

ATTACHMENT 2

NETWORK ELEMENTS AND COMBINATIONS

TABLE OF CONTENTS

1. INTRODUCTION..... 3

2. NETWORK ELEMENTS AND COMBINATIONS..... 3

3. LOCAL LOOPS 10

294. NETWORK INTERFACE DEVICE (“NID”) 32

5. SUBLOOPS 34

6. SWITCHING CAPABILITIES..... 43

7. OPERATOR SERVICE AND DIRECTORY ASSISTANCE SERVICE..... 49

8. INTEROFFICE TRANSMISSION FACILITIES 59

9. SIGNALING NETWORKS AND CALL-RELATED DATABASES 65

10. DIRECTORY ASSISTANCE DATABASE SERVICE 73

11. SERVICE MANAGEMENT SYSTEM 75

12. TRUNK INTERFACE REQUIREMENTS 76

EXHIBIT A, RATES

EXHIBIT B, CALLING NAME DELIVERY (CNAM) DATABASE SERVICES

NETWORK ELEMENTS AND COMBINATIONS

1. Introduction

- 1.1 This Attachment sets forth the Network Elements and Combinations that BellSouth agrees to offer to TCG in accordance with its obligations under Section 251(c)(3) of the Act. The specific terms and conditions that apply to the Network Elements and Combinations are described below in this Attachment 2. The prices for the Network Elements and Combinations are set forth in Exhibit A of this Attachment 2.
- 1.2 BellSouth agrees to provide to TCG access to and TCG agrees to utilize Network Elements and Combinations in accordance with effective rules and regulations of the FCC or Commission. The Parties further agree that should such rules and regulations become vacated or stayed, that the Parties shall conform this Attachment 2 accordingly.

2. Network Elements and Combinations

- 2.1 Network Element is defined to mean a facility or equipment used in the provision of a telecommunications service. Such term may include, but is not limited to, features, functions, and capabilities that are provided by means of such facility or equipment, including but not limited to, subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service. BellSouth offers access to the following Network Elements: local loops; network interface devices; subloops; switching capabilities; interoffice transmission facilities; operations support systems functions; signaling networks; access to call-related databases; and service management systems, as set forth in this Attachment 2. BellSouth shall offer operator services and directory assistance pursuant to the rates, terms and conditions contained within this Attachment.
- 2.2 BellSouth shall provide to TCG for the provision of a telecommunications service, non-discriminatory access to Network Elements at any technically feasible point on terms and conditions that are just, reasonable, and non-discriminatory in accordance with the terms and conditions of the Agreement.
- 2.3 BellSouth will permit TCG to interconnect TCG's facilities or facilities provided to TCG by an ILEC or by third parties with each of BellSouth's Network Elements at any point designated by TCG that is technically feasible. Any request by TCG to interconnect at a point not previously

established (i) in accordance with the terms of the Agreement or (ii) under any arrangement BellSouth may have with another telecommunications carrier, shall be subject to the process set forth in Attachment 10 of this Agreement, incorporated herein by this reference.

- 2.4 BellSouth will provide Network Elements and Combinations to TCG via a standard interface that allows the Network Elements and Combinations to operate within the appropriate technical specification unless another technically feasible interface is agreed to by the Parties. TCG, at its option, may designate other interfaces using the process set forth in Attachment 10 of this Agreement, incorporated herein by this reference.
- 2.5 TCG may use one or more Network Elements and Combinations to provide to itself, its affiliates and to TCG end users any feature, function, capability or service option that such Network Elements and Combinations are technically capable of providing or any feature, function, capability or service option that is described in the Telcordia and other industry standard technical references.
- 2.6 In addition to Combinations furnished by BellSouth to TCG hereunder, BellSouth shall permit TCG to combine any Network Element or Network Elements provided by BellSouth with another Network Element, other Network Elements or Access Services obtained from BellSouth or with compatible network components provided by TCG or provided by third parties to TCG to provide telecommunications services to TCG, its affiliates and to TCG end users.
- 2.7 Except upon request by TCG, BellSouth shall not separate requested Network Elements that BellSouth currently combines.
- 2.7.1 Currently Combined Network Elements are defined as Network Elements that BellSouth ordinarily combines in its own network in the manner in which they are typically combined even if the particular Network Elements being ordered are not actually physically connected at the time the order is placed. To the extent TCG orders combinations of network elements that are new, not actually physically connected in BellSouth's network at the time the order is being placed, BellSouth shall combine such network elements for TCG at the rates set forth in Exhibit A, incorporated herein by reference, and consistent with the Kentucky Commission's Order in Case 2000-465. To the extent TCG seeks to obtain other Combinations BellSouth ordinarily combines in its network which have not been specifically priced by the Commission when purchased in combined form, TCG may purchase such Combinations at the sum of the stand-alone rates. TCG may pursue

the bona fide request process set forth in Attachment 10 to seek a different rate.

- 2.8 For each Network Element, BellSouth shall provide a demarcation point (e.g., an interconnection point at a digital signal cross connect or light guide cross connect panel or a main distribution frame) and, if necessary, access to such demarcation point, which TCG agrees is suitable. However, where BellSouth provides Combinations to TCG, BellSouth may provide the existing interconnections and no demarcation point shall exist between the combined Network Elements.
- 2.9 The recurring and nonrecurring rates set forth in Exhibit A of this Attachment 2 are for Currently Combined Network Elements for new, which is defined as typically combined and not actually physically connected in BellSouth's network at the time the order is being placed, and those combinations that are actually physically connected at the time the order is placed. On an interim basis, for those Currently Combined Network Elements where the particular elements being ordered are not actually physically connected at the time the order is placed, the nonrecurring charge for such Currently Combined Network Elements shall be the sum of the stand-alone nonrecurring charges of the individual Network Elements which make up the combination, and the nonrecurring combining charge, consistent with the Kentucky Commission's Order in Case 2000-465. These rates are interim, subject to true-up, pursuant to the Commission's Order in Case No. 2000-465. Upon the Commission's determination of non-recurring rates, TCG and BellSouth will amend this agreement to incorporate said rates.
- 2.9.1 Combination Offerings
- 2.9.1.1 2-wire voice grade port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.2 2-wire voice grade Coin port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.3 2-wire voice grade DID port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

- 2.9.1.4 2-wire CENTREX port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.5 2-wire ISDN Basic Rate Interface, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.6 4-wire ISDN Primary Rate Interface, DS1 loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.7 4-wire DS1 Trunk port, DS1 Loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.9.1.8 4-wire DS1 Loop with normal serving wire center channelization interface, 2-wire voice grade ports (PBX), 2-wire DID ports, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 2.10 Attachment 2 of this Agreement describes the Network Elements that TCG and BellSouth have identified as of the Effective Date of this Agreement and are not exclusive. Either Party may identify additional or revised Network Elements as necessary to improve services to end users, to improve network or service efficiencies or to accommodate changing technologies, or end user demand. Upon BellSouth's offering of a new or revised Network Element, BellSouth shall notify TCG of the existence of and the technical characteristics of the new or revised Network Element. Upon TCG's identification of a new or revised Network Element, it shall make a request pursuant to Attachment 10 of this Agreement, incorporated herein by this reference.
- 2.11 **Special Access Conversions**
- 2.11.1 TCG may not convert special access services to combinations of loop and transport network elements, whether or not TCG self-provides its

entrance facilities (or obtains entrance facilities from a third party), unless, TCG uses the combination to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer. To the extent TCG requests to convert any special access services to combinations of loop and transport network elements at UNE prices, TCG shall provide to BellSouth a written letter, pursuant to the notices requirement as set forth in Section 17 of the General Terms and Conditions, certifying that TCG is providing a significant amount of local exchange service (as described in this Section) over such combinations.

- 2.11.2 The certification letter shall indicate under what local usage option TCG seeks to qualify for conversion of special access circuits. TCG shall be automatically deemed to be providing a significant amount of local exchange service over such combinations if it certifies that they are meeting one of the following options:
- 2.11.3 TCG certifies that it is the exclusive provider of an end user's local exchange service. The loop-transport combinations must terminate at TCG's collocation arrangement in at least one BellSouth central office. This option does not allow loop-transport combinations to be connected to BellSouth's tariffed services. Under this option, TCG is the end user's only local service provider, and thus, is providing more than a significant amount of local exchange service. TCG can then use the loop-transport combinations that serve the end user to carry any type of traffic, including using them to carry 100% interstate access traffic; or
- 2.11.4 TCG certifies that it provides local exchange and exchange access service to the end user customer's premises and handles at least one third of the end user customer's local traffic measured as a percent of total end user customer local dialtone lines; and for DS1 circuits and above, at least 50% of the activated channels on the loop portion of the loop-transport combination have at least 5% local voice traffic individually, and the entire loop facility has at least 10% local voice traffic. When a loop-transport combination includes multiplexing, each of the individual DS1 circuits must meet this criteria. The loop-transport combination must terminate at TCG's collocation arrangement in at least one BellSouth central office. This option does not allow loop-transport combinations to be connected to BellSouth tariffed services; or
- 2.11.5 The requesting carrier certifies that at least 50% of the activated channels on a circuit are used to provide originating and terminating local dialtone service and at least 50% of the traffic on each of these local dialtone channels is local voice traffic, and that the entire loop

facility has at least 33% local voice traffic. When a loop-transport combination includes multiplexing, each of the individual DS1 circuits must meet this criteria. This option does not allow loop-transport combinations to be connected to BellSouth's tariffed services. Under this option, collocation is not required. TCG does not need to provide a defined portion of the end user's local service, but the active channels on any loop-transport combination, and the entire facility, must carry the amount of local exchange traffic specified in this option.

- 2.11.6 In addition, there may be extraordinary circumstances where TCG is providing a significant amount of local exchange service, but does not qualify under any of the three options set forth in Section 2.11. In such case, TCG may petition the FCC for a waiver of the local usage options set forth herein. If a waiver is granted, then upon TCG's request the Parties shall amend this Agreement to the extent necessary to incorporate the terms of such waiver for such extraordinary circumstance.
- 2.11.7 BellSouth may, at its sole expense, audit TCG records in order to determine TCGs compliance with the local usage options set forth above. All audits shall be conducted by a third party independent auditor, and TCG and the FCC shall be given thirty (30) days written notice of scheduled audit. Such audit shall occur no more than one time in a calendar year, unless results of an audit find noncompliance with the significant amount of local exchange service requirement. In the event of noncompliance, TCG shall reimburse BellSouth for the cost of the audit. If, based on its audits, BellSouth concludes that TCG is not providing a significant amount of local exchange traffic over the combinations of loop and transport network elements, BellSouth may file a complaint with the appropriate Commission, pursuant to the dispute resolution process as set forth in the Interconnection Agreement. In the event that BellSouth prevails, BellSouth may convert such combinations of loop and transport network elements to special access services and may seek appropriate retroactive reimbursement from TCG.
- 2.11.8 The Parties further acknowledge that on a going forward basis, TCG may purchase additional special access service under BellSouth's applicable tariffs and convert such special access circuits to EELs, pursuant to the terms of this Agreement, subject to such circuits meeting the local usage options of this Section 2.11.
- 2.11.9 When an existing special access service circuit employed by TCG is converted to Network Elements and/or Combination, BellSouth shall not disconnect and re-connect the elements. When combinations of

loop and transport network elements include multiplexing, each of the individual DS1 circuits must meet the above criteria.

- 2.11.10 Conversion of Service As Is
 - 2.11.10.1 TCG may request conversion of existing retail services to non-switched combinations of unbundled network elements by submitting an LSR or a conversion spreadsheet, provided by BellSouth, to the LCSC for record changes. For the conversion of retail services to switched combinations, TCG may request such conversions on a single LSR for all services billed under the same Account Telephone Number or master billing account. TCG may consolidate onto a single LSR, up to four end user accounts to a single Account Telephone Number where the accounts are for the same end user and are the same type and end user location. BellSouth will project manage conversions of fifteen (15) or more lines.
- 2.12 Standards for Network Elements
 - 2.12.1 BellSouth shall comply with the requirements set forth in the technical references, as well as any performance or other requirements identified in this Agreement, to the extent that they are consistent with the greater of BellSouth's actual performance or applicable industry standards.
 - 2.12.2 If one or more of the requirements set forth in this Agreement are in conflict, the parties shall mutually agree on which requirement shall apply. If the parties cannot reach agreement, the dispute resolution process set forth in Section 16 of the General Terms and Conditions of this Agreement, incorporated herein by this reference, shall apply.
 - 2.12.3 The quality of the Network Elements as well as the quality of the access to said Network Elements that BellSouth provides to TCG shall be, to the extent technically feasible, at least equal to that which BellSouth provides to itself. Detailed performance standards and measurements for Network Elements are set forth in Attachment 9 of this Agreement, incorporated herein by this reference.
 - 2.12.4 Except as otherwise specified by law, BellSouth shall not impose any limitations, restrictions or requirements on requests for or use of Network Elements or Combinations that would impair the ability of TCG to offer a telecommunications service in the manner TCG intends, provided such use does not impede or impair the use of BellSouth's network by BellSouth or any other telecommunications carrier utilizing said network.

3. Local Loops

3.1 Definition

3.1.1 The local loop network element (“Loop(s)”) is defined as a transmission facility between a distribution frame (or its equivalent) in BellSouth’s central office and the loop Demarcation Point at an end user’s premises, including inside wire owned by BellSouth. The local loop network element includes all features, functions, and capabilities of such transmission facilities, including dark fiber and attached electronics (except those used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers) and line conditioning.

3.2 The provisioning of service to TCG will require cross-office cabling and cross-connections within the central office to connect the loop to a local switch or to other transmission equipment in Collocation Space. These cross-connects are not considered part of the loop. The purchase of such cross-connects shall be pursuant to Attachment 4, incorporated herein by this reference.

3.3 Line Conditioning. The rates for line conditioning shall be as set forth in Exhibit A of this Attachment 2 incorporated herein by this reference. BellSouth shall condition lines required to be unbundled wherever TCG requests, whether or not BellSouth offers advanced services to the end user on that loop.

3.3.1 Line conditioning is defined as the removal from the loop of any devices that may diminish the capability of the loop to deliver high-speed switched wireline telecommunications capability, including xDSL service. Such devices include, but are not limited to, bridge taps, low pass filters, and range extenders.

3.3.2 In so far as it is technically feasible, BellSouth shall test and report trouble for all the features, functions and capabilities of conditioned lines, and may not restrict testing to voice-transmission only.

3.3.3 If an TCG order for a local loop is cancelled or modified by TCG or an TCG end-user, and the cancellation or modification is not caused by BellSouth, TCG will compensate BellSouth costs incurred by BellSouth for provisioning or accommodating the modification of the local loop, unless such costs are already being recovered through approved rates. TCG may charge BellSouth order modification or cancellation charges using the same rates and conditions as BellSouth utilizes for assessing such charges to TCG, if the modification or cancellation is caused by BellSouth.

3.4 Order Coordination (OC) allows BellSouth and TCG to coordinate the installation of the SL2 Loops, Unbundled Digital Loops (UDL) and other Loops where OC may be purchased as an option. OC for physical conversions will be scheduled by BellSouth during normal business hours on a committed due date. OC will be provided in accordance with the chart set forth below.

3.5 As a chargeable option on all loops except unbundled copper loop ("UCL"), and is billed in addition to the OC charge. BellSouth will offer Order Coordination Time Specific ("OC-TS"). This will allow TCG the ability to specify the time that the coordinated conversion takes place. The OC-TS charge for orders due on the same day at the same location will be applied on a per appropriate local service request basis.

	Order Coordination (OC)	Order Coordination – Time Specific (OC-TS)	Test Points	DLR	Charge for Dispatch and Testing if No Trouble Found
SL-1	Chargeable Option	Chargeable Option	Not available	Chargeable Option – ordered as Engineering Information Document	Charged for Dispatch inside and outside Central Office
SL-2	Included	Chargeable Option	Included	Included	Charged for Dispatch outside Central Office
Unbundled Digital Loop	Included	Chargeable Option (except on Universal Digital Channel)	Included (where appropriate)	Included	Charged for Dispatch outside Central Office
Unbundled Copper Loop	Chargeable in accordance with Section 2	Not available	Included	Included	Charged for Dispatch outside Central Office
For UVL-SL1 and UCLs, TCG must order and will be billed for both OC and OC-TS if requesting OC-TS.					

3.6 Unbundled Voice Loops (UVL) may be provisioned using any type of facility that will support voice grade services. This may include loaded copper, non-loaded copper, digital loop carrier systems, fiber or a

combination of any of these facilities. BellSouth will offer UVL in two different service levels - Service Level One (SL1) and Service Level Two (SL2).

- 3.6.1 Unbundled Voice Loop - SL1 (UVL-SL1) loops are 2-wire loop start circuits, will be non-designed, and will not have remote access test points. OC will be offered as a chargeable option on SL1 loops when reuse of existing facilities has been requested by TCG. TCG may also order OC-TS when a specified conversion time is requested. OC-TS is a chargeable option for any coordinated order and is billed in addition to the OC charge. An Engineering Information (EI) document can be ordered as chargeable option. The EI document provides loop make up information which is similar to the information normally provided in a Design Layout Record. Upon issuance of a non-coordinated order in the service order system, SL1 loops will be activated on the due date in the same manner and time frames that BellSouth normally activates POTS-type loops for its customers.
- 3.6.2 BellSouth will offer unbundled voice-grade loops ("UVL") Service Level Two ("SL2"). SL2 loops shall have test points, will be designed with a design layout record ("DLR") provided to TCG, and will be provided with order coordination ("OC"). The OC feature will allow TCG to coordinate the installation of the loop with the disconnect of an existing end user's service and/or number portability service. In these cases, BellSouth will perform the order conversion with standard order coordination at its discretion during normal work hours.
- 3.6.3 TCG will be responsible for isolating troubles on SL2 loops. Once TCG has isolated a trouble to the BellSouth provided loop, TCG will issue a trouble report to BellSouth on the loop. BellSouth will take the actions necessary to repair the loop if trouble actually exists. BellSouth will repair these loops in the same time frames that BellSouth repairs similarly situated loops to its end users.
- 3.6.4 If TCG reports a trouble on SL2 loops and no trouble actually exists, BellSouth will charge TCG for any dispatching and testing (outside the central office) required by BellSouth in order to confirm the loop's working status.
- 3.6.5 BellSouth will also offer unbundled digital loops ("UDL"). They will be designed, will be provisioned with test points (where appropriate), and will come standard with Order Coordination and a DLR.
- 3.6.6 TCG will be responsible for isolating troubles on UDL. Once TCG has isolated a trouble to the BellSouth provided loop, TCG will issue a trouble report to BellSouth on the loop. BellSouth will take the actions

necessary to repair the loop if a trouble actually exists. BellSouth will repair these loops in the same time frames that BellSouth repairs similarly situated loops to its end users.

- 3.6.7 If TCG reports a trouble on a UDL and no trouble actually exists, BellSouth will charge TCG for any dispatching and testing (outside the central office) required by BellSouth in order to confirm the loop's working status.
- 3.6.8 In addition to the UVLs and UDLs, BellSouth shall make available an UCL. The UCL will be a copper twisted pair loop that is unencumbered by any intervening equipment (e.g., filters, load coils, range extenders, digital loop carrier, or repeaters). The UCL will be offered in two versions - short and long. A short UCL (18 kft or less) will be provisioned according to Resistance Design parameters. The long UCL (beyond 18kft) will be used when TCG wants to condition copper loops longer than 18kft by removing load coils and other intervening equipment. BST will only ensure electrical continuity and balance relative to tip and ring on UCLs.
- 3.6.9 The UCL will be a designed circuit, with or without conditioning, provisioned with a test point and come standard with a DLR. OC will be offered as a chargeable option on all UCL loops. OC-TS will not be offered on UCLs.
- 3.6.10 The UCL is a dry copper loop and is not intended to support any particular telecommunications service. TCG may use the UCL loop for a variety of services, including xDSL (e.g., ADSL and HDSL) services, by attaching appropriate terminal equipment of TCG's choosing. TCG will determine the type of service that will be provided over the loop.
- 3.6.11 Because the UCL shall be an unbundled loop offering that is separate and distinct from BellSouth's ADSL and HDSL capable loop offerings, TCG agrees that BellSouth's UCL loop will not be held to the service level and performance expectations that will apply to its ADSL and HDSL unbundled loop offerings. BellSouth shall only be obligated to maintain copper continuity and provide balance to ground relative to tip and ring on UCL.
- 3.6.12 The UCL shall be provided to TCG in accordance with BellSouth's applicable industry standards.

3.7 Provisioning and Coordinated Cutovers

- 3.7.1 Section 3.7 contains the initial coordination procedures that the Parties agree to follow when TCG orders and BellSouth provisions the

conversion of active BellSouth retail end users to a service configuration by which TCG will serve such end users by unbundled Loops and number portability (hereinafter referred to as "Hot Cuts"). Both Parties agree that these procedures may need to be refined or augmented if necessary as experience in ordering and provisioning Hot Cuts is gained, and they further agree to implement the improvement procedure provided in Section 3.7.4 below.

- 3.7.1.1 Except as otherwise agreed by the Parties, the time intervals for Hot Cuts shall be monitored and shall conform to the performance standards and consequences for failure to meet the specified standards as reflected in Attachment 9 of this Agreement, which is incorporated herein by this reference.
- 3.7.1.2 The following coordination procedures shall apply when BellSouth retail service is being converted to service to be provided by TCG utilizing a SL2 local loop (as that term is defined in Section 3.7.3.1.3 below) provided by BellSouth to TCG with SPNP or PNP (as these two acronyms are defined in Attachment 5, incorporated herein by this reference).
- 3.7.1.3 TCG shall order Services and Elements as set forth in this Attachment 2 and BellSouth shall provide a Firm Order Confirmation ("FOC") (as that term and acronym are defined in Attachment 7, incorporated herein by this reference).
- 3.7.2 Ordering
- 3.7.2.1 TCG shall request Hot Cuts from BellSouth by delivering to BellSouth a valid Local Service Request ("LSR") using BellSouth's ordering interfaces described in Attachment 7 to this Agreement, incorporated herein by this reference. TCG may specify a Due Date or Frame Due Time, as defined below, at any time, including twenty-four (24) hours a day and seven (7) days a week. TCG shall specify whether its service order is to be provisioned by BellSouth as either: (a) Order Coordination ("OC"); or (b) Order Coordination—Time Specific ("OC-TS"). OC shall mean the type of service order used by TCG to request that BellSouth provision a Hot Cut on the particular calendar date as specified on the LSR and confirmed on the FOC as set forth in Section 3.7.2.3 below, at any time during that day, referred to in this Section as the "Due Date." OC-TS shall mean the type of service order used by TCG to request that BellSouth provision a Hot Cut on the particular day returned on the FOC as set forth in Section 3.7.2.3 below and at the particular time specified on the FOC, referred to in this Section as the "Frame Due Time." TCG shall pay the appropriate rate for either OC or OC-TS as set forth in Attachment 2. TCG will be

billed and will pay overtime for conversions requested and occurring outside of BellSouth's normal hours of operation as defined in Section 3.7.2.2 below.

- 3.7.2.1.1 Until such time as BellSouth's systems can deliver the requested frame due time on the FOC as set forth above, TCG shall rely on the time requested on the LSR.
- 3.7.2.2 For purposes of this Section, BellSouth's normal hours of operation for personnel performing physical wire work are defined as follows:
 - 3.7.2.2.1 Monday – Friday: 8:00 a.m. – 5:00 p.m. (Excluding Holidays) (Resale/UNE non-coordinated, coordinated orders and order coordination-time specific)
 - 3.7.2.2.2 Saturday: 8:00 a.m. – 5:00 p.m. (Excluding Holidays) (Resale/UNE non-coordinated orders)
 - 3.7.2.2.3 The above hours are defined as the time of day where the work is being performed.
 - 3.7.2.2.4 Normal hours of operation for the various BellSouth centers supporting ordering, provisioning and maintenance are as set forth in Attachment 7 and incorporated herein by this reference. Normal hours of operation for the BellSouth centers providing TCG support will be equal to the hours of operation that BellSouth provisions services to its affiliates, end users, and other CLECs.
 - 3.7.2.2.5 It is understood and agreed that BellSouth technicians involved in provisioning service to TCG may work shifts outside of BellSouth's regular working hours as defined in Section 3.7.2.2 above (e.g., the employee's shift ends at 7:00 p.m. during daylight savings time). To the extent that TCG requests that work necessarily required in the provisioning of service to be performed outside BellSouth's normal hours of operation and that work is performed by a BellSouth technician during his or her scheduled shift such that BellSouth does not incur any additional costs in performing the work on behalf of TCG, BellSouth will not assess TCG additional charges beyond the rates and charges specified in this Agreement.
 - 3.7.2.2.6 TCG will not be assessed overtime charges where BellSouth elects to perform a coordinated hot cut outside of BellSouth's normal hours of operation. However, TCG will pay overtime charges subject to the provisions of Section 3.7.2.2.5 above, where TCG requests a time specific conversion which based on the completion intervals outlined in Section 3.7.3.6 requires BellSouth to complete the conversion outside

of BellSouth's normal hours of operation. BellSouth normal hours of operation are defined in Section 3.7.2.2 above of this Attachment 2 as well as Attachment 7, incorporated herein by this reference.

- 3.7.2.2.7 Upon receipt of the LSR, BellSouth's Operational Support System (hereinafter "BellSouth's OSS") shall examine the service order to determine whether it contains all the information necessary for BellSouth to process the service order. BellSouth shall review the information provided on the LSR and identify and reject any errors contained in the information provided by TCG for the current view of the LSR.
- 3.7.2.2.8 BellSouth shall provide TCG real-time, electronic access to its LFACS system in the pre-ordering phase to allow TCG (1) to access loop makeup in accordance with Attachment 2 incorporated herein by this reference and (2) to validate its connecting facility assignments (CFA) prior to the issuance of an LSR. Implementation of such shall be determined by the current Change Control Process Guidelines outlined in Attachment 7. However, BellSouth commits that the CFA LFACS feature will be included in release 10.0 unless an alternative release delivery is mutually agreed to by both parties.
- 3.7.2.2.9 If BellSouth does not deliver CFA LFACS access as outlined in Section 3.7.2.2.8 above, BellSouth will waive OCTS charges for any time specific conversions where a post FOC CFA conflict occurs until such time as BellSouth provides CFA LFACS access as outlined in Section 3.7.2.2.8 above. Upon facility assignment validation by TCG and upon receipt of TCG's LSR, BellSouth may issue clarifications to FOCs (Post-FOC Clarification) if BellSouth determines that a connecting facility assignment ("CFA") assigned on an TCG LSR is in conflict with BellSouth records.
- 3.7.2.2.10 Both parties agree that post FOC clarifications should not occur, provided TCG checks the status of the CFA utilizing the real-time preorder LFACS access, as referenced in Section 3.7.2.2.8 above, prior to the issuance of an LSR, and BellSouth completes disconnect orders in a timely manner through updating its own CFA database and performing the required physical work. BellSouth and TCG will investigate and address adverse trends of post FOC clarifications via the process improvement mechanism outlined in Section 3.7.4 below.
- 3.7.2.2.11 BellSouth and TCG will work cooperatively to ensure data base integrity is achieved between TCG and BellSouth CFA assignments. This cooperative effort will include at a minimum: (1) TCG ensuring that its processes support data base integrity, e.g., timely issuance of disconnects, proper assigning of facilities pending on canceled LSRs,

and use of information provided by BellSouth to allow TCG to identify and synchronize such data base; and (2) BellSouth will ensure that it processes TCG requests for cancellation of local service requests in a time frame that allows TCG to accurately maintain its CFA records. Until such time BellSouth provides LFACS access to TCG in accordance with Section 3.7.2.2.8 above, BellSouth agrees to continue processing disconnects to correct CFA data base discrepancies via a BellSouth provided spread sheet. Once access to LFACS is provided to TCG, in accordance with Section 3.7.2.2.8 above, TCG agrees to submit individual LSRs to correct data base discrepancies and will discontinue using the spread sheet method unless the parties mutually agree otherwise.

- 3.7.2.2.12 BellSouth will provide TCG with data base information via the BellSouth Interconnection Services website at weekly intervals and BellSouth and TCG will work jointly to identify and resolve any discrepancies between BellSouth and TCG databases containing the CFA assignments.
- 3.7.2.3 Firm Order Commitment (“FOC”)
 - 3.7.2.3.1 Pursuant to Section 3.7.2.1 above, for purposes of this Section, a “Firm Order Commitment” or “FOC” is a notification from BellSouth to TCG that a service order is valid and error free and that BellSouth has committed to provision the service order on the date specified on the LSR and confirmed on the FOC and or on the date and time specified on the LSR and confirmed on the FOC for time specific conversions. BellSouth’s committed due date is the date BellSouth strives to deliver service but is not a guaranteed date and may be altered due to facility or manpower shortages and acts of God.
 - 3.7.2.3.2 For the initial LSR, BellSouth should not provide TCG with either a request for clarification or a reject message after BellSouth provides TCG a FOC, except as outlined in Section 3.7.2.2.9 above. Supplemental LSRs must be submitted via the method utilized to submit the original LSR e.g. mechanized or manual unless conditions warrant otherwise and mutually agreed to by both parties.
 - 3.7.2.3.3 BellSouth’s measurement of FOC/reject performance as stated in Section 3.7.2.3.1 above will be set forth in Attachment 9, incorporated herein by this reference.
- 3.7.3 Provisioning
 - 3.7.3.1 Either party shall notify the other as soon as it becomes aware of any jeopardy condition which may arise that would jeopardize BellSouth’s

committed due date or OC-TS, as applicable, of providing service to TCG.

- 3.7.3.1.1 Upon receipt of the FOC pursuant to Section 3.7.2.3.1, TCG shall notify the customer of the Due Date and or Due Time (OC-TS order). Either party shall notify the other party immediately if either party becomes unable to make the Hot Cut at the Due Time and / or on the Due Date specified. New scheduled due dates and times shall be within BellSouth's normal hours of operations unless mutually agreed to by both parties.
- 3.7.3.1.2 Excluding facility shortages, acts of God or unforeseen force shortages, if BellSouth changes the date of a conversion from the date returned on the FOC, the new due date will be no greater than three (3) business days from the original requested date.
- 3.7.3.1.3 In the event BellSouth does not complete a conversion on the date returned on the FOC or does not complete a time specific conversion as requested due solely to BellSouth reasons, the following circumstances shall occur: (a) BellSouth shall document the order as a Missed Appointment pursuant to the appropriate service quality measurement outlined in Attachment 9 and incorporated herein by this reference and (b) TCG will not re-negotiate nor consider a change in due date and or due time as a re-negotiation; and (c) TCG will advise BellSouth to proceed as necessary to complete the cut; and BellSouth will not bill OCTS charges and TCG will not be required to pay for OCTS where a missed appointment of OCTS has occurred as provided for in the service quality measurements of Attachment 9 and incorporated herein by this reference.
- 3.7.3.1.4 Conversions that cannot be completed as requested on the LSR and confirmed on the FOC, solely to TCG or TCG's end user reasons will be submitted to BellSouth as a Supplemental Order. Supplemental Orders must be submitted via the method utilized to submit the original LSR, e.g., mechanized or manual unless conditions warrant otherwise and mutually agreed to by both parties.
- 3.7.3.2 Upon receipt of the FOC, TCG and BellSouth agree to follow the procedures for porting numbers as outlined in Attachment 5, incorporated herein by this reference.
- 3.7.3.2.1 In the event that BellSouth discovers, during the provisioning process, a conflict between BellSouth's database and its physical facilities, indicating a lack of BellSouth facilities, BellSouth shall issue a Pending Facilities ("PF") status by sending an electronic notice to TCG, if the request was submitted electronically, or in the case of a manually

submitted LSR, such notice will be provided via the PF report accessible via the Internet.

- 3.7.3.2.1.1 Pending Facilities order status occurs when a due date may be in jeopardy due to facility delay and may become a Missed Appointment due to BellSouth reasons.
- 3.7.3.2.1.2 In the event that BellSouth cannot meet its committed Due Date and or Due Time because of a PF condition due to a BellSouth facility shortage, the following shall occur: (a) BellSouth will notify TCG as soon as the order is placed in PF status in accordance with Section 3.7.3.2.1 above; and (b) BellSouth shall document the order as a Missed Appointment (“MA”) within BellSouth’s internal systems, provided BellSouth is unable to complete the work on the date returned on the FOC; and (c) BellSouth will provide TCG estimated service date (“ESD”) information at intervals that BellSouth provides such information to itself, its own end users, its affiliates or any other CLEC. BellSouth targets to provide ESD information within 5 business days from the date the PF condition occurs.
- 3.7.3.2.2 TCG shall provide BellSouth with a toll free number as stated in the Implementation Contact Telephone Number (“ImpCon”) Field on the LSR that BellSouth shall commit to call and use for all notification to TCG. In addition, an TCG representative will answer and will respond within 5 minutes. Response as used in this section shall mean that the TCG agent is ready to receive and record information provided by BellSouth.
- 3.7.3.2.3 In the event BellSouth does not find dial tone on the TCG side when testing prior to the conversion date and time, and detects no trouble on the BellSouth side, BellSouth shall immediately notify TCG. TCG shall perform the appropriate internal tests and, if necessary, will dispatch a technician to its collocation site at the BellSouth Central Office. If the TCG technician finds no trouble on the TCG side when testing, TCG will notify BellSouth. Both Parties will work cooperatively, to isolate and clear the trouble and arrange, if necessary, a joint meeting of a BellSouth technician and an TCG technician at the last point of BellSouth’s responsibility at the collocation site. Both Parties’ technicians will meet at the collocation site to work cooperatively by jointly isolating the trouble, and repairing it. If either Party believes the trouble is not being resolved properly, either Party may escalate the matter for immediate resolution. BellSouth will continue to process the Service Order without requiring a supplemental order assuming that TCG will correct the problem prior to the cut date and time. If the problem is determined to be a BellSouth problem and the cut time has passed, BellSouth will waive non-recurring OC-TS charges pursuant to

Section 3.7.3.1.3 above, and the Parties shall establish, by mutual consent, a new due time and or due date to be met through expedited processing.

- 3.7.3.2.4 Troubles referred to TCG as referenced in Section 3.7.3.2.3 above will be repaired by the TCG technician, if necessary. Unless TCG notifies BellSouth that the “No Dial tone” issue has not been resolved, BellSouth shall continue to process the Service Order without requiring a supplemental order. TCG agrees that BellSouth may rely on the lack of such notification to mean that TCG believes it can resolve the “No Dial tone” issue prior to Due Date or Due Time. TCG shall not be required to call BellSouth to communicate that the “No Dial Tone” issue has been resolved. If at the time of the cut, TCG dial tone is not detected on the BellSouth collocation pair and TCG and BellSouth agree that the problem is due to TCG and cannot be resolved within 15 minutes, TCG will be required to supplement the order, which will be submitted via the method utilized to submit the original LSR, and request a new due date and time. If TCG is unable to correct the repair within 15 minutes, TCG may request that BellSouth technicians standby until the condition is corrected by paying standby rates as provided for in FCC Tariff #1. If either Party believes that the process set forth herein is not satisfactorily implemented, the process improvement plan as described in Section 3.7.4.1 below will be applied
- 3.7.3.3 TCG will ensure that dial tone is delivered to the BellSouth collocation pair 48 hours prior to due date.
- 3.7.3.3.1 For OC-TS or OC conversions, BellSouth will verify the cut-over time designated by TCG for OCTS or verify the due date for OC conversions 24-48 hours in advance via telephone to ensure that the conversion is to be completed as ordered. In addition, BellSouth shall provide the following information at the time of this call: dial tone and the ANI test results, Due Date, frame due time if the order is an OC-TS order, the number of lines and the cable and pair assignment. This telephone call at [24-48] notifying TCG with the above information stated in this Section, will be known as the “Concurrence Call.” This verified information must be the same Due Date or OC-TS as sent back on the FOC unless the Parties jointly agree on or before this concurrence call on a new due date or OC-TS. Both parties will ensure OC-TS as identified in this section will commence within 15 minutes of the agreed time. BellSouth agrees to make the concurrence call at the same time or after the dial tone and ANAC test has been completed. In the unlikely event BellSouth does not complete the dial tone and ANAC test 24 hours prior to the due date, BellSouth will either confirm that the conversion will take place at the scheduled conversion time or advise TCG that it will not. If BellSouth

advises TCG that it will not meet the scheduled conversion date or time, BellSouth will document a missed due date or missed time specific conversion in accordance with Section 3.7.3.1.3 above.

- 3.7.3.3.2 BellSouth will advise TCG, via jeopardy notice, as soon as BellSouth becomes aware of a jeopardy condition which would delay the delivery of service to TCG as outlined in BellSouth's FOC or time of conversion as mutually agreed to or as ordered by TCG.
- 3.7.3.3.3 Upon the issuance and receipt of a jeopardy notice, the Parties agree to follow mutually agreed upon business rules established for resolving various types of jeopardy conditions.
- 3.7.3.4 Due Date Activities
 - 3.7.3.4.1 The UNEC will coordinate with all internal groups within BellSouth to start the conversion at the scheduled conversion time. Once notified, the central office technician will verify TCG dial tone at the tied in jumper at the BellSouth cable pair and will perform an ANAC verification of the line at the BellSouth cable pair. If dial tone is verified and the line is verified to the correct number, the BellSouth central office technician will monitor the line and when idle, will remove the BellSouth jumper and terminate at the BellSouth main distribution frame ("MDF") the tied in jumper to the TCG collocation point. The BellSouth CO technician will then perform an ANAC verification of the line to verify TCG dial tone and ensure the correct number is delivered to the BellSouth cable pair.
- 3.7.3.5 Activities After Hot Cut
 - 3.7.3.5.1 The UNEC will then advise TCG via telephone call for all coordinated conversions that the cut is complete, pursuant to Section 3.7.3.2.2 above, and allow TCG to accept or reject the service. BellSouth shall work cooperatively with TCG to correct any problems associated with the conversion of the service which might result in TCG's rejection of the service.
 - 3.7.3.5.2 If BellSouth fails to contact TCG after the hot cut and in accordance with the Cut Complete Call stated in Sections 3.7.3.5.1 and 3.7.3.2.2 above (number stated in the "ImpCon" Field of the TCG LSR) BellSouth shall document the order as a "Missed Appointment" within BellSouth's internal systems pursuant to Section 3.7.3.1.3 above.
 - 3.7.3.5.3 BellSouth will hold open the conversion orders within the following time frames after the call specified in Section 3.7.3.5.1 above has been made:

- 3.7.3.5.3.1 If the call is received by TCG prior to 5:00 p.m. on the conversion day, BellSouth will hold the order open until 6:00 p.m.;
- 3.7.3.5.3.2 If TCG requests the order be held open for a longer time, BellSouth will hold the requested order open until 12:00 noon the following business day;
- 3.7.3.5.3.3 If the call is received by TCG after 5:00 p.m. on the conversion day, BellSouth will hold the order open until 12:00 noon the following business day unless otherwise agreed to by the parties;
- 3.7.3.5.3.4 If BellSouth does not receive verbal acceptance by TCG pursuant to the above conditions, BellSouth will deem the conversion accepted by TCG.
- 3.7.3.5.4 BellSouth and TCG reserve the right to change its internal hot cut activities as business needs dictate. Any change to the hot cut procedures contained in this Attachment will be discussed by the parties and will be implemented subject to the provisions of the process improvement mechanism as set forth in Section 3.7.4 below.
- 3.7.3.6 Loop Cut-Over Timing
 - 3.7.3.6.1 BellSouth shall complete the loop cut-over step and notify TCG of such completion in accordance with the section, commencing with the specified time committed to on the FOC and ending no later than the following time limits depending on the number of lines being cut. In the case of a Coordinated Order Time Specific or OC conversion: 1-10 loops => 60 mins (1 hour); 11-30 loops => 120 mins. (2 hours) unless project managed; 31+ loops => Project Managed.
 - 3.7.3.6.2 BellSouth's commitment to performance as set forth in Attachment 9 of this Agreement is incorporated herein by this reference.
 - 3.7.3.6.3 Intervals for loops for a single end user on the same local service requests for loops greater than thirty (30) will be completed at intervals mutually coordinated by both parties through Project Management. Both parties recognize that certain conversions requiring multiple cut points may exceed the above intervals but in any event both parties will work cooperatively to limit service outage to an end user.
 - 3.7.3.6.4 In the event BellSouth does not complete the loop cut-over step within the appropriate time limit provided in Section 3.7.3.6.1 above and notify TCG of such completion in accordance with Section 3.7.3.5.1 above, TCG may escalate such failure to the proper BellSouth official for expedited resolution immediately at the end of such time limit.

3.7.3.7 Completion Notice

3.7.3.7.1 BellSouth shall send TCG completion notices when the LSRs are submitted electronically. If submitted manually, TCG may determine the completion status for all LSRs by accessing the CSOTS Report via the Internet.

3.7.4 Process Improvement

3.7.4.1 Within seventy-five (75) calendar days of the Effective Date, the Parties agree to negotiate and adopt a process improvement method to be used throughout the term of this Agreement for amending and supplementing the initial procedures established in this Section. Such process shall be implemented by the Parties thirty (30) calendar days from the date such method is mutually developed. Both parties will work cooperatively to identify areas for improvement and, if applicable, develop and implement process changes resulting from such mutual cooperation. Such method will provide the procedures to be employed on an on-going basis by the Parties when one Party wishes to improve any of the initial provisions set out in this Section. Each improvement negotiated by the Parties must be documented in an Attachment to the initial procedures as mutually agreed by the Parties.

3.7.4.2 In the event that the Parties are unable to enter into the improvement method contemplated in Section 3.7.4.1 above within ninety (90) days of the Execution Date, the Parties agree to resolve any disputes in accordance with the dispute resolution process provided in Section 16 of the General Terms and Conditions of this Agreement. Additionally, the Parties agree to seek such resolution on an expedited basis of any dispute involving a procedure that adversely impacts a customer.

3.7.5 New Loop Provisioning – “Loop Only”

3.7.5.1 BellSouth will provision new loops at intervals outlined in the Products and Service Interval Guide.

3.7.5.2 BellSouth will perform pre-service testing to ensure TCG dial tone and telephone number is delivered to the BellSouth loop.

3.7.5.3 If TCG dial tone is not detected during pre-service testing, BellSouth will notify TCG and will continue with the provisioning process assuming that TCG will correct the problem prior to the due date.

3.7.5.4 TCG will deliver dial tone and telephone number to the TCG collocation point 48 hours prior to the due date.

- 3.7.5.5 BellSouth and TCG will notify either party if the due date cannot be met for any reason.
- 3.7.5.6 Cooperative testing, trouble resolution, completion notification and acceptance testing as provided for in Ordering and Provisioning of Hot Cuts will apply, and is incorporated herein by this reference.
- 3.7.5.7 BellSouth will deliver to the ordered location at the end users premises, loops as outlined in TR 73600, or in the applicable industry standard.
- 3.7.5.8 Where a field visit is required to provision the loop, BellSouth will test the loop ordered by TCG to the NID. Testing requested by TCG to points beyond the NID will be billed a time and material charge at the same increments BellSouth charges its own end users. Requests for field testing where a dispatch is not required may be made by TCG and where mutually agreed to, BellSouth will dispatch to perform additional field testing at rates billed on a time and material basis as mentioned in this section.
- 3.8 Technical Requirements
 - 3.8.1 BellSouth shall offer Loops capable of providing the following:
 - 3.8.1.1 2-wire analog voice grade Loop provides an effective 2-wire channel with 2-wire interfaces at each end that is suitable for the transport of analog voice grade (nominal 300 to 3300 Hz) signals and using either Loop-start or ground start signaling;
 - 3.8.1.2 4-wire analog voice grade Loop provides an effective 4-wire channel with 4-wire interfaces at each end that is suitable for the transport of analog voice grade (nominal 300 to 3300 Hz) signals. The service will operate with one of the following signaling types that may be specified when the service is ordered: Loop-start, ground-start, Loop-reverse-battery, duplex;
 - 3.8.1.3 2-wire ISDN digital grade Loop provides a channel with 2-wire interfaces at each end that is suitable for the transport of 144 kbps digital services using the ISDN 2B1Q line code;
 - 3.8.1.4 TCG will be responsible for providing BellSouth with a Service Profile Identifier ("SPID") associated with a particular ISDN-cable loop and end user. With the SPID, BellSouth will be able to adequately test the circuit and ensure that it properly supports ISDN service;
 - 3.8.1.5 ADSL-capable Loop – an ADSL-capable Loop is a basic Loop (2 or 4-wire) without any intervening equipment and is capable of permitting

the transmission of communications both within the voice band and in frequency ranges above the voice band. An ADSL-capable Loop provided by BellSouth is designed to Revised Resistance Design ("RRD") guidelines and is expected to support ADSL service;

- 3.8.1.6 HDSL-capable Loop – an HDSL-capable Loop is a basic Loop (2 or 4-wire) without any intervening equipment and is capable of permitting the transmission of communications both within the voice band and in frequency ranges above the voice band. An HDLS-capable Loop provided by BellSouth is designed to Carrier Serving Area ("CSA") guidelines and is expected to support HDSL service;
- 3.8.1.7 4-wire DS-1 Loop provides a channel with 4-wire interfaces at each end. Each 4-wire channel may be equipped with DS-1 Loop repeaters suitable for the transport of 1.544 mbps digital signals simultaneously in both directions using PCM line code and may terminate on a smart jack; and
- 3.8.1.8 UCL is a dry copper Loop, not intended to support any particular telecommunications service. UCL Loops are offered pursuant to Section 3.7 of this Attachment 2. The UCL is available with a no signaling option.

3.9 High Frequency Spectrum Network Element

The Parties have agreed to move issues related to Line Sharing and Line Splitting to the Kentucky Public Service Commission Administrative Case No 382. The Parties agree to amend this agreement consistent with the Commission's effective Order within sixty (60) days of the Commission's final resolution of any exception or Motions for Reconsiderations filed by the Parties, and consistent with the FCC's Order in CC Docket Nos. 98-147, *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, and 96-98, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, released December 9, 1999 and the FCC's further order in these dockets released on January 19, 2001. For Purposes of this Agreement the Parties have agreed to the following provisions:

- 3.9.1 General
 - 3.9.1.1 BellSouth shall provide TCG access to the high frequency portion of the local loop as an unbundled network element only where BellSouth is the voice service provider to the end user ("High Frequency Spectrum") at the rates set forth in Exhibit A.

- 3.9.1.2 The High Frequency Spectrum is defined as the frequency range above the voiceband on a copper loop facility carrying analog circuit-switched voiceband transmissions. Access to the High Frequency Spectrum is intended to allow TCG the ability to provide Digital Subscriber Line (“xDSL”) data services to the end user for which BellSouth provides voice services. The High Frequency Spectrum shall be available for any version of xDSL complying to Spectrum Management Class 5 of ANSI T1.417, *American National Standard for Telecommunications, Spectrum Management for Loop Transmission Systems*. BellSouth will continue to have access to the low frequency portion of the loop spectrum (from 300 Hertz to at least 3000 Hertz, and potentially up to 3400 Hertz, depending on equipment and facilities) for the purposes of providing voice service. TCG shall only use xDSL technology that is within the PSD mask for Spectrum Management Class 5 as found in the above mentioned document.
- 3.9.1.3 Access to the High Frequency Spectrum requires an unconditioned, 2-wire copper Loop. An unloaded Loop is a copper Loop with no load coils, low-pass filters, range extenders, DAMLs, or similar devices and minimal bridged taps consistent with ANSI T1.413 and T1.601. BellSouth will provide Loop conditioning to TCG in accordance with the Unbundled Loop Modification process set forth in Section 3.3 of this Attachment. BellSouth is not required to condition a Loop for access to the High Frequency spectrum if conditioning of that Loop significantly degrades BellSouth’s voice service. If TCG requests that BellSouth condition a Loop longer than 18,000 ft. and such conditioning significantly degrades the voice services on the Loop, TCG shall pay for the loop to be restored to its original state.
- 3.9.2 Provisioning of High Frequency Spectrum and Splitter Space
- 3.9.2.1 BellSouth will provide TCG with access to the High Frequency Spectrum as follows:
- 3.9.2.1.1 To order High Frequency Spectrum on a particular Loop, TCG must have a Digital Subscriber Line Access Multiplexer (DSLAM) collocated in the central office that serves the end-user of such Loop. TCG may order splitters in a central office once it has installed its DSLAM in that central office. BellSouth will install splitters within thirty-six (36) calendar days of TCG’s submission of such order to the BellSouth Complex Resale Support Group; provided, however, that in the event BellSouth did not have reasonable notice that a particular central office was to have a splitter installed therein, the thirty-six (36) day interval shall not apply. Collocation itself or an application for collocation will serve as reasonable notice.

- 3.9.2.1.2 Once a splitter is installed on behalf of TCG in a central office in which TCG is located, TCG shall be entitled to order the High Frequency Spectrum on lines served out of that central office. BellSouth will bill and TCG shall pay the electronic or manual ordering charges as applicable when TCG orders High Frequency Spectrum for end-user service.
- 3.9.2.1.3 BellSouth will select, purchase, install, and maintain a central office POTS splitter and provide TCG access to data ports on the splitter. The splitter will route the High Frequency Spectrum on the circuit to TCG 's xDSL equipment in TCG's collocation space. At least thirty (30) days before making a change in splitter suppliers, BellSouth will provide TCG with a carrier notification letter, informing TCG of change. TCG shall purchase ports on the splitter in increments of 24 ports, and after July 25, 2001 TCG can purchase ports on the splitter in increments of 8.
- 3.9.2.1.4 BellSouth will install the splitter in (i) a common area close to the TCG collocation area, if possible; or (ii) in a BellSouth relay rack as close to the TCG DS0 termination point as possible. TCG shall have access to the splitter for test purposes, regardless of where the splitter is placed in the BellSouth premises. For purposes of this section, a common area is defined as an area in the central office in which both Parties have access to a common test access point. A Termination Point is defined as the point of termination for TCG on the toll main distributing frame in the central office and is not the demarcation point set forth in Attachment 4 of this Agreement. BellSouth will cross-connect the splitter data ports to a specified TCG DS0 at such time that a TCG end user's service is established.
- 3.9.2.1.5 The High Frequency Spectrum shall only be available on loops on which BellSouth is also providing, and continues to provide, analog voice service directly to the end user. In the event the end-user terminates its BellSouth provided voice service for any reason, or in the event BellSouth disconnects the end user's voice service pursuant to its tariffs or applicable law, and TCG desires to continue providing xDSL service on such loop, TCG shall be required to purchase a full stand-alone loop unbundled network element. To the extent commercially practicable, BellSouth shall give TCG notice in a reasonable time prior to disconnect, which notice shall give TCG an adequate opportunity to notify BellSouth of its intent to purchase such loop. In those cases in which BellSouth no longer provides voice service to the end user and TCG purchases the full stand-alone loop, TCG may elect the type of loop it will purchase. TCG will pay the appropriate recurring and non-recurring rates for such loop as set forth in Exhibit A to this Attachment. In the event TCG purchases a voice

grade loop, TCG acknowledges that such loop may not remain xDSL compatible.

- 3.9.2.1.6 Only one competitive local exchange carrier shall be permitted access to the High Frequency Spectrum of any particular loop.
- 3.9.2.2 Ordering
- 3.9.2.3 BellSouth will provide TCG the Local Service Request (“LSR”) format to be used when ordering the High Frequency Spectrum.
- 3.9.2.3.1 BellSouth will return a manual Firm Order Confirmation (“FOC”) in no more than two (2) business days after receipt of a valid, error free manual LSR. When TCG submits an electronic LSR for High Frequency Spectrum, BellSouth will return a FOC in four (4) hours ninety-five percent (95%) of the time, or, for orders that do not flow-through, in two (2) business days. BellSouth will provide TCG with access to the High Frequency Spectrum at the following target intervals:
 - 3.9.2.3.2 For 1-5 lines at the same address within three (3) business days from BellSouth’s issuance of a FOC; 6-10 lines at same address within 5 business days from BellSouth’s issuance of a FOC; and more than 10 lines at the same address is to be negotiated.
 - 3.9.2.3.3 BellSouth will provide to TCG BellSouth’s Loop Qualification System that BellSouth uses to qualify loops for its own ADSL offering.
 - 3.9.2.3.4 BellSouth will provide TCG access to Preordering Loop Makeup (LMU), in accordance with the terms of this Agreement. BellSouth shall bill and TCG shall pay the rates for such services, as described in Exhibit A.
 - 3.9.2.3.5 BellSouth shall test the data portion of the loop to ensure the continuity of the wiring for TCG’s data.
- 3.9.2.4 Maintenance and Repair
 - 3.9.2.4.1 TCG shall have access for repair and maintenance purposes, to any loop for which it has access to the High Frequency Spectrum. TCG may access the loop at the point where the combined voice and data signal exits the central office splitter.
 - 3.9.2.4.2 BellSouth will be responsible for repairing voice services and the physical line between the network interface device at the customer’s premises and the Termination Point. TCG will be responsible for

repairing data services. Each Party will be responsible for maintaining its own equipment.

- 3.9.2.4.3 TCG shall inform its end users to direct data problems to TCG, unless both voice and data services are impaired, in which event the end users should call BellSouth.
- 3.9.2.4.4 Once a Party has isolated a trouble to the other Party's portion of the loop, the Party isolating the trouble shall notify the end user that the trouble is on the other Party's portion of the loop.
- 3.9.2.4.5 In the event TCG's deployment of xDSL on the High Frequency Spectrum significantly degrades the performance of other advanced services or of BellSouth's voice service on the same loop, BellSouth shall notify TCG and allow twenty-four (24) hours to cure the trouble. If TCG fails to resolve the trouble, BellSouth may discontinue TCG's access to the High Frequency Spectrum on such loop.
- 3.9.2.5 Line Splitting. BellSouth will work cooperatively with CLECs to develop rates, methods and procedures to operationalize a process whereby two CLECs, one being a provider of voice services (a "Voice CLEC") and the other being a provider of data services (a "Data CLEC") may provide services over the same loop. The loop and port over which the services are provided cannot be a loop and port combination (i.e., UNE-P), but must be individual, stand alone network elements. The Voice CLEC or the Data CLEC shall be responsible for connecting the loop and port to a CLEC-owned splitter. BellSouth shall not own or maintain the splitter used for this purpose. When such rates, methods and procedures have been developed and operationalized, then at the request of TCG, the Parties shall amend this Agreement to incorporate the same.

3.10 Integrated Digital Loop Carriers

- 3.10.1 If TCG requests one or more loops served by an Integrated Digital Loop Carrier system ("IDLC"), BellSouth shall unbundle the IDLC-delivered loop, as soon as practicable, using one of the following alternative arrangements: (1) utilize existing Next Generation Digital Loop Carrier ("NGDLC") facilities; (2) utilize existing Universal Digital Loop Carrier ("UDLC"); (3) utilize existing cooper facilities that serve the distribution area or allocate new copper feeder pairs to the distribution area if spare capacity is available in the feeder route or carrier serving area; (4) utilize spare capacity of existing Integrated Network Access system or other existing IDLC that is terminated on a digital cross-connect system; (5) utilize side-door/hairpin capability of switch peripheral if the serving IDLC is terminated on a peripheral with

those capabilities, or if spare capacity is available on a switch peripheral; (6) activate new IDLC or NGDLC capacity to the distribution area; or (7) convert some existing IDLC capacity to UDL. These alternative arrangements will be used where available to permit TCG to order a Loop and to provide TCG with the capability to serve end users at the same level BellSouth provides its retail customers, to the extent technically feasible.

3.11 Loop Makeup (LMU)

3.11.1 Description of Service

3.11.1.1 BellSouth shall make available to TCG loop makeup (LMU) information so that TCG can make an independent judgment about whether the loop is capable of supporting the advanced services equipment TCG intends to install and the services TCG wishes to provide. This section addresses LMU as a *preordering* transaction, distinct from TCG ordering any other service(s). Loop Makeup *Service Inquiries (LMUSI)* for *preordering loop makeup* are likewise unique from other preordering functions with associated service inquiries (SI) as described in this Agreement.

3.11.1.2 BellSouth will provide TCG LMU information consisting of the composition of the loop material (copper/fiber); the existence, location and type of equipment on the loop, including but not limited to digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridged taps, load coils, pair-gain devices; the loop length; the wire gauge and electrical parameters.

3.11.1.3 BellSouth's LMU information is provided to TCG as it exists either in BellSouth's databases or in its hard copy facility records. BellSouth does not guarantee accuracy or reliability of the LMU information provided.

3.11.1.4 TCG may choose to use equipment that it deems will enable it to provide a certain type and level of service over a particular BellSouth loop. The determination shall be made solely by TCG and BellSouth shall not be liable in any way for the performance of the advanced data services provisioned over said loop. The specific loop type (ADSL, HDSL, or otherwise) ordered on the LSR must match the LMU of the loop requested taking into consideration any requisite line conditioning. The LMU data is provided for informational purposes only and does not guarantee TCG's ability to provide advanced data services over the ordered loop type. Further, if TCG orders loops that are not intended to support advanced services (such as UV-SL1, UV-SL2, or ISDN compatible loops) and that are not inventoried as advanced services

loops, the LMU information for such loops is subject to change at any time due to modifications and/or upgrades to BellSouth's network. TCG is fully responsible for any of its service configurations that may differ from BellSouth's technical standard for the loop type ordered.

- 3.11.1.5 Submitting Loop Makeup Service Inquiries TCG may obtain LMU information by submitting a LMUSI mechanically or manually. Mechanized LMUSIs should be submitted through BellSouth's Operational Support Systems interfaces. After obtaining the loop from the mechanized LMUSI process, if TCG needs further loop information in order to determine loop service capability, TCG may initiate a separate Manual LMUSI for a separate nonrecurring charge as set forth in the rate exhibit for Attachment 2.
- 3.11.1.6 Manual LMUSIs shall be submitted by electronic mail to BellSouth's Complex Resale Support Group (CRSG)/Account Team utilizing the Preordering Loop Makeup Service Inquiry form. The service interval for the return of a Loop Makeup Manual Service Inquiry is seven business days. Manual LMUSIs are not subject to expedite requests. This service interval is distinct from the interval applied to the subsequent service order.
- 3.11.2 Loop Reservations
 - 3.11.2.1 TCG may reserve facilities for up to four (4) calendar days for each facility requested on a LMUSI from the time the LMU information is returned to TCG. During and prior to TCG placing an LSR, the reserved facilities are rendered unavailable to other customers, including BellSouth. If TCG does not submit an LSR for a UNE service on a reserved facility within the four-day reservation timeframe, the reservation of that spare facility will become invalid and the facility will be released.
 - 3.11.2.2 For a Mechanized LMUSI, TCG may reserve up to ten loop facilities. For a Manual LMUSI, TCG may reserve up to three loop facilities.
 - 3.11.2.3 Charges for preordering LMUSI are separate from any charges associated with ordering other services from BellSouth.
- 3.11.3 Ordering of Other UNE Services
 - 3.11.3.1 All LSRs issued for reserved facilities shall reference the facility reservation number as provided by BellSouth. TCG will not be billed any additional LMU charges for the loop ordered on such LSR. If, however, TCG does not reserve facilities upon an initial LMUSI, TCG's placement of an order for an advanced data service type facility shall

be deemed placed for such a facility rate element that "includes manual service inquiry and reservation" per the rate matrix of this Attachment.

- 3.11.3.2 Where TCG has reserved multiple loop facilities on a single reservation, TCG may not specify which facility shall be provisioned when submitting the LSR. For those occasions, BellSouth will assign to TCG, subject to availability, a facility that meets the BellSouth technical standards of the BellSouth type loop as ordered by TCG . If the ordered loop type is not available, TCG may utilize the Unbundled Loop Modification process or the Special Construction process, as applicable, to obtain the loop type ordered.

4 Network Interface Device (“NID”)

- 4.1 Definition. The NID is defined as any means of interconnection of end user customer premises wiring to BellSouth’s distribution plant, such as a cross-connect device used for that purpose. The NID is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit at the end user’s premises. The NID features two independent chambers or divisions that separate the service provider’s network from the on-premises wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider, and the end user each make their connections. The NID provides a protective ground connection and is capable of terminating cables such as twisted pair cable.

- 4.2 BellSouth shall permit TCG to connect TCG’s loop facilities to on-premises wiring through BellSouth’s NID or at any other technically feasible point.

4.3 Access to Network Interface Device

- 4.3.1 Due to the wide variety of NIDs utilized by BellSouth (based on subscriber size and environmental considerations), TCG may access the subscriber’s inside wire by any of the following means:
- 4.3.1.1 BellSouth shall allow TCG to connect its loops directly to BellSouth’s multi-line residential NID enclosures that have additional space and are not used by BellSouth or any other telecommunications carriers to provide service to the premise.
- 4.3.1.2 Where an adequate length of on-premises wiring is present and environmental conditions permit, either Party may remove the on-

premises wiring from the other Party's NID and connect that wire to that Party's own NID; or

- 4.3.1.3 Enter the subscriber access chamber or "side" of "dual chamber" NID enclosures for the purpose of extending a connectorized or spliced jumper wire from the on-premises wiring through a suitable "punch-out" hole of such NID enclosures; or
- 4.3.1.4 Request BellSouth to make other rearrangements to the on-premises wiring terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting Party (i.e., TCG, its agent, the building owner or the subscriber). Such charges will be billed to the requesting Party.
- 4.3.2 In no case shall either Party remove or disconnect the other Party's loop facilities from either Party's NIDs, enclosures, or protectors without adhering to state regulatory requirements and without providing prior notice to the other Party. In such cases, it shall be the responsibility of the Party disconnecting loop facilities to leave undisturbed the existing form of electrical protection (if applicable) and to maintain the physical integrity of the NID. The Party disconnecting the loop will hold BellSouth harmless for any liability associated with removal of the BellSouth loop from the BellSouth NID and the disconnecting Party will assume full liability for its actions and for any adverse consequences that may result. Furthermore, it shall be the responsibility of the disconnecting Party to reconnect the disconnected loop to a nationally-recognized-testing-laboratory-listed station protector which has been grounded as per Article 800 of the National Electrical Code within the NID. If no spare station protector exists in the NID, the disconnected loop must be appropriately cleared, capped and stored. If the disconnecting party does not wish to accept these responsibilities, other options exist in which BellSouth installs a NID as a chargeable option.
- 4.3.3 In no case shall either Party remove or disconnect ground wires from the other Party's NID, enclosures, or protectors.
- 4.3.4 In no case shall either Party remove or disconnect NID modules, protectors, or terminals from the other Party's NID enclosures.
- 4.3.5 Due to the wide variety of NID enclosures and outside plant environments BellSouth will work with TCG to develop specific procedures to establish the most effective means of implementing this section.
- 4.3.6 Technical Requirements

- 4.3.6.1 The NID shall provide an accessible point of interconnection for the on-premise wiring, for BellSouth's facilities, for the Subloop Distribution and/or cross connect to TCG's NID, and shall maintain a connection to ground.
- 4.3.6.2 The NID shall be capable of transferring electrical analog or digital signals between the on-premise wiring and the Subloop Distribution and/or cross connect to TCG's NID, consistent with the NID's function at the Effective Date of this Agreement.
- 4.3.6.3 Where a BellSouth NID exists, it is provided in its "as is" condition. TCG may request BellSouth do additional work to the NID at the time and materials charges set forth in the appropriate BellSouth Tariff.
- 4.3.6.4 When TCG deploys its own local loops with respect to multiple-line termination devices, TCG shall specify the quantity of NID connections it requires within such device.

5 Subloops Elements

5.1 Definitions

- 5.1.1 Subloop. The subloop network element is defined as any portion of the loop that is technically feasible to access at terminals in BellSouth's outside plant, including inside wire. An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole or pedestal, the network interface device, ("NID") the minimum point of entry, ("MPOE") the single point of interconnection, the main distribution frame, the remote terminal, and the feeder/distribution interface ("FDI").
- 5.1.2 Inside Wire. Inside wire is defined as all loop plant owned by BellSouth on end user customer premises as far as the point of demarcation as defined in 47 C.F.R. § 68.3, including the loop plant near the end user customer premises. TCG may access the inside wire subloop at any technically feasible point including, but not limited to, the NID, the MPOE, the single point of interconnection, the pedestal, or the pole.
- 5.1.3 Subloop elements include, but are not limited to, the following: Distribution, including inside wire; Concentration Multiplexing Functionality; and Feeder.

5.3.1 Subloop Distribution

The Parties have agreed to move issues related to Subloop to the Kentucky Public Service Commissions Administrative Docket 382. Consistent with the Commission's Order in this Docket, the Parties agree to amend this Agreement within sixty (60) days of the Commission's resolution of exceptions and any Motion for Reconsideration filed by the Parties. For purposes of this Agreement, the Parties agree to the following:

- 5.1.3.1.1 The unbundled subloop distribution facility is a dedicated transmission facility that BellSouth provides from an end user's point of demarcation to a BellSouth cross-connect device. The BellSouth cross-connect device may be located within a remote terminal (RT) or a stand-alone cross-box in the field or in the equipment room of a building. The unbundled sub-loop distribution media is a copper twisted pair that can be provisioned as a 2 Wire or 4 Wire facility. BellSouth will make the following available sub-loop distribution offerings where facilities permit:
- Unbundled SubLoop Distribution – Voice Grade
 - Unbundled Copper Sub-Loop
 - Unbundled SubLoop Distribution – Intrabuilding Network Cable (aka riser cable)
- 5.1.3.1.2 Unbundled SubLoop Distribution – Voice Grade (“USLD-VG”) is a subloop facility from the cross-box in the field up to and including the point of demarcation, at the end user's premises and may have load coils.
- 5.1.3.1.3 Unbundled Copper SubLoop (“UCSL”) is a copper facility of any length provided from the cross-box in the field up to and including the end-user's point of demarcation. If available, this facility will not have any intervening equipment such as load coils between the end-user and the cross-box.
- 5.1.3.1.4 If TCG requests a UCSL and it is not available, TCG may request the SubLoop facility be modified pursuant to the ULM process request to remove load coils and/or bridged taps. If load coils and/or bridged taps are removed, the facility will be classified as a UCSL.
- 5.1.3.1.5 Unbundled SubLoop Distribution – Intrabuilding Network Cable (“USLD-INC”) is the distribution facility inside a building or between buildings on the same continuous property which is not separated by a public street or road. USLD-INC includes the facility from the cross-connect device in the building equipment room up to and including the point of demarcation, at the end user's premises.

- 5.1.3.1.6 BellSouth will install a cross connect panel in the building equipment room for the purpose of accessing USLD-INC pairs from a building equipment room. The cross-connect panel will function as a single point of interconnection (“SPOI”) for USLD-INC and will be accessible by multiple carriers as space permits. BellSouth will place cross-connect blocks in 25-pair increments for TCG’s use on this cross-connect panel. TCG will be responsible for connecting its facilities to the 25-pair cross-connect block(s).
- 5.1.3.1.7 Unbundled SubLoop distribution facilities shall support functions associated with provisioning, maintenance and testing of the Unbundled SubLoop. For access to Voice Grade USLD and UCSL, TCG shall install a cable to the BellSouth cross-box pursuant to the terms and conditions for physical collocation for remote sites set forth in this Agreement. This cable would be connected by a BellSouth technician within the BellSouth cross-box during the set-up process. TCG’s cable pairs can then be connected to BellSouth’s USL within the BellSouth cross-box by the BellSouth technician.
- 5.1.3.1.8 Through the Service Inquiry (“SI”) process, BellSouth will determine whether access to Unbundled SubLoops at the location requested by TCG is technically feasible and whether sufficient capacity exists in the cross-box. If existing capacity is sufficient to meet TCG’s request, then BellSouth will perform the site set-up as described in this Section. If any work must be done to modify existing BellSouth facilities or add new facilities (other than adding the cross-connect panel in a building equipment room as noted in this Section) to accommodate TCG’s request for Unbundled SubLoops, TCG may request BellSouth’s Special Construction (“SC”) process to determine additional costs required to provision the Unbundled SubLoops. TCG will have the option to proceed under the SC process to modify the BellSouth facilities.
- 5.1.3.1.8 The site set-up must be completed before TCG can order sub-loop pairs. For the site set-up in a BellSouth cross-connect box in the field, BellSouth will perform the necessary work to splice TCG’s cable into the cross-connect box. For the site set-up inside a building equipment room, BellSouth will perform the necessary work to install the cross-connect panel and the connecting block(s) that will be used to provide access to the requested USLs.
- 5.1.3.1.9 Once the site set-up is complete, TCG will request sub-loop pairs through submission of a Local Service Request (“LSR”) form to the Local Carrier Service Center (“LCSC”). Order Coordination is required with USL pair provisioning when TCG requests reuse of an existing facility and is in addition to the USL pair rate. For expedite requests by

TCG for sub-loop pairs, expedite charges will apply for intervals less than 5 days.

- 5.1.3.1.10 Unbundled SubLoops will be provided in accordance with technical reference TR73600.
- 5.1.4 Unbundled Network Terminating Wire (“UNTW”)
 - 5.1.4.1 Unbundled Network Terminating Wire (“UNTW”) is unshielded twisted copper wiring that is used to extend circuits from an intra-building network cable terminal or from a building entrance terminal to an individual customer’s point of demarcation. It is the final portion of the Loop which, in multi-subscriber configurations, represents the point at which the network branches out to serve individual subscribers.
 - 5.1.4.2 This element will be provided in Multi-Dwelling Units (“MDUs”) and/or Multi-Tenants Units (“MTUs”) where BellSouth owns wiring all the way to the end-users premises. BellSouth will not provide this element in those locations where the property owner provides its own wiring to the end-user’s premises, where a third party owns the wiring to the end-user’s premises or where the property owner will not allow BellSouth to place its facilities to the end user.
 - 5.1.4.3 Requirements
 - 5.1.4.3.1 On a multi-unit premises, upon request of the other Party (“Requesting Party”), the Party owning the network terminating wire will provide access to UNTW pairs on an Access Terminal that is suitable for use by multiple carriers at each Garden Terminal or Wiring Closet.
 - 5.1.4.3.2 The Provisioning Party shall not be required to install new or additional NTW beyond existing NTW to provision the services of the Requesting Party.
 - 5.1.4.3.3 Upon receipt of the UNTW (SI) requesting access to the Provisioning Party’s UNTW pairs at a multi-unit premises, representatives of both Parties will participate in a meeting at the site of the requested access. The purpose of the site visit will include discussion of the procedures for installation and location of the Access Terminals. By request of the Requesting Party, an Access Terminal will be installed either adjacent to each Provisioning Party’s Garden Terminal or inside each Wiring Closet. Requesting Party will deliver and connect its central office facilities to the UNTW pairs within the Access Terminal. Requesting Party may access any available pair on an Access Terminal. A pair is available when a pair is not being utilized to provide service or where the end user has requested a change in its local service provider to the

Requesting Party. Prior to connecting Requesting Party's service on a pair previously used by Provisioning Party, Requesting Party is responsible for ensuring the end-user is no longer using Provisioning Party's service or another CLEC's service before accessing UNTW pairs.

- 5.1.4.3.4 Access Terminal installation intervals will be established on an individual case basis.
- 5.1.4.3.5 Requesting Party is responsible for obtaining the property owner's permission for Provisioning Party to install an Access Terminal(s) on behalf of the Requesting Party. The submission of the SI by the Requesting Party will serve as certification by the Requesting Party that such permission has been obtained. If the property owner objects to Access Terminal installations that are in progress or subsequent to completion and demands removal of Access Terminals, Requesting Party will be responsible for costs associated with removing Access Terminals and restoring property to its original state prior to Access Terminals being installed.
- 5.1.4.3.6 The Requesting Party shall indemnify and hold harmless the Provisioning Party against any claims of any kind that may arise out of the Requesting Party's failure to obtain the property owner's permission. Requesting Party will be billed for non-recurring and recurring charges for accessing UNTW pairs at the time the Requesting Party activates the pair(s). The Requesting Party will notify the Provisioning Party each time it activates UNTW pairs using the LSR form.
- 5.1.4.3.7 Requesting Party will isolate and report troubles in the manner specified by the Provisioning Party. Requesting Party must tag the UNTW pair that requires repair. If Provisioning Party dispatches a technician on a reported trouble call and no UNTW trouble is found, Provisioning Party will charge Requesting Party for time spent on the dispatch and testing the UNTW pair(s).
- 5.1.4.3.8 If Requesting Party initiates the Access Terminal installation and the Requesting Party has not activated at least one pair on the Access Terminal installed pursuant to Requesting Party's request for an Access Terminal within 6 months of installation of the Access Terminal, Provisioning Party will bill Requesting Party a non-recurring charge equal to the actual cost of provisioning the Access Terminal.
- 5.1.4.3.9 If Provisioning Party determines that Requesting Party is using the UNTW pairs without reporting the activation of the pairs, the following charges shall apply:

- 5.1.4.3.10 If Requesting Party issued a LSR to disconnect an end-user from Provisioning Party in order to use a UNTW pair, Requesting Party will be billed for the use of the pair back to the disconnect order date.
- 5.1.4.3.11 If Requesting Party activated a UNTW pair on which Provisioning Party was not previously providing service, Requesting Party will be billed for the use of that pair back to the date the end-user began receiving service using that pair. Upon request, Requesting Party will provide copies of its billing record to substantiate such date. If Requesting Party fails to provide such records, then Provisioning Party will bill the Requesting Party back to the date of the Access Terminal installation.

5.1.5 Subloop Concentration Multiplexing Functionality

- 5.1.5.1 Where facilities permit, BellSouth will provide to TCG the ability to concentrate its subloops onto multiple DS1s back to the BellSouth central office.
- 5.1.5.2 Definition
 - 5.1.5.2.1 The Subloop Concentration Multiplexing Functionality: (1) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (2) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing); (3) aggregates a specified number of signals or channels to fewer channels (concentrating); (4) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (5) where available, performs electrical to optical (E/O) conversion.
 - 5.2.5.2.2 The Subloop Concentration Multiplexing Functionality may be provided through a Digital Loop Carrier (“DLC”) system, multiplexer or other equipment at which traffic is encoded and decoded, multiplexed and demultiplexed, or concentrated.
- 5.1.5.3 Technical Requirements
 - 5.1.5.3.1 The Subloop Concentration Multiplexing Functionality, if deployed, is used to concentrate and or multiplex the TCG distribution media to the BellSouth feeder media. BellSouth’s feeder media can be copper, coaxial (if deployed) or fiber. To the extent unbundling involves “concentration,” BellSouth and TCG will work cooperatively to establish concentration ratios for the specific application within the technical limits that may exist with deployed equipment and facilities. If concentration ratios are established which result in reengineering of the facilities, special construction charges will apply.

- 5.1.5.3.2 When BellSouth provides a Subloop Concentration Multiplexing Functionality or Loop repeaters, BellSouth shall provide power for subloop equipment through a non-interruptible source with battery backup unless otherwise mutually agreed upon by the Parties.
- 5.1.5.3.3 The Subloop Concentration Multiplexing Functionality shall be provided to TCG in accordance with applicable industry standard technical references.
- 5.1.5.3.4 The Subloop Concentration Multiplexing Functionality shall continuously monitor protected circuit packs and redundant common equipment in the same manner which BellSouth provides such functionality to itself.
- 5.1.5.3.5 The redundant common equipment shall also automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation where technically feasible.
- 5.1.5.3.6 The Subloop Concentration Multiplexing Functionality shall be capable of performing its functions on the signals needed to provide telecommunications services capable of being transmitted through said Subloop Concentration Multiplexing Functionality.
- 5.1.5.3.7 BellSouth shall provide power for the Subloop Concentration Multiplexing Functionality, through a non-interruptible source if the function is performed in a central office, or from a commercial AC power source with battery backup if the equipment is located outside a central office, where BellSouth provides such functionality to itself.
- 5.1.5.3.8 With the Effective Date of this Agreement, Subloop Concentration Multiplexing Functionality, using the Lucent Series 5 equipment, will be offered in two different systems. System A will allow up to 96 of TCG's subloops to be concentrated onto multiple DS1s. System B will allow an additional 96 of TCG's subloops to be concentrated onto multiple DS1s. One System A may be supplemented with one System B and they both must be physically located in a single Series 5 dual channel bank. A minimum of two DS1s is required for each system (i.e., System A requires two DS1s and System B would require an additional two DS1s or four in total). The DS1 level facility that connects the RT site with the BSWC is known as a feeder interface. Except where the Subloop Concentration Multiplexing Functionality is currently combined with other Network Elements. All DS1 Feeder Interfaces will terminate to TCG's Collocation Space within the BSWC that serves the RT where TCG's subloops are connected. Subloop Concentration Multiplexing Functionality service is offered with or without concentration and with or without a protection DS1. If BellSouth