new xDSL technologies on a time and materials basis or may direct the CLEC, at CLEC's expense, to a third party laboratory of CLEC's choice for such evaluation.
- 4.6.2 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 CLEC as follows:
- 4.6.2.1 If the technology requires the use of a 2-Wire or 4-Wire xDSL loop [as defined in this Attachment], then SBC MISSOURI will provide with the xDSL loop at the same rates listed for a 2-Wire or 4-Wire xDSL loop and associated loop conditioning as needed (pursuant to Section 6 below). SBC MISSOURI'S ordering procedures will remain substantially the same as for its 2-Wire or 4-Wire xDSL loop even though the xDSL loop is now capable of supporting a new xDSL technology.
- 4.6.2.2 In the unlikely event that a new xDSL technology requires a loop type that differs from that of a 2-Wire or 4-Wire loop [as defined in this Attachment], 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. 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 provided for in this Attachment.
- 4.7 Technologies deployed on copper loops must be in compliance with applicable national industry standards and/or requirements established during the MISSOURI Commission's Section 271 proceeding, e.g., standards set by the Section 271 DSL Working Group; provided, however, CLEC can deploy technologies under Section 4.6 above for which applicable national standards have not been adopted.
- 4.8 If SBC MISSOURI or another carrier claims that a CLEC service is significantly degrading the performance of other advanced services or traditional voice band services, then SBC MISSOURI or that other carrier must notify CLEC and CLEC must cooperate with SBC MISSOURI or the other carrier to correct the problem. Any claims of network harm must be supported with specific and verifiable supporting information. In the event that SBC MISSOURI or another carrier demonstrates to the Commission that a CLEC-deployed technology is significantly degrading the performance of other advanced services or traditional voice band services, CLEC shall discontinue deployment of that technology and migrate its customers to technologies that will not significantly degrade the performance of other such services.
- 4.9 Each party must abide by Commission or FCC-approved spectrum management standards. SBC MISSOURI shall not impose its own standards for provisioning xDSL services, through Technical Publications or otherwise, until and unless approved by the Commission prior to use.
- 4.10 SBC MISSOURI shall not employ internal technical standards, through Technical Publications or otherwise, for its own retail xDSL, if any, that would adversely affect wholesale xDSL services or xDSL providers.

5. OPERATIONAL SUPPORT SYSTEMS: LOOP MAKE-UP INFORMATION AND ORDERING

- 5.1 General: SBC MISSOURI will provide CLEC with nondiscriminatory access, whether that access is available by electronic or manual means, to its OSS functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing for DSL-capable loops as provided for in Appendix OSS. SBC MISSOURI will provide CLEC with nondiscriminatory access to its loop makeup information set forth originally in SBC MISSOURI'S Plan of Record. CLEC 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. This includes any loop makeup information contained in SBC MISSOURI'S operations support systems containing loop make-up information provided by SBC MISSOURI to SBC MISSOURI'S service representatives and/or SBC MISSOURI'S internal engineers and/or by SBC MISSOURI'S advanced services affiliate to provision its own retail xDSL service. The preorder OSS interfaces used to retrieve this loop makeup data is noted in the attached OSS appendix.
- 5.2 SBC MISSOURI shall provide actual, real-time loop makeup information to CLEC via the electronic loop qualification process.
- 5.3 Loop Qualification: SBC MISSOURI will provide access to its existing Datagate and EDI interfaces that will allow CLECs, as well as SBC MISSOURI'S retail operations or its advanced service affiliate, to have real-time electronic access as a preordering function to the loop makeup information, when such information is contained in SBC MISSOURI'S electronic databases. If a CLEC elects to have SBC MISSOURI provide actual loop makeup information through a manual process for information that is not available electronically, then the interval will be 3 business days or the interval provided to SBC MISSOURI'S advanced services affiliate in MISSOURI, whichever is less.
- 5.4 Loop makeup data should include the following: (a) the actual loop length; (b) the length by gauge; and (c) the presence of repeaters, load coils, or bridged taps; and shall include, if noted on the individual loop record, (d) the approximate location, type, and number of bridged taps, load coils, and repeaters; (e) the presence, location, type, and number of pair-gain devices, DLC, and/or DAML, and (f) the presence of disturbers in the same and/or adjacent binder groups. SBC MISSOURI also shall provide to the CLEC any other loop makeup information listed on the individual loop record but not listed above.
- 5.5 Where SBC MISSOURI has not compiled loop qualification information for itself, SBC MISSOURI is not required to conduct a plant inventory and construct a database on behalf of requesting carriers. If SBC MISSOURI has manual access to this sort of information for itself, or any affiliate, SBC MISSOURI will provide access to it to CLEC on a non-discriminatory basis. To the extent SBC MISSOURI has access to this information in an electronic format, that same format should be made available to CLEC via an electronic interface.
- 5.6 SBC MISSOURI will provide real time, electronic access to it's existing EDI and WebLex ordering interfaces needed for efficient provisioning of advanced services such as xDSL.

6. PROVISIONING

- 5.5 CLEC shall designate, at the CLEC's sole option, what loop conditioning (i.e. the removal of excessive bridged tap, load coils and/or repeaters) SBC MISSOURI is to perform in provisioning the requested loop. Conditioning may be ordered on loop(s) or subloop(s) of any length to remove excessive bridged tap, load coils and/or repeaters at the loop conditioning rates set forth in the

Pricing Schedule. The xDSL Loop or Subloop will be provisioned to meet basic metallic and electrical characteristics such as electrical conductivity and capacitive and resistance balance.

- 5.6 The provisioning and installation interval for a xDSL Loop, where no conditioning is requested, on orders for 1-20 loops per order or per end-user location, will be 3-5 business days, or the provisioning and installation interval applicable to SBC MISSOURI'S tariffed xDSL-based services, or its affiliate's, whichever is less. The provisioning and installation intervals for xDSL-capable loops where conditioning is, on orders for 1-20 loops per order or per end-user customer location, will be 10 business days, or the provisioning and installation interval applicable to SBC MISSOURI'S tariffed xDSL-based services or its affiliate's xDSL-based services where conditioning is required, whichever is less. Orders for more than 20 loops per order or per end-user location, where no conditioning is requested, will have a provisioning and installation interval of 15 business days, or as agreed upon by the Parties. Orders for more than 20 loops per order which require conditioning will have a provisioning and installation interval agreed by the parties in each instance. These provisioning intervals are applicable to every xDSL loop regardless of the loop length. The Parties will meet to negotiate and agree upon xDSL Subloop provisioning intervals. Any dispute between the parties as to such provisioning intervals, after negotiations, shall be resolved pursuant to the Dispute Resolution provisions set forth in this Agreement.
- 5.7 Subsequent to the initial order for a xDSL Loop or subloop, additional conditioning for the removal of excessive bridged tap, load coils and/or repeaters may be requested on such loop at the rates set forth in the Pricing Schedule and the applicable service order charges will apply; provided, however, when requests to add or modify conditioning are received for a pending xDSL Loop order, no additional service order charges shall be assessed, but the due date may be adjusted as 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.
- 6.4 The CLEC, at its sole option, may request shielded cross-connects for central office wiring at rates set forth in Pricing Schedule.
- 6.5 SBC MISSOURI shall keep CLEC deployment information confidential from SBC MISSOURI'S retail operations, any SBC MISSOURI affiliate, or any other CLEC.

7.0* ACCEPTANCE TESTING

- 7.1* Should CLEC desire Acceptance Testing, CLEC 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.
- 7.2* Acceptance Testing Procedure:
- 7.2.1* Upon delivery of a loop to CLEC, SBC MISSOURI'S field technician will call the Local Operations Center (LOC) and the LOC technician will call a toll free number provided by CLEC to initiate performance of a series of Acceptance Tests.
- 7.2.1.1* Except for IDSL loops that are 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 .

- 7.2.1.2* For IDSL loops that are provisioned through repeaters or digital loop carriers, the SBC MISSOURI field technician will not perform a short or open circuit.
- 7.2.2* If the loop passes the "Proof of Continuity" parameters, as defined by this Attachment for xDSL loops, CLEC will provide SBC MISSOURI with a confirmation number and SBC MISSOURI will complete the order and will close out the corresponding acceptance testing order ticket in SBC MISSOURI'S systems . CLEC will be billed and shall pay for the Acceptance Test as specified below under Acceptance Testing Billing.
- 7.2.3* If the Acceptance Test fails loop continuity test parameters, as defined by this Attachment for xDSL loops, the LOC or field technician will take reasonable steps to immediately resolve the problem with the CLEC 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 SBC MISSOURI technician will release the CLEC technician, and perform the work necessary to correct the situation. Once the loop is correctly provisioned, SBC MISSOURI will contact CLEC to repeat the Acceptance Test. When the aforementioned test parameters are met, CLEC will provide SBC MISSOURI with a confirmation number and SBC MISSOURI will complete the order. If CLEC does not send its confirmation number to SBC MISSOURI, SBC MISSOURI may close the order. SBC MISSOURI will not complete an order that fails Acceptance Testing.
- 7.2.4* Until such time as the CLEC and SBC MISSOURI agree, or industry standards establish, that their test equipment can accurately send signals through repeaters or digital loop carriers, CLEC will accept IDSL loops without testing the complete circuit. Consequently, SBC MISSOURI agrees that should CLEC open a trouble ticket on such a loop within ten (10) business days (that is the fault of SBC MISSOURI), SBC MISSOURI will adjust CLEC's bill and refund the recurring charge of such a loop until SBC MISSOURI has resolved the problem and closed the trouble ticket.
- 7.2.5* SBC MISSOURI will be relieved of the obligation to perform Acceptance Testing on a particular loop and will, assume acceptance of the loop by CLEC when CLEC places the SBC MISSOURI LOC or field technician on hold for over ten (10) minutes. In that case, SBC MISSOURI may close the order utilizing existing procedures. If no trouble ticket is opened on that loop within 24 hours, SBC MISSOURI may bill and CLEC shall pay as if the Acceptance Test had been completed and the loop accepted. If, however, a trouble ticket is opened on the loop within 24 hours and the trouble resulted from SBC MISSOURI error, CLEC will be credited for the cost of the acceptance test. Additionally, CLEC may subsequently request and SBC MISSOURI will perform testing of such a loop under the terms and conditions of a repair request. If such loop is found by SBC MISSOURI to not meet loop continuity test parameters as defined herein, SBC MISSOURI will not charge for any acceptance testing performed on the repair call.
- 7.2.6* If a trouble ticket is opened within 24 hours of a loop order completion, and the trouble is determined to be SBC MISSOURI'S error, SBC MISSOURI will credit CLEC for any charge(s) previously assessed to CLEC for the test.
- 7.2.7* Both Parties will work together 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 Agreement or any commission-ordered tariff, the

Parties will negotiate terms and conditions to implement such additional testing, procedures and/or standards. Additional charges may apply if any agreed-to changes require SBC MISSOURI to expend additional time and expense.

7.3* Acceptance Testing Billing

7.3.1* CLEC will be billed for Acceptance Testing upon the effective date of this Attachment for loops that are installed correctly by the committed interval without the benefit of corrective action performed by SBC MISSOURI due to acceptance testing.

7.3.2* The charges for Acceptance Testing shall be as specifically listed in Section 13.4.4 of the commission-ordered FCC Tariff No. 73, as such tariff may be modified from time to time. If requested by CLEC, Overtime or Premium time charges will apply for Acceptance Testing 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.

8.0* COOPERATIVE TESTING

8.1* The charges for Cooperative Testing shall be as specifically listed in Section 13.4.4 of the commission-ordered FCC Tariff No. 73, as such tariff may be modified from time to time. If requested by CLEC, Overtime or Premium time charges will apply for Cooperative Testing 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.

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

8.3* If the trouble ticket was opened without a request for Cooperative Testing, and the CLEC 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.

8.4* Cooperative Testing Procedure:

8.4.1* The SBC MISSOURI field technician will call the LOC and the LOC will contact the CLEC for test and resolution of the trouble ticket and to verify basic metallic loop parameters including proof of continuity and pair balance.

8.4.2* If the loop passes the "Proof of Continuity" parameters, as defined by this Attachment for xDSL Loops, the technician will close out the trouble report and the LOC will bill and CLEC shall pay for the Cooperative Test as provided in Section 8.1 above.

8.4.3* If the Cooperative testing fails "Proof of Continuity" parameters, as defined by this Attachment for xDSL capable loops, the LOC technician will take any reasonable steps to immediately resolve the problem with the CLEC 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 CLEC representative, and perform the work reasonably necessary to bring the loop to standard continuity parameters as defined by this Attachment for xDSL capable loops. When the

above-mentioned test parameters are met, the LOC will contact the CLEC for another Cooperative Test. If the cooperative test reveals the loop fails the proof of continuity test, then CLEC shall not be billed or responsible to pay for the Cooperative test.

8.4.4* SBC MISSOURI will be relieved of the obligation to perform Cooperative Testing on a particular loop and will assume acceptance of the test by the CLEC when the CLEC cannot provide a "live" representative (through no answer or placement on hold) for over ten (10) minutes. SBC MISSOURI may then close the trouble ticket, document the time and reason, and may bill the CLEC, and CLEC shall pay, as if the Cooperative Test had been completed as provided in Section 8.1 above. If SBC MISSOURI has not made a documented attempt to contact CLEC to perform the test, CLEC will not be billed or responsible to pay for the Cooperative Test.

9.0 SERVICE QUALITY AND MAINTENANCE

9.1 SBC MISSOURI will not guarantee that the local loop(s) ordered will perform as desired by CLEC for xDSL-based or other advanced services, but will guarantee basic metallic loop parameters, including continuity and pair balance. CLEC-requested testing by SBC MISSOURI beyond these parameters will be billed on a time and materials basis at the rates set forth in the commission-ordered FCC Tariff No. 73, as provided in Section 8.1 above.

9.2 Maintenance, other than assuring loop continuity and balance, on unconditioned or partially conditioned loops in excess of 12,000 feet, will only be provided on a time and material basis as provided in Section 8.1 above. On loops where CLEC has requested that no conditioning be performed, SBC MISSOURI'S maintenance will be limited to verifying loop suitability based on POTS design. For loops having had partial or extensive conditioning performed at CLEC'S request, SBC MISSOURI will verify continuity, the completion of all requested conditioning, and will repair at no charge to CLEC any gross defects which would be unacceptable based on current POTS design criteria and which do not result from the loop's modified design.

9.3 For loops currently in service where trouble ticket resolution has identified that bridged tap, load coils and/or repeaters are on the loop and transferring to a new loop is a solution identified by SBC MISSOURI to resolve the trouble ticket, SBC MISSOURI at its sole option may perform a line and station transfer ("LST") to resolve and close out the identified trouble. In the event that a request for conditioning is received from the CLEC on a loop currently in service and SBC MISSOURI determines that an LST can be performed, the appropriate SBC MISSOURI Local Operations Center ("LOC") will contact the CLEC to inform that a LST may be performed in lieu of the CLEC'S requested conditioning. In such cases that SBC MISSOURI performs an LST to resolve the identified trouble, CLEC will be billed and shall pay for such LST as outlined in the Pricing Schedule to this Agreement. If, however, the LST does not resolve the reported trouble and the trouble is determined to be a SBC MISSOURI-network-related problem, then CLEC will not be charged the LST rate or for SBC MISSOURI'S resolution of the trouble. If, however, the trouble is found to be a CPE or a non-SBC MISSOURI network-related problem, then a Maintenance of Service and/or Time & Material charge will apply, as provided for in Section 9.1 above, in addition to the LST charge.

9.4 Each xDSL-Capable Loop offering provided by SBC MISSOURI to CLEC will be at least equal in quality and performance as that which SBC MISSOURI provides to itself or to an affiliate.

10.0 SPECTRUM MANAGEMENT

- 10.1 The parties shall comply with the FCC's lawful and effective spectrum management rules, 47 C.F.R. § 51.231-233, as such rules may be modified from time to time. CLEC will advise SBC MISSOURI of the Power Spectral Density ("PSD") mask approved or proposed by T1.E1 that reflects the service performance parameters of the technology to be used. CLEC, at its option and without further disclosure to SBC MISSOURI, may provide any service compliant with that PSD mask so long as it stays within the allowed service performance parameters. At the time of ordering a xDSL Loop, CLEC will notify SBC MISSOURI as to the type of PSD mask CLEC intends to use on the ordering form, and if and when a change in PSD mask is made, CLEC will notify SBC MISSOURI as set forth in Section 4.3 above. CLEC will abide by standards pertinent for the designated PSD mask type.
- 10.2 SBC MISSOURI shall not implement, impose or maintain any spectrum management, selective feeder separation, or binder group management program. SBC MISSOURI may not segregate or reserve loop binder groups, pair ranges or pair complements exclusively for the provisioning of ADSL and/or POTS services to the exclusion of other xDSL technologies. SBC MISSOURI may not segregate xDSL technologies into designated loop binder groups, pair ranges or pair complements without prior Commission review and approval. SBC MISSOURI will not deny requests for xDSL Loops based on spectrum management issues.
- 10.3 In the event that a loop technology without national industry standards for spectrum management is deployed, SBC MISSOURI, CLECs and the 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. These standards are to be used until such time as national industry standards exist. CLECs that offer xDSL-based service consistent with mutually agreed-upon standards developed by the industry in conjunction with the Commission, or by the Commission in the absence of industry agreement, 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.
- 10.4 In the event that 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 Agreement, SBC MISSOURI and CLEC agree to 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.
- 10.5 In such case, 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 a CLEC or by SBC MISSOURI, as well as competitively neutral as between different xDSL services. Where disputes arise, SBC MISSOURI and CLEC will put forth a good faith effort to resolve such disputes in a timely manner. As a part of the dispute resolution process, SBC MISSOURI will, upon request from CLEC, disclose within 3-5 business days 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 any.

- 10.6 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 Commission or FCC, if SBC MISSOURI and/or CLEC is providing xDSL technologies deployed under Section 4.0 above, or other advanced services for which there is no standard, then SBC MISSOURI and/or CLEC must begin the process of bringing its deployed xDSL technologies and equipment into compliance with such standards at its own expense.

11.0 PRICING

- 11.1 The rates for xDSL loops, xDSL subloops, Loop Qualification – Manual, Loop Conditioning, xDSL cross-connects – standard, xDSL cross-connects – shielded and Loop Qualification – Mechanized are set forth in the Pricing Schedule to the Agreement. The Parties further understand and agree that nothing in this Attachment or Agreement shall foreclose and/or otherwise affect either Party's rights to retroactive true-up for any interim rates for xDSL capable loops and associated offerings (e.g., loop qualification, loop conditioning, xDSL cross-connects, etc.), to which it may be entitled for the period prior to the effective date of this Agreement.
- 11.2 SBC MISSOURI will make "clean loops" available for all xDSL services and use by all xDSL providers. When a CLEC orders an xDSL loop, SBC MISSOURI will make available for use on a nondiscriminatory basis loops that do not need conditioning. If no "clean loops" are available for use, then the conditioning charges set forth in the Pricing Schedule shall apply. SBC MISSOURI'S retail and/or advanced services affiliate shall not be given preferential access to clean loops, nor shall such clean loops be reserved exclusively for ADSL services.
- 11.3 The conditioning charges, set forth in the Pricing Schedule, are applicable to every xDSL loop in which the CLEC requests conditioning; provided, however, CLEC will not be charged for conditioning to remove excessive bridged tap, load coils and/or repeaters on xDSL Loops less than 12,000 feet in Actual Loop Length

12.0 PERFORMANCE MEASURES

- 12.1 Performance Measures, if any, applicable to provisions of this appendix are contained in Attachment 17: Performance Measures of this agreement.

13.0 PHYSICAL LOOP TEST ACCESS POINTS

- 13.1 SBC-MISSOURI shall provide, on a nondiscriminatory basis, physical loop test access points for copper xDSL Loops and Subloops to CLEC, upon request, for the purpose of testing, maintaining, and repairing copper xDSL Loops and xDSL Subloop, as provided under 47 C.F.R. § 51.319(a)(1)(iv)(A) and (B), as such rule may be modified from time to time.

14.0 RESERVATION OF RIGHTS/INTERVENING LAW

- 14.1 The Parties acknowledge and agree that the intervening law language set forth in Sections 3.0, et seq. of the General Terms and Conditions of this Agreement is legitimately related to this Attachment and shall apply to all of the rates, terms and conditions set forth in this Attachment, in addition to all of the other rates, terms and conditions set forth in this Agreement, including any other Attachments/Appendices to such Agreement.

15.0 REMOVAL OF ALL OR NON-EXCESSIVE BRIDGED TAP VIA A MODIFIED MAINTENANCE PROCESS (“RABT-MMP”)

- 15.1 The Parties hereby agree that any requests by CLEC for the removal of all (both Excessive and Non-Excessive) or Non-Excessive bridged tap (“RABT-MMP”) shall be governed by Schedule 1 of this Attachment, which is attached hereto and incorporated herein by this reference.