

ATTACHMENT 2

NETWORK ELEMENTS AND COMBINATIONS

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NETWORK ELEMENTS AND COMBINATIONS

1 Introduction

1.1 This Attachment sets forth the Network Elements and Combinations that BellSouth agrees to offer to AT&T 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 AT&T access to and AT&T 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 AT&T 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 AT&T to interconnect AT&T's facilities or facilities provided to AT&T by an ILEC or by third parties with

each of BellSouth's Network Elements at any point designated by AT&T that is technically feasible. Any request by AT&T 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 Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.

- 2.4 BellSouth will provide Network Elements and Combinations to AT&T 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. AT&T, at its option, may designate other interfaces using the process set forth in Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.
- 2.5 AT&T may use one or more Network Elements and Combinations to provide to itself, its affiliates and to AT&T 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 AT&T hereunder, BellSouth shall permit AT&T 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 AT&T or provided by third parties to AT&T to provide telecommunications services to AT&T, its affiliates and to AT&T end users.
- 2.7 Except upon request by AT&T, BellSouth shall not separate requested Network Elements that BellSouth currently combines.
- 2.7.1 **AT&T PROPOSAL**

Currently combined Network Elements are defined as elements that BellSouth ordinarily combines in its own network in the manner in which they are typically combined. AT&T may order Combinations of typically combined elements, even if the particular elements being ordered are not actually, physically connected at the time the order is placed. Combinations that

meet the definition of this section 2.7.1 are identified in Exhibit A of this Attachment.

- 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 AT&T agrees is suitable. However, where BellSouth provides Combinations to AT&T, BellSouth may provide the existing interconnections and no demarcation point shall exist between the combined Network Elements.

2.9 **AT&T PROPOSAL**

BellSouth shall not charge AT&T an interconnection fee or demand other consideration for directly interconnecting any Network Element or Combination to any other Network Element or Combination provided by BellSouth to AT&T if BellSouth directly interconnects the same Network Elements or Combinations in providing any service to its own end users or a BellSouth affiliate, including the use of intermediary devices, such as a digital cross connect panel, to perform such interconnection.

- 2.10 Attachment 2 of this Agreement describes the Network Elements that AT&T 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 AT&T of the existence of and the technical characteristics of the new or revised Network Element. Upon AT&T'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 **Replacement of Services with UNE(s).**

- 2.11.1 AT&T may not convert special access services to combinations of loop and transport network elements, whether or not AT&T self-provides its entrance facilities (or obtains entrance facilities from a third party), unless, AT&T 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 AT&T requests to convert any special access services to combinations of loop and transport network

elements at UNE prices, AT&T 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 AT&T 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 AT&T seeks to qualify for conversion of special access circuits. AT&T 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 AT&T certifies that it is the exclusive provider of an end user's local exchange service. The loop-transport combinations must terminate at AT&T'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, AT&T is the end user's only local service provider, and thus, is providing more than a significant amount of local exchange service. AT&T 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 AT&T 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 AT&T'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. AT&T 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 AT&T is providing a significant amount of local exchange service, but does not qualify under any of the three options set forth in Section 2.11.1. In such case, AT&T may petition the FCC for a waiver of the local usage options set forth herein.

2.12 AT&T PROPOSAL

If a waiver is granted, then AT&T may be able to immediately place such orders.

- 2.12.1 BellSouth may, at its sole expense, audit AT&T records in order to determine AT&T's compliance with the local usage options set forth above. All audits shall be conducted by a third party independent auditor, and AT&T 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, AT&T shall reimburse BellSouth for the cost of the audit. If, based on its audits, BellSouth concludes that AT&T 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 AT&T.

2.13 AT&T PROPOSAL

The Parties further acknowledge that on a going forward basis, AT&T 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 and will not be subject to such circuits meeting local usage options as described in this section or subject to any termination provisions of any applicable tariffs.

- 2.13.1 When an existing special access service circuit employed by AT&T 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.

2.14

AT&T PROPOSAL

In recognition of the fact that AT&T's continued payments to BellSouth for use of Network Elements shall compensate BellSouth for its investment in the facilities originally used to provide services to AT&T, in the event that the termination of any service that is converted to Network Elements would otherwise affect AT&T's ability to satisfy any term or volume requirements applicable to existing services pursuant to tariff or contract, any lawful termination liabilities or other requirements shall be limited in the following ways:

For requirements based on the purchase by AT&T of specific aggregate volumes of services from BellSouth, the purchase price paid by AT&T to BellSouth for the Network Elements that replace any service shall be included in the calculation of AT&T purchases that apply toward such volume requirements.

For tariffs or contracts requiring minimum service terms for individual services ordered by AT&T, any lawful penalty for early termination shall be reduced by subtracting from the otherwise applicable lawful penalty an amount equal to (i) the otherwise applicable lawful penalty, multiplied by (ii) a fraction equal to (A) the recurring fixed or usage-based charges to be payable by AT&T for the Network Elements that replace the service following the conversion, divided by (B) the recurring fixed or usage-based charges that were payable by AT&T for the service being replaced prior to the conversion. For example, if the recurring monthly charges for a service prior to the conversion had been \$100, the recurring monthly charges for the Network Elements following the conversion will be \$60, and the otherwise applicable lawful termination penalty would be \$10, the termination penalty shall be reduced to \$4 [or $\$10 - \$10 (60/100)$].

2.15

Conversion of Service As Is

AT&T 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, AT&T may request such conversions on a single LSR for all services billed under the same Account Telephone Number or master billing account. BellSouth will project manage conversions of fifteen (15) or more lines.

2.16 AT&T PROPOSAL

AT&T may consolidate multiple end-user accounts to a single Account telephone Number into a single LSR.

2.17 Standards for Network Elements

2.17.1 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.

2.17.2 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.

2.17.3 The quality of the Network Elements as well as the quality of the access to said Network Elements that BellSouth provides to AT&T 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.

2.17.4 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 AT&T to offer a telecommunications service in the manner AT&T 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.

- 3.1.2 The provisioning of service to AT&T 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.
- 3.1.3 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 AT&T requests, whether or not BellSouth offers advanced services to the end user on that loop.
- 3.1.4 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.
- 3.1.5 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.
- 3.1.6 As a chargeable option on all loops except unbundled copper loop ("UCL"), BellSouth will offer Order Coordination Time Specific ("OC-TS"). This will allow AT&T 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.
- 3.2 BellSouth will offer unbundled voice-grade loops ("UVL") Service Level Two ("SL2").**
- 3.2.1 SL2 loops shall have test points, will be designed with a design layout record ("DLR") provided to AT&T, and will be provided with order coordination ("OC"). The OC feature will allow AT&T 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.
- 3.2.2 AT&T will be responsible for isolating troubles on SL2 loops. Once AT&T has isolated a trouble to the BellSouth provided loop, AT&T 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.

- 3.2.3 If AT&T reports a trouble on SL2 loops and no trouble actually exists, BellSouth will charge AT&T for any dispatching and testing (outside the central office) required by BellSouth in order to confirm the loop's working status.
- 3.2.4 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.
- 3.2.5 AT&T will be responsible for isolating troubles on UDL. Once AT&T has isolated a trouble to the BellSouth provided loop, AT&T 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.
- 3.2.6 If AT&T reports a trouble on a UDL and no trouble actually exists, BellSouth will charge AT&T for any dispatching and testing (outside the central office) required by BellSouth in order to confirm the loop's working status.
- 3.2.7 In addition to the UVLs and UDLs, BellSouth shall make available a UCL. The UCL will be a copper twisted pair loop that is unencumbered by any intervening equipment (e.g., filters, load coils, build-out capacitors, 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 AT&T wants to condition copper loops longer than 18kft by removing load coils and other intervening equipment. BST will only ensure electrical continuity and balance to ground relative to tip and ring on UCLs.
- 3.2.8 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.
- 3.2.9 The UCL is a dry copper loop and is not intended to support any particular telecommunications service. AT&T may use the UCL loop for a variety of services, including xDSL (e.g., ADSL and HDSL) services, by attaching appropriate terminal equipment of AT&T's

choosing. AT&T will determine the type of service that will be provided over the loop.

3.2.10 Because the UCL shall be an unbundled loop offering that is separate and distinct from BellSouth's ADSL and HDSL capable loop offerings, AT&T 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.

3.2.11 The UCL shall be provided to AT&T in accordance with BellSouth's Technical Reference 73600.

3.3 Provisioning and Coordinated Cutovers

3.3.1 Section 3.3 contains the initial coordination procedures that the Parties agree to follow when AT&T orders and BellSouth provisions the conversion of active BellSouth retail end users to a service configuration by which AT&T 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 ---- below.

3.3.2 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.

3.3.3 The following coordination procedures shall apply when BellSouth retail service is being converted to service to be provided by AT&T utilizing a SL2 local loop (as that term is defined in Section ----- below) provided by BellSouth to AT&T with SPNP or PNP (as these two acronyms are defined in Attachment 5, incorporated herein by this reference).

3.3.4 AT&T 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).

3.4 Ordering

- 3.4.1 AT&T 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. AT&T 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. AT&T 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 AT&T 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 ----- 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 AT&T to request that BellSouth provision a Hot Cut on the particular day returned on the FOC as set forth in Section ----- below and at the particular time specified on the FOC, referred to in this Section as the "Frame Due Time." AT&T shall pay the appropriate rate for either OC or OC-TS as set forth in Attachment 2. AT&T will be billed and will pay overtime for conversions requested and occurring outside of BellSouth's normal hours of operation as defined in Section ------ below.
- 3.4.2 Until such time as BellSouth's systems can deliver the requested frame due time on the FOC as set forth above, AT&T shall rely on the time requested on the LSR.
- 3.4.3 For purposes of this Section, BellSouth's normal hours of operation for personnel performing physical wire work are defined as follows:
- 3.4.3.1 Monday – Friday: 8:00 a.m. –5 :00 p.m. (Excluding Holidays) (Resale/UNE non-coordinated, coordinated orders and order coordination-time specific)
- 3.4.3.2 Saturday: 8:00 a.m. – 5:00 p.m. (Excluding Holidays) (Resale/UNE non-coordinated orders)
- 3.4.3.3 The above hours are defined as the time of day where the work is being performed.
- 3.4.3.4 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 AT&T support will be equal to the hours of operation that BellSouth provisions services to its affiliates, end users, and other CLECs.

- 3.4.3.5 It is understood and agreed that BellSouth technicians involved in provisioning service to AT&T may work shifts outside of BellSouth's regular working hours as defined in Section ----- above (e.g., the employee's shift ends at 7:00 p.m. during daylight savings time). To the extent that AT&T 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 AT&T, BellSouth will not assess AT&T additional charges beyond the rates and charges specified in this Agreement.
- 3.4.3.6 AT&T will not be assessed overtime charges where BellSouth elects to perform a coordinated hot cut outside of BellSouth's normal hours of operation. However, AT&T will pay overtime charges subject to the provisions of Section ----- above, where AT&T requests a time specific conversion which based on the completion intervals outlined in Section 3.8.3.6 requires BellSouth to complete the conversion outside of BellSouth's normal hours of operation. BellSouth normal hours of operation are defined in Section ----- above of this Attachment 2 as well as Attachment 7, incorporated herein by this reference.
- 3.4.3.7 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 AT&T for the current view of the LSR.
- 3.4.3.8 BellSouth shall provide AT&T real-time, electronic access to its LFACS system in the pre-ordering phase to allow AT&T (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 Change Control Process Guidelines outlined in Attachment 7, Exhibit A, incorporated herein by this reference. 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.
- 3.4.3.9 If BellSouth does not deliver CFA LFACS access as outlined in Section ----- 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 - ---- above. Upon facility assignment validation by AT&T and upon

receipt of AT&T's LSR, BellSouth may issue clarifications to FOCs (Post-FOC Clarification) if BellSouth determines that a connecting facility assignment ("CFA") assigned on an AT&T LSR is in conflict with BellSouth records.

- 3.4.3.10 Both parties agree that post FOC clarifications should not occur, provided AT&T checks the status of the CFA utilizing the real-time preorder LFACS access, as referenced in Section ----- 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 AT&T will investigate and address adverse trends of post FOC clarifications via the process improvement mechanism outlined in Section ----- below.
- 3.4.3.11 BellSouth and AT&T will work cooperatively to ensure data base integrity is achieved between AT&T and BellSouth CFA assignments. This cooperative effort will include at a minimum: (1) AT&T 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 AT&T to identify and synchronize such data base; and (2) BellSouth will ensure that it processes AT&T requests for cancellation of local service requests in a time frame that allows AT&T to accurately maintain its CFA records. Until such time BellSouth provides LFACS access to AT&T in accordance with Section ----- 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 AT&T, in accordance with Section -----above, AT&T agrees to submit individual LSRs to correct data base discrepancies and will discontinue using the spread sheet method unless the parties mutually agree otherwise.
- 3.4.3.12 BellSouth will provide AT&T with data base information via the BellSouth Interconnection Services website at weekly intervals and BellSouth and AT&T will work jointly to identify and resolve any discrepancies between BellSouth and AT&T databases containing the CFA assignments.
- 3.4.4 Firm Order Commitment ("FOC")
 - 3.4.4.1 Pursuant to Section ----- above, for purposes of this Section, a "Firm Order Commitment" or "FOC" is a notification from BellSouth to AT&T 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.

- 3.4.4.2 For the initial LSR, BellSouth should not provide AT&T with either a request for clarification or a reject message after BellSouth provides AT&T a FOC, except as outlined in Section ----- 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.
- 3.4.4.3 BellSouth's measurement of FOC/reject performance as stated in Section ----- above will be set forth in Attachment 9, incorporated herein by this reference.

3.5 Provisioning

- 3.5.1 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 AT&T.
 - 3.5.1.1 Upon receipt of the FOC pursuant to Section -----, AT&T 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.
 - 3.5.1.2 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 3 business days from the original requested date.
 - 3.5.1.3 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) AT&T will not re-negotiate nor consider a change in due date and or due time as a re-negotiation; and (c) AT&T will advise BellSouth to proceed as necessary to complete the cut; and BellSouth will not bill OCTS charges and AT&T 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.

- 3.5.1.4 Conversions that cannot be completed as requested on the LSR and confirmed on the FOC, solely to AT&T or AT&T'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.
- 3.5.2 Upon receipt of the FOC, AT&T and BellSouth agree to follow the procedures for porting numbers as outlined in Attachment 5, incorporated herein by this reference.
 - 3.5.2.1 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 AT&T, 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.
 - 3.5.2.1.1 Pending Facilities Order ("PF") status occurs when a due date may be in jeopardy due to facility delay and may become a Missed Appointment due to BellSouth reasons.
 - 3.5.2.1.2 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 AT&T as soon as the order is placed in PF status in accordance with Section ---- 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 AT&T 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.
 - 3.5.2.2 AT&T 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 AT&T. In addition, an AT&T representative will answer and will respond within 5 minutes. Response as used in this section shall mean that the AT&T agent is ready to receive and record information provided by BellSouth.

- 3.5.2.3 In the event BellSouth does not find dial tone on the AT&T side when testing prior to the conversion date and time, and detects no trouble on the BellSouth side, BellSouth shall immediately notify AT&T. AT&T shall perform the appropriate internal tests and, if necessary, will dispatch a technician to its collocation site at the BellSouth Central Office. If the AT&T technician finds no trouble on the AT&T side when testing, AT&T 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 AT&T 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 AT&T 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 ----- above, and the Parties shall establish, by mutual consent, a new due time and or due date to be met through expedited processing.
- 3.5.2.4 Troubles referred to AT&T as referenced in Section ----- above will be repaired by the AT&T technician, if necessary. Unless AT&T 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. AT&T agrees that BellSouth may rely on the lack of such notification to mean that AT&T believes it can resolve the "No Dial tone" issue prior to Due Date or Due Time. AT&T 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, AT&T dial tone is not detected on the BellSouth collocation pair and AT&T and BellSouth agree that the problem is due to AT&T and cannot be resolved within 15 minutes, AT&T 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 AT&T is unable to correct the repair within 15 minutes, AT&T 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 -----below will be applied.
- 3.5.3 AT&T will ensure that dial tone is delivered to the BellSouth collocation pair 48 hours prior to due date.

- 3.5.3.1 For OC-TS or OC conversions, BellSouth will verify the cut-over time designated by AT&T 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 AT&T 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 AT&T that it will not. If BellSouth advises AT&T 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 ----- above.
- 3.5.3.2 BellSouth will advise AT&T, via jeopardy notice, as soon as BellSouth becomes aware of a jeopardy condition which would delay the delivery of service to AT&T as outlined in BellSouth's FOC or time of conversion as mutually agreed to or as ordered by AT&T.
- 3.5.3.3 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.
- 3.5.4 Due Date Activities
- 3.5.4.1 The Unbundled Network Element Center ("UNEC") will call AT&T to ensure AT&T's readiness to complete the conversion as scheduled.
- 3.5.4.2 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 AT&T 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 AT&T collocation point. The

BellSouth CO technician will then perform an ANAC verification of the line to verify AT&T dial tone and ensure the correct number is delivered to the BellSouth cable pair.

3.5.5 Activities After Hot Cut

3.5.5.1 The UNEC will then advise AT&T via telephone call for all coordinated conversions that the cut is complete, pursuant to Section ----- above, and allow AT&T to accept or reject the service. BellSouth shall work cooperatively with AT&T to correct any problems associated with the conversion of the service which might result in AT&T's rejection of the service.

3.5.5.2 If BellSouth fails to contact AT&T after the hot cut and in accordance with the Cut Complete Call stated in Sections ----- and ----- above (number stated in the "ImpCon" Field of the AT&T LSR) BellSouth shall document the order as a "Missed Appointment" within BellSouth's internal systems pursuant to Section ----- above.

3.5.5.3 BellSouth will hold open the conversion orders within the following time frames after the call specified in Section ----- above has been made:

3.5.5.3.1 If the call is received by AT&T prior to 5:00 p.m. on the conversion day, BellSouth will hold the order open until 6:00 p.m.;

3.5.5.3.2 If AT&T 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;

3.5.5.3.3 If the call is received by AT&T 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;

3.5.5.3.4 If BellSouth does not receive verbal acceptance by AT&T pursuant to the above conditions, BellSouth will deem the conversion accepted by AT&T.

3.5.5.4 BellSouth and AT&T 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 ----- below.

3.6 Loop Cut-Over Timing

3.6.1 BellSouth shall complete the loop cut-over step and notify AT&T 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: loops => 60 mins (1 hour); 11-30 loops => 120 mins. (2 hours) unless project managed; 31+ loops => Project Managed.

- 3.6.2 BellSouth's commitment to performance as set forth in Attachment 9 of this Agreement is incorporated herein by this reference.
- 3.6.3 Intervals for loops for a single end user on the same local service requests for loops greater than 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.
- 3.6.4 In the event BellSouth does not complete the loop cut-over step within the appropriate time limit provided in Section ----- above and notify AT&T of such completion in accordance with Section ----- above, AT&T may escalate such failure to the proper BellSouth official for expedited resolution immediately at the end of such time limit.

3.7 Completion Notice

- 3.7.1 BellSouth shall send AT&T completion notices when the LSRs are submitted electronically. If submitted manually, AT&T may determine the completion status for all LSRs by accessing the CSOTS Report via the Internet.

3.8 Process Improvement

- 3.8.1 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 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.

3.8.2 In the event that the Parties are unable to enter into the improvement method contemplated in Section ----- 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.

3.9 New Loop Provisioning – “Loop Only”

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

3.9.2 BellSouth will perform pre-service testing to ensure AT&T dial tone and telephone number is delivered to the BellSouth loop.

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

3.9.4 AT&T will deliver dial tone and telephone number to the AT&T collocation point 48 hours prior to the due date.

3.9.5 BellSouth and AT&T will notify either party if the due date cannot be met for any reason.

3.9.6 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.

3.9.7 BellSouth will deliver to the ordered location at the end users premises, loops as outline in TR 73600.

3.9.8 Where a field visit is required to provision the loop, BellSouth will test the loop ordered by AT&T to the NID. Testing requested by AT&T 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 AT&T 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.

3.10 Technical Requirements

3.10.1 BellSouth shall offer Loops capable of providing the following:

- 3.10.1.1 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;
- 3.10.1.2 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;
- 3.10.1.3 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;
- 3.10.1.4 AT&T 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;
- 3.10.1.5 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;
- 3.10.1.6 HDSL-capable Loop – a 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. A HDSL-capable Loop provided by BellSouth is designed to CSA guidelines and is expected to support HDSL service;
- 3.10.1.7 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
- 3.10.1.8 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.

3.11 AT&T PROPOSAL

BELLSOUTH shall support AT&T's ability to provide combinations of voice services, data services, or voice and data services.

3.11.1 AT&T may propose that any term or provision in this Attachment 2, Section 3.11 be amended, modified or deleted upon thirty (30) days written notice. If the Parties do not mutually agree to any change in this Section within thirty (30) days after written notice is provided, any dispute shall be resolved according to the Alternative Dispute Resolution process set forth in this Agreement.

3.11.2 Definitions

3.11.2.1 BellSouth Line Sharing -- Use of the High Frequency Spectrum ("HFS") of the local loop by AT&T or a third party CLEC to provide Advanced Services to customers that obtain retail local voice service from BellSouth on the same local loop, as addressed in the FCC's Third Report and Order in Docket 98-147 (Advanced Services) (released Dec. 9, 1999) and other applicable law.

3.11.2.2 High Frequency Spectrum (HFS) loop access -- Use of the HFS of the loop by AT&T or a third party authorized by AT&T to provide Advanced Services, on UNE loops employed by AT&T in a UNE-P configuration to provide customers retail local voice service. In this configuration, AT&T leases the entire UNE Loop from BellSouth, and BellSouth performs operational activities necessary to facilitate extracting the high frequency loop spectrum so that AT&T or an authorized Advanced Services Provider can utilize the high frequency portion of the leased loop.

3.11.2.3 Authorized Advanced Services Provider -- A CLEC, or any other entity, with whom AT&T has partnered to provide services in the HFS.

3.11.2.4 UNE Loop -- The term "UNE Loop" refers to both stand-alone loops and loops used in combination with unbundled switch ports.

3.11.3 General Requirements

3.11.3.1 AT&T shall have the right to provide voice service (to any customer who elects AT&T as its voice service provider) over the same loop that BellSouth, or any data affiliate of BellSouth or its

parent company, uses to provide data services to that customer, without interruption or termination of services provided in the HFS. BellSouth agrees to continue to provide all existing data services in the HFS, on a prospective basis, to any customer that chooses AT&T as their local service carrier for voice services and the retail customer desires continuation of such service.

- 3.11.3.2 Whenever AT&T acquires a loop from BellSouth that has existing data service operating in the HFS of the loop AT&T shall be charged for the entire UNE loop and BellSouth shall cease charging the existing data provider for utilizing the HFS of the UNE loop.
- 3.11.3.3 Whenever AT&T provides service utilizing an unbundled loop, either as part of UNE-P or otherwise, AT&T shall control the entire loop spectrum. In addition, AT&T has the right to offer services with the high frequency portion of the UNE loop either by itself or via an authorized Advanced Services Provider.
- 3.11.3.4 BellSouth, in conjunction with AT&T, shall institute procedures to allow AT&T or an authorized Advanced Services Provider to order HFS data capabilities on the AT&T UNE loop.
- 3.11.3.5 The billing for these additional features shall be billed to AT&T, or to an authorized Advanced Services Provider, per AT&T's direction.
- 3.11.3.6 BellSouth and AT&T shall jointly develop and engage in operational readiness testing and subsequently deploy mutually agreeable operational capabilities that deliver non-discriminatory support, whether compared to BellSouth operations or any affiliate of BellSouth (or the parent company) that provides comparable data service involving use of the HFS of a loop.
- 3.11.3.7 The manner in which the above provisions will be implemented is set forth below.
- 3.11.4 Procedural Requirements
 - 3.11.4.1 Operational procedures shall address, without limitation, pre-ordering, ordering, provisioning, maintenance and billing for line sharing and HFS loop access arrangements. Unless otherwise specified, support requirements will be equally applicable to both line sharing and HFS loop access. BellSouth agrees to immediately engage in a collaborative process to resolve the operational issues related to pre-ordering, ordering, provisioning

and billing as specifically related to line sharing and HFS access, regardless of form. If the collaborative process does not result in mutually agreeable operational procedures in a timely manner, either Party may elect to resolve the remaining disputes in accordance with the Alternative Dispute Resolution process set forth in Section 16 of the General Terms and Conditions of this Agreement.

3.11.5 Authorized Advanced Services Partnering Arrangements

3.11.5.1 AT&T may identify one or more CLECs as an authorized Advanced Services Provider, on a central office by central office basis, that is authorized by AT&T to add, change or delete advanced services capabilities within the HFS of a local loop UNE employed or ordered by AT&T. In such instances, AT&T will provide BellSouth with written authorization that identifies the central offices in which AT&T will engage Advanced Services Providers and, for each of the central offices, AT&T will further identify the specific providers that are authorized to access the HFS portion of an AT&T UNE loop. AT&T may modify this authorization and such changes will become effective upon thirty (30) days notice by AT&T, unless a different time period is otherwise mutually agreed. Unless AT&T provides written authorization, as required in this section, BellSouth shall reject any orders from any party, other than AT&T, that seeks to utilize, modify or in any manner affect the operation of the UNE loop employed or ordered by AT&T.

3.11.5.2 In addition to providing a list of the approved data CLECs as described in Section 5.1 above; AT&T, at its option, may inform BellSouth of these authorized Advanced Services Providers through other means, such as by an arranged assumption that if AT&T identifies the data CLEC on the order, then AT&T has an arrangement with the data CLEC.

3.11.6 Advanced Notification

3.11.6.1 BellSouth shall provide advanced notification to AT&T that identifies when xDSL qualified loops and/or electronic loop qualification information access will be made available to its retail operations or to any affiliate of BellSouth. This advance notification interval shall exceed the longest standard interval required to provide physical collocation space (both process the inquiry and subsequently provide physical collocation) in any of the central offices identified in the notification. Failure to provide

notice as documented herein shall result in the consequences set forth Attachment 9 of this Agreement.

- 3.11.7 **Advanced Services Equipment Deployment**
- 3.11.7.1 **AT&T may directly deploy, or deploy through an affiliated third party, any advanced services equipment that operates within the PSD mask parameters set forth in T1.413 or conforms to other generally recognized and applicable industry standards.**
- 3.11.7.2 **BellSouth shall not withhold any operational support so as to limit AT&T's ability to connect its advanced services equipment to a loop UNE. BellSouth may deny support only after it has made a showing to and obtained a finding by the relevant state Commission that the deployment of advanced services equipment that AT&T seeks to utilize will significantly degrade the performance of another advanced service or other voice-based services. To the extent an authorized Advanced Services Provider seeks to deploy advanced services equipment on a loop UNE used or ordered by AT&T, BellSouth shall only refuse to provide support to the extent it is permitted under the least restrictive of AT&T's or the authorized Advanced Services Provider's interconnection agreement, or as applied to the BellSouth's affiliate.**
- 3.11.7.3 **AT&T, at its option, may utilize a splitter provided by BellSouth or deploy its own splitter either directly or by utilizing an AT&T authorized Advanced Services Provider. Any splitter, regardless of the means of deployment, shall be compliant with all industry standards, including but not limited to, ANSI T1.413-1998 Annex E and NEBS safety standards.**
- 3.11.7.4 **BellSouth splitters shall be available to AT&T or its authorized Advanced Services Provider on a line by line basis. AT&T or an AT&T authorized Advanced Services Provider will furnish the Connecting Facility Assignment (CFA) to BellSouth in order that BellSouth connect the HFS (data) loop to the designated POI.**
- 3.11.7.5 **BellSouth may employ shielded cable, high twist copper, standard twisted pairs, or other reasonable transmission media to connect advanced service equipment and the UNEs provided by BellSouth. AT&T shall only be charged for standard twisted pair connections unless AT&T provides written authorization for BellSouth to do otherwise.**
- 3.11.8 **Pre-ordering**

- 3.11.8.1** BellSouth shall provide AT&T with electronic access to all loop make-up information that is currently or subsequently made available on an electronic basis to any employees of BellSouth or BellSouth affiliate(s). AT&T, at its option, may also authorize BellSouth to provide electronic access to all loop make-up information, requested by one or more AT&T authorized Advanced Services Providers, for the purpose of determining availability of loops capable of delivering HFS in partnership with AT&T. Such electronic access shall be made available to AT&T within thirty (30) days of AT&T's request whether or not BellSouth has instituted database security procedures. BellSouth will provide AT&T with advance notice of any changes to the information content, structure, business rules or any other factors relevant to the information access in accordance with Attachment 7 to this Agreement. BellSouth will offer training for AT&T personnel that is no less complete and timely as that provided to other CLECs, personnel of BellSouth or BellSouth affiliates who utilize the loop qualification information. To the extent AT&T requires additional loop qualification information that is not available electronically from BellSouth, but is maintained in manual records, BellSouth shall make such information available in a mutually agreeable form within the same time frame that the information is available to BellSouth's own personnel or that of the relevant BellSouth's subsidiary or affiliate.
- 3.11.8.2** Unless specifically waived by AT&T, BellSouth shall make all qualification information, sufficient to answer the following questions, available to AT&T in a nondiscriminatory manner:
- 3.11.8.3** Is there a digital loop carrier (DLC) present anywhere between the customer's premises and serving central office? If so, what type of DLC is present? Will it support xDSL service? Can it be removed and replaced with copper facilities?
- 3.11.8.4** Are there any intervening active or passive electronics on the loop that can reasonably be expected to affect the information carrying capacity of the loop facility? If so, what are they and where are they located? Can it be removed and replaced with copper facilities?
- 3.11.8.5** What is the working and total length of the loop and how many feet of each wire gauge make up the length of the working loop?
- 3.11.8.6** Are there bridge taps on the loop? If so, what are the locations, length and gauge of each? Can they be removed?

- 3.11.8.7** What is the total loop resistance measured in ohms?
- 3.11.8.8** How many “disturbers” are present within the same binder group in which the loop (under consideration) is located and what is the nature of each disturber? These disturbers are inclusive of but not limited to those listed in T1.413 Issue 2.
- 3.11.8.9** How many “disturbers” are present within the same cable and what is the nature of each? These disturbers are inclusive of but not limited to those listed in T1.413 Issue 2.
- 3.11.8.10** What loop design strategy was used for the loop? (e.g., Resistance Design (RD), Long-Route Design (LRD) or Unigauge (UG), which were largely employed prior to 1980, and Revised Resistance Design (RRD), Modified Long-Route Design (MLRD) and Concentrated Range Extender with Gain (CREG) which are employed primarily on a going-forward basis.)
- 3.11.9** BellSouth, within thirty (30) days of the Effective Date of this Agreement, shall disclose to AT&T all loop qualification data that is used or useful for understanding the transmission characteristic of a loop, irrespective of whether or not the retail operations of BellSouth or to the advanced services affiliate of BellSouth currently utilizes such information. BellSouth shall, at the same time, identify what information is maintained in electronic versus hard copy media. To the extent multiple sources of the same information exist, BellSouth shall identify the most reliable source. Information disclosure shall not be limited to that necessary to answer the preceding questions. For example, to the extent BellSouth keeps records that may permit AT&T to understand the quality of the loop, such records must be identified, including any overall quality indicator that may be retained with the loop record, even if it is subjective in nature. Likewise any baseline test results recorded for the loop and/or any history of trouble tickets logged for the loop under consideration should be identified. Within thirty (30) days of supplying the preceding information, unless mutually agreeable to allow more time, AT&T and BellSouth shall identify information that will be provided on a routine loop qualification request and what shall be provided through other request mechanisms. In addition, AT&T and BellSouth shall agree upon which items shall be provided electronically and which may be provide through alternative mechanism and the time frames in which such access shall be provided.

3.11.10 BellSouth shall provide AT&T with any information currently available or subsequently made available directly or indirectly to its retail operation and/or affiliates. Such information includes but is not limited to any assessment of what specific variant of xDSL capability a loop can support and whether such support is contingent upon utilization of particular brand(s) or model(s) of network equipment or premises deployed equipment. Until detailed loop qualification information that meets AT&T's requirements is provided BellSouth shall provide but not charge for loop qualification information.

3.12 Ordering

3.12.1 BellSouth shall implement ordering procedures that support AT&T line sharing or access to the HFS of the UNE loop. AT&T, at its option, may also authorize BellSouth to process orders, issued by one or more AT&T authorized Advanced Services Providers, for the purpose of adding, changing or removing capabilities to deliver service in the high frequency spectrum in partnership with AT&T. BellSouth will provide complete documentation and technical assistance necessary for AT&T to understand order format, information content, business rules and all system/network interface requirements necessary to accomplish each of the following tasks:

3.12.2 Where BellSouth is line sharing, convert the local voice portion to AT&T UNE-P while leaving the service in the HFS of the loop intact. As part of the conversion order, billing of HFS loop UNE to the Advanced Services Provider shall be terminated.

3.12.3 Where BellSouth is line sharing, convert the local voice portion to AT&T UNE-P and, as part of the same transaction, deliver the HFS (data) loop to the AT&T designated POI. AT&T, at its option, may issue the necessary order(s) to provide the advanced services capability or AT&T may provide the advanced service capability through an AT&T authorized Advanced Services Provider.

3.12.4 Where BellSouth is line sharing, convert the local voice portion to AT&T UNE-P and, as part of the same transaction, discontinue the advanced service.

3.12.5 Where AT&T seeks to add advanced service capability to a UNE loop leased by AT&T, whether on a stand alone basis or as part of UNE-P, install a line splitter to deliver the HFS (data) loop to the AT&T designated POI, perform any necessary conditioning, and perform any operational support as directed by AT&T. AT&T, at

its option, may issue the order(s) to provide the advanced services capability or AT&T may issue the orders through an authorized Advanced Services Provider.

- 3.12.6 Change the AT&T designated POI for the advanced service capability. AT&T, at its option, may issue the necessary order(s) to change the HFS (data) POI location, or AT&T may provide the advanced services capability through an authorized Advanced Services Provider.
- 3.12.7 Add voice capability, where none currently exists, to a loop where only the high frequency spectrum is used for service delivery. BellSouth shall provide the capability to utilize the telephone number of any voice line currently provided by BellSouth to the retail customer at that same location, provided the retail customer disconnects the associated BellSouth line with that telephone number, and AT&T provides service, via UNE-P from the same central office. As part of the conversion order, BellSouth shall redirect billing of the loop UNE from the Advanced Services Provider to AT&T.
- 3.12.8 BellSouth shall provide AT&T with the advanced opportunity to test all newly instituted or revised ordering capabilities in conjunction with its own internal systems through a separate testing environment that fully reflects the functionality that will be deployed in commercial market operations. Such testing will be provided in accordance with Attachment 7 of this Agreement.
- 3.12.9 To the extent necessary, AT&T and BellSouth will develop a mutually agreeable methodology for conveying Connecting Facility Assignments (CFAs) for the advanced services equipment deployed in collocation space for those instances where AT&T, rather than an authorized Advanced Services Provider, is providing the advanced services capability.
- 3.13 Provisioning
- 3.13.1 BellSouth provisioning activities associated with HFS access shall not introduce a greater degree of service interruption or service degradation than that experienced when BellSouth line engages in line sharing.
- 3.13.2 BellSouth shall implement mutually agreeable provisioning procedures for each ordering case identified above. Such procedures shall be fully deployed and demonstrated to meet minimum performance criteria as defined in Attachment 9 by the

earlier of thirty (30) days after the Effective Date of this Agreement or when BellSouth deploys procedures to support its line sharing with any CLEC or any advanced service affiliate of BellSouth.

3.13.3 For any ordering case affecting a loop where an advanced service is operable, existing wiring shall not be disturbed nor shall service in the HFS be interrupted or otherwise degraded except as documented, in advance, within mutually agreeable provisioning procedures.

3.14 Maintenance

3.14.1 BellSouth will provide AT&T and any AT&T authorized Advanced Services Provider with timely and efficient remote test access capability and operational support necessary to isolate troubles on equipment and facilities used to provide advanced services from those for voice services and from those used in common for voice and advanced services. When AT&T provides the advanced service capability, BellSouth must either provide physical test access at the point where splitting of high frequency spectrum and the voice service occurs or provide a mutually agreeable remote test access alternative (i.e., MLT or equivalent) that permits the same degree of trouble isolation by AT&T. Regardless of the party providing the advanced services capability, BellSouth shall be responsible for maintenance and repair of any equipment or facilities that it deploys including, but not limited to, the loop facility on the retail customer side of the splitter, any splitter that BellSouth has deployed and all in office wiring that BellSouth performs. BellSouth shall cooperate with AT&T and any AT&T authorized Advanced Services Provider(s) for the purposes of sectionalizing, diagnosing and otherwise resolving trouble reported or detected on these facilities.

3.14.2 Maintenance metrics shall be reported separately for loops without any advanced services operating, loops which utilize the HFS for data service, and loops supporting only advanced services.

3.15 Billing

3.15.1 Any chargeable activities initiated by an AT&T authorized Advanced Services Provider, as provided for in this section, shall at AT&T's request be billed by BellSouth to the authorized Advanced Services Provider pursuant to that party's interconnection agreement.

3.16 Digital Loop Carrier Systems

3.16.1 If AT&T 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 AT&T to order a Loop and to provide AT&T with the capability to serve end users at the same level BellSouth provides its retail customers, to the extent technically feasible.

3.16.2 AT&T PROPOSAL

In those instances where the Loop facilities available to serve the end user passes through a digital Loop carrier equipment located between the end user premises and the serving network locations and such equipment prevents AT&T from deploying xDSL capabilities of equivalent quality to those offered by BellSouth or its affiliates, to the extent technically feasible BellSouth must provide AT&T with the following options:

a Loop without intervening transmission equipment that meets industry standard electrical characteristics suitable for supporting xDSL capabilities as specified by AT&T;

access to a Loop facility and appropriate collocation space in the remote terminal; and

a Loop equipped by BellSouth with all electronics, including but not limited to ATM transport, necessary to provide xDSL capabilities of equivalent quality to those deployed by BellSouth or its affiliates.

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 AT&T to connect AT&T'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), AT&T may access the subscriber's inside wire by any of the following means:
- 4.3.1.1 BellSouth shall allow AT&T 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 connecterized 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., AT&T, its agent, the building owner or the end user). 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 AT&T to develop specific procedures to establish the most effective means of implementing this section.
- 4.3.6 Technical Requirements
- 4.3.7 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 AT&T's NID, and shall maintain a connection to ground.
- 4.3.8 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 AT&T's NID, consistent with the NID's function at the Effective Date of this Agreement.
- 4.3.9 Where a BellSouth NID exists, it is provided in its "as is" condition. AT&T may request BellSouth do additional work to the NID at the time and materials charges set forth in the appropriate BellSouth Tariff.

- 4.3.10 When AT&T deploys its own local loops with respect to multiple-line termination devices, AT&T shall specify the quantity of NID connections it requires within such devices.

5 Subloops

- 5.1 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 owned or controlled by BellSouth. 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"), cross connect block, the minimum point of entry ("MPOE"), the single point of interconnection, the main distribution frame, the remote terminal, and the feeder/distribution interface ("FDI").

- 5.2 **Inside Wire.** Inside wire is defined as all loop plant owned or controlled by BellSouth on the 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. AT&T 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.

- 5.3 Subloop elements include, but are not limited to, the following: Distribution, including inside wire (subdivided into IntraBuilding Cable and Network Terminating Wire); Concentration Multiplexing Functionality; and Feeder.

5.4 AT&T PROPOSAL

5.4.1 Subloop Distribution

- 5.4.1.1 Subloop Distribution provides connectivity between the customer's privately owned and controlled Inside Wire and the terminal block on the end user side of an FDI, and can be assessed through a SPOI or at multiple points of interconnection located at any technically feasible point, including but not limited to, a pole or pedestal, a NID, a MPOE, or single point of interconnection which is constructed by BellSouth pursuant to Section 5.2.5 below. Subloop Distribution will be provisioned as 2-wire or 4-wire circuits up to and including the end user's demarcation point.

- 5.4.1.2** Subloop Distribution will be copper twisted pair, coaxial cable, or single or multi-mode fiber optic cable. A Combination that includes two or more of these media is also possible. Where BellSouth constructs a single point of interconnection in a multiunit installation in accordance with 47 CFR 51.319(a)(2)(E) and applicable state law, BellSouth shall provide a copper twisted pair even in instances where the Subloop Distribution for services that BellSouth offers is other than a copper facility in accordance with Section 5.2.5 of this Attachment. In other circumstances, BellSouth shall provide to AT&T, upon request, a copper twisted pair even in instances where the Subloop Distribution for services that BellSouth offers is other than a copper facility, and in such circumstances, the special construction process will be used to determine the cost for placing new copper facilities.
- 5.4.2** Requirements for Subloop Distribution
- 5.4.2.1** Subloop distribution shall be capable of carrying all signaling messages or tones needed to provide telecommunications services.
- 5.4.2.2** BellSouth will provide the infrastructure necessary to provision, test, and maintain subloop distribution as set forth in Attachment 7 of this Agreement, incorporated herein by this reference.
- 5.4.2.3** Upon request, BellSouth shall provide line conditioning for Subloop Distribution pursuant to Section 3.3 of this Attachment 2 and at the rates set forth in Exhibit A of this Attachment 2, all incorporated herein by this reference.
- 5.4.2.4** BellSouth will provide AT&T with nondiscriminatory physical access to, and the right to connect to, the FDI in conjunction with unbundled Subloop Distribution.
- 5.4.2.5** BellSouth shall offer unbundled Subloop Distribution together with, and separately from, the NID component of a Loop. Where such Subloop Distribution is requested without BellSouth's NID, AT&T will provide a suitable NID meeting in accordance with the relevant and applicable standards listed in the industry standard technical references.
- 5.4.3** Single Unit & Multiunit Installation
- 5.4.3.1** In the case of BellSouth facilities serving a single unit installation (e.g. a single residence or single business location), Subloop Distribution consists of all such facilities providing connectivity

between the end user's point of demarcation, including the point of demarcation, and the end user side of the FDI and can be accessed at any technically feasible point in between.

- 5.4.3.2 In the case of BellSouth facilities serving multiple unit installations, e.g., apartments, condominiums, office buildings and office complexes, Subloop Distribution shall be furnished to AT&T, depending on the location at which AT&T intends to interconnect its facilities, in either of the following elements, as requested by AT&T, at the appropriate rate set forth in Exhibit A to this Attachment:
- 5.4.3.3 **Subloop Distribution.** This is the entire Subloop Distribution element which includes all facilities from an interconnection point (e.g., terminal block or cross connect panel) on the end user side of an FDI, or any other interconnection point in between these points, including an SPOI at the MPOE, to the end user's point of demarcation; or,
- 5.4.3.4 **Intrabuilding Network Cable (a.k.a. House and Risder Cable).** This subloop element consists of those facilities owned or controlled by BellSouth, from the single point of interconnection or MPOE up to and including the point of demarcation as defined in 47 C.F.R. Sec. 68.3. Intrabuilding Network Cable also includes intra-property wiring outside buildings such as garden apartments containing multiple end users' premises; or
- 5.4.3.5 **Network Terminating Wire (NTW).** NTW extends from the BellSouth wiring closet, garden terminal or other cross-connect distribution point at a SPOI at the MPOE, to the end user's point of demarcation. NTW refers to those horizontal portions of intrabuilding network cable that are located inside a building containing multiple end users' premises and are located on the same floor as an end user's premises. NTW is the last segment of the field-side loop facilities that, in multi-unit configurations, represent the facilities extending from an SPOI at the MPOE to serve individual end users. Configurations depicting a wiring closet and garden terminal and are attached to this Attachment as Exhibit E.
- 5.4.4 **Requirements**
- 5.4.4.1 BellSouth shall be required to relinquish the first NTW pair and make it available to AT&T unless BellSouth is using the first NTW pair to concurrently serve the end user requesting service from AT&T. When BellSouth is using the first NTW pair to provide

concurrent service, BellSouth will offer to AT&T spare pairs that are available to an end user's premises.

5.4.4.2 Notwithstanding the foregoing, should BellSouth subsequently require the use of additional pair(s) to provide for the activation of additional lines in an end user's premise, in response to a request from such end user, AT&T agrees to surrender its unused spare pair(s) upon request by BellSouth.

5.4.4.3 If an end user of AT&T desires to receive local exchange service from a telecommunications service provider who is not a Party to this Agreement, and such third party telecommunications service provider needs access to the BellSouth NTW to provide local exchange service to the end user, then AT&T agrees to surrender the requisite number of its inactive spare pair(s) if no other spare pair is available and upon request by BellSouth.

5.4.5 Single Point of Interconnection

5.4.5.1 BellSouth shall provide a single point of interconnection (SPOI) at, or as close as commercially practicable, to the MPOE at multiunit premises that is suitable for use by multiple carriers and that provides non-discriminatory access to all subloop elements. AT&T's employees and agents shall have direct access to the SPOI at the MPOE and all NTW pairs at the SPOI at the MPOE, without the necessity of coordinating such efforts with BellSouth's employees or agents. This obligation is in addition to BellSouth's obligation to provide nondiscriminatory access to subloops at any technically feasible point. If a single point of interconnection does not exist where all NTW pairs can be accessed, BellSouth must construct a single point of interconnection that has such capability and is suitable for use by multiple carriers.

5.4.6 BellSouth shall provide a single point of interconnection at the garden terminal or wiring closet for AT&T to access the Network Terminating Wire. The SPOI will be provided at the rates set forth in Exhibit A to this Attachment.

5.5 Subloop Concentration Multiplexing Functionality

5.5.1 Where facilities permit, BellSouth will provide to AT&T the ability to concentrate its subloops onto multiple DS1s back to the BellSouth central office.

5.5.1.1 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.

- 5.5.1.2 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.
- 5.5.2 Technical Requirements
 - 5.5.2.1 Subloop Concentration Multiplexing Functionality, if deployed, is used to concentrate and or multiplex the AT&T 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 AT&T 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.
 - 5.5.2.2 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.
 - 5.5.2.3 Subloop Concentration Multiplexing Functionality shall be provided to AT&T in accordance with applicable industry standard technical references.
 - 5.5.2.4 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.
 - 5.5.2.5 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.
 - 5.5.2.6 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.

- 5.5.2.7 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.
- 5.5.2.8 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 AT&T's subloops to be concentrated onto multiple DS1s. System B will allow an additional 96 of AT&T'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 AT&T's Collocation Space within the BSWC that serves the RT where AT&T's subloops are connected. Subloop Concentration Multiplexing Functionality service is offered with or without concentration and with or without a protection DS1. If BellSouth deploys a different technology for Subloop Concentration Multiplexing Functionality in its network, the Parties will negotiate rates, terms and conditions for AT&T's access to such Subloop Concentration Multiplexing Functionality.
- 5.5.2.9 If technically feasible, BellSouth shall provide AT&T access to the Subloop Concentration Multiplexing Functionality in response to a specific AT&T request. Otherwise, AT&T would be required to place a cross-box, remote terminal, or other similar device and deliver a cable to the BellSouth remote terminal. This cable would be connected, by a BellSouth technician, to a cross-connect panel within the BellSouth RT/cross-box and would allow AT&T's subloops to then be placed on the Subloop Concentration Multiplexing Functionality.
- 5.5.2.10 Subloop Concentration Multiplexing Functionality shall be provided to AT&T in accordance with applicable industry standard technical references.
- 5.5.2.11 BellSouth shall provide AT&T real time performance and alarm data that may affect AT&T's traffic, if and when technically feasible and to partition such data for AT&T where feasible.

5.5.2.12 At AT&T's option BellSouth shall provide AT&T with real time ability to initiate non service-affecting tests on the underlying device that provides Subloop Concentration Multiplexing Functionality.

5.6 Subloop Feeder

5.6.1 Subloop Feeder is the Network Element that provides connectivity between (1) a FDI associated with Subloop Distribution and a termination point appropriate for the media in a central office, or (2) a Subloop Concentration Multiplexing Functionality provided in a remote terminal and a termination point appropriate for the media in a central office. If technically feasible, BellSouth shall provide AT&T physical access to the FDI, and the right to connect the Subloop Feeder to the FDI in response to a specific AT&T request. Otherwise, BellSouth shall provide the necessary cabling between BellSouth's equipment (i.e., FDI) and AT&T's equipment.

5.6.1.1 The physical medium of the Subloop Feeder may be copper twisted pair, coaxial (if deployed), or single or multi-mode fiber. In certain cases, BellSouth must provide a copper twisted pair loop even in instances where the medium of the Subloop Feeder for services that BellSouth offers is other than a copper facility, and in such cases, the special construction process will be used to determine the cost of placing new copper facilities.

5.6.2 Requirements for Subloop Feeder

5.6.2.1 Subloop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data, or analog radio frequency signals, where available in BellSouth's network.

5.6.2.2 BellSouth shall provide appropriate power for all active elements in the Subloop Feeder. BellSouth will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant RT, where BellSouth provides such functionality to itself.

5.6.3 Additional Requirements for Special Copper Subloop Feeder Medium

5.6.3.1 In addition to requirements set forth in Section 5.4.2 above, and where available in the BellSouth network, AT&T may require BellSouth to provide copper twisted pair Subloop Feeder which is unfettered by any intervening equipment (e.g. filters, load coils, and range extenders), so that AT&T can use these Subloop Feeders for a variety of services by attaching appropriate terminal equipment at the ends.

- 5.6.4 Additional Technical Requirements for DS1 Conditioned Subloop Feeder
- 5.6.4.1 In addition to the requirements set forth in this Section, and where available in the BellSouth network, AT&T may designate that the Subloop Feeder be conditioned to transport a DS1 signal. The requirements for such transport are defined in the applicable industry standard technical references.
- 5.6.5 Additional Technical Requirements for Optical Subloop Feeder
- 5.6.5.1 Where available in BellSouth's network AT&T may designate that Subloop Feeder will transport DS3 and OCn (where n is defined in the industry standard technical reference). The requirements for such transport are defined in the applicable industry standard technical references.
- 5.6.6 Interface Requirements
- 5.6.6.1 If AT&T desires access to unbundled Subloop Feeder in a BellSouth Central Offices, the Subloop Feeder point of termination (POT) will be as follows:
- 5.6.7 Copper twisted pairs shall terminate on the MDF;
- 5.6.8 DS1 Subloop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and
- 5.6.9 Fiber Optic cable shall terminate on a LGX.

6 Switching Capabilities

- 6.1 **BellSouth shall provide non-discriminatory access to local circuit switching capability, and local tandem switching capability, on an unbundled basis, except as set forth below in Section 6.3 of this Attachment 2, to AT&T for the provision of a telecommunications service. BellSouth shall provide non-discriminatory access to packet switching capability on an unbundled basis to AT&T for the provision of a telecommunications service only in the limited circumstance described in Section 6.9 of this Attachment 2.**
- 6.2 **Except as otherwise provided for herein, BellSouth shall not impose any restrictions on AT&T regarding the use of Switching Capabilities purchased from BellSouth provided such use does not result in demonstrable harm to either the BellSouth network or personnel or the use of BellSouth's network by BellSouth or any other telecommunications carrier.**

6.3 Local Circuit Switching Capability, including Tandem Switching Capability

6.3.1 Definition

6.3.1.1 Local Circuit Switching capability is defined as: (A) line-side facilities, which, include but are not limited to, the connection between a loop termination at a main distribution frame and a switch line card; (B) trunk-side facilities, which include, but are not limited to, the connection between trunk termination at a trunk-side cross-connect panel and a switch trunk card; (C) All features, functions, and capabilities of the switch, which include, but are not limited to: (1) the basic switching function of connecting lines to lines, line to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to BellSouth's end users, such as a telephone number, white page listings, and dial tone; and (2) all other features that the switch is capable of providing, including but not limited to, customer calling, custom local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch; and (D) switching provided by remote switching module functionality is included in Switching Capability. The switching capabilities used will be based on the line side features they support.

Notwithstanding BellSouth's general duty to unbundle local circuit switching, BellSouth shall not be required to unbundle local circuit switching for AT&T when AT&T serves end users with four (4) or more voice-grade (DS-0) equivalents or lines in locations served by BellSouth's local circuit switches, which are in the following MSAs: Atlanta, GA; Miami, FL; Orlando, FL; Ft. Lauderdale, FL; Charlotte-Gastonia-Rock Hill, NC; Greensboro/Winston-Salem/High Point, NC; Nashville, TN; and New Orleans, LA, and BellSouth has provided non-discriminatory cost based access to the Enhanced Extended Link ("EEL") throughout Density Zone 1 as determined by NECA Tariff No. 4 as in effect on January 1, 1999.

6.3.1.2 AT&T PROPOSAL

6.3.1.3 BellSouth is not required to provide local circuit switching capability with respect to the fourth and any subsequent two (2) wire voice-grade loops that AT&T uses in combination with local circuit switching to provide retail local voice service to a single end user account name, at a single physical end user location (including a single tenant building or a single unit within a MDU or MTU) from a BellSouth central office in the MSAs listed in Section 6.3.1.2; provided however, that AT&T shall be entitled to purchase

local circuit switching pursuant to the rates set forth in Exhibit A to this Attachment for the first, second, and third lines to provide and/or continue providing telecommunications service to a single end user despite the addition of a fourth line and subsequent lines.

6.3.1.4 AT&T PROPOSAL

6.3.1.5 In the event that AT&T orders local circuit switching for a single end user account name at a single physical end user location with four (4) or more two (2) wire voice-grade loops from a BellSouth central office in the MSA's listed in Section 6.3.1.2 above, BellSouth's sole recourse shall be to charge AT&T a rate to be negotiated for use of the local circuit switching functionality for the affected facilities, or in the alternative, to charge AT&T the local services resale rate for use of all Combinations used to provide the affected facilities to AT&T.

6.3.1.6 When BellSouth provides the local circuit switching, BellSouth will provide to AT&T, upon request, customized routing (selective routing) of calls: (i) to a requested directory assistance services platform; (ii) to a requested operator services platform; (iii) for AT&T's PIC'ed toll traffic in a two (2) PIC environment to an alternative OS/DA platform designated by AT&T or (iv) to a repair center. AT&T end users may use the same dialing arrangements as BellSouth end users. BellSouth shall allow AT&T to commingle local and toll OS and/or DA traffic on existing OS and/or FGD trunks. Customized routing will include but not be limited to the customized routing of inter-switch traffic on a wire center basis to a port other than the standard routing used by BellSouth.

6.4 AIN Customized (Selective) Carrier Routing

6.4.1 [BellSouth will provide AIN customized carrier routing at the request of AT&T. AIN customized carrier routing will provide AT&T with the capability of routing operator calls, 0+ and 0- and 0+ NPA (LNPA) 555-1212 directory assistance, 1+411 directory assistance and 611 repair center calls to pre-selected destinations.

6.4.2 AT&T shall order AIN customized carrier routing through its Account Team. AIN customized carrier routing must first be established regionally and then on a per central office, per state basis.

6.4.3 AIN customized carrier routing is not available in DMS 10 switches.

- 6.4.4 Where AIN customized carrier routing is utilized by AT&T, the routing of AT&T 's end user calls shall be pursuant to information provided by AT&T and stored in BellSouth's AIN customized carrier routing service control point database. AIN customized carrier routing shall utilize a set of line class codes (LCCs) unique to a basic class of service assigned on an "as needed" basis. The same LCCs will be assigned in each central office where AIN customized carrier routing is established.
- 6.4.5 Upon ordering of AIN customized carrier routing regional service, AT&T shall remit to BellSouth the regional service order non-recurring charges set forth in Exhibit A of this Attachment. There shall be a non-recurring end office establishment charge per office due at the addition of each central office where AIN customized carrier routing will be utilized. Said non-recurring charge shall be as set forth in Exhibit A of this Attachment. For each AT&T end user activated, there shall be a non-recurring end user establishment charge as set for in Exhibit A of this Attachment, payable to BellSouth pursuant to the terms of Attachment 6, incorporated herein by this reference. AT&T shall pay the AIN customized carrier routing per query charge set forth in Exhibit A of this Attachment.
- 6.4.6 The regional service order non-recurring charge will be non-refundable and will be paid with one half ($\frac{1}{2}$) coming up-front with the submission of all fully completed required forms, including: regional customized carrier routing order request-Form A, central office AIN customized carrier routing order request-Form B, AIN_SCR central office identification form-Form c, AIN_SCR routing options selection forms-Form D, and routing combinations table-Form E. BellSouth has thirty (30) days to respond to AT&T's fully completed firm order as a regional service order. With the delivery of this firm order response to the AT&T, BellSouth considers that the delivery schedule of this service commences. The remaining one half ($\frac{1}{2}$) of the regional service order payment must be paid when at least 90% of the central office listed on the original order have been turned up for service.
- 6.4.7 The non-recurring end office establishment charge will be billed to AT&T following BellSouth's normal monthly billing cycle for this type of order.
- 6.4.8 End user establishment orders will not be turned-up until the 2nd payment is received for the regional service order. The non-recurring end user establishment charges will be billed to AT&T following BellSouth's normal monthly billing cycle for this type of order.
- 6.4.9 Additionally, the AIN customized routing per query charge will be billed to AT&T following the normal billing cycle for per query charges.

6.4.10 All other network components needed, for example, unbundled switching and unbundled local transport, etc. will be billed accordingly per contracted rates.

6.5 Line Class Code Customized (Selective) Carrier Routing

6.5.1 BellSouth will provide line class codes customized carrier routing at the request of AT&T. Line class code customized carrier routing will provide AT&T with the capability of routing operator calls, 0+ and 0-and 0+ NPA (LNPA) 555-1212 directory assistance, 1+411 directory assistance and 611 repair center calls to pre-selected destinations.

6.6 Technical Requirements

6.6.1 Local Switching shall be at least equal to the requirements for Local Switching set forth in the applicable industry standard technical references.

6.6.2 BellSouth's local switch shall maintain translations necessary to direct AIN queries for selected lines and dialing sequences to the AT&T Signaling System 7 ("SS7") network.

6.6.3 BellSouth's local switch shall accept mutually agreeable AIN responses from the AT&T Service Control Point ("SCP") via SS7 network interconnection then continue call handling according to instructions contained in the response.

6.6.4 BellSouth shall provide unbranded recorded announcements and call progress tones to alert callers of call progress and disposition.

6.6.5 BellSouth shall activate service for an AT&T end user or network interconnection on any of the local circuit switching interfaces. This includes provisioning changes to change an end user from BellSouth's services to AT&T's services without loss of switch feature functionality as defined in this Agreement.

6.6.6 BellSouth shall perform routine testing (e.g., Mechanized Loop Tests ("MLT") and test calls such as 105, 107 and 108 type calls) and fault isolation on a mutually agreed upon schedule.

6.6.7 BellSouth shall repair and restore any equipment or any other maintainable component that may adversely impact local circuit switching.

6.6.8 BellSouth shall control congestion points such as those caused by radio station call-ins, and network routing abnormalities. All traffic shall be restricted in a non-discriminatory manner.

- 6.6.9 BellSouth shall perform manual call trace and permit end user originated call trace.
- 6.6.10 For local switching used as 911 Tandems, BellSouth shall allow interconnection from AT&T local switching elements and BellSouth shall route the calls to the appropriate Public Safety Access Point ("PSAP").
- 6.6.11 Special Services provided by BellSouth will include the following:
 - 6.6.11.1 Essential service lines;
 - 6.6.11.2 Telephone Service Prioritization;
 - 6.6.11.3 Related services for handicapped;
 - 6.6.11.4 Soft dial tone where required by law; and
 - 6.6.11.5 Any other service required by law.
- 6.6.12 BellSouth shall provide Switching Service Point ("SSP") capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch ("STPS"). These capabilities shall adhere to the technical specifications set forth in the applicable industry standard technical references.
- 6.6.13 BellSouth shall provide interfaces to adjuncts in accordance with the technical specifications set forth in the applicable industry standard technical references. These adjuncts can include, but are not limited to, the Service Circuit Node and Automatic Call Distributors.
- 6.6.14 BellSouth shall provide performance data regarding an end user line, traffic characteristics or other measurable elements to AT&T, upon a reasonable request from AT&T. AT&T will pay BellSouth for all costs incurred to provide such performance data through the process set forth in Section 13 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.
- 6.6.15 BellSouth shall offer to AT&T all AIN triggers which are supported by BellSouth for offering AIN-based services in accordance with the technical specifications set forth in the applicable industry standard technical references. Triggers that are currently available include:
 - 6.6.15.1 Off-Hook Immediate,
 - 6.6.15.2 Off-Hook Delay,

- 6.6.15.3 Termination Attempt,
- 6.6.15.4 3/6/10 Public Office Dialing Plan,
- 6.6.15.5 Feature Code Dialing,
- 6.6.15.6 Customer Dialing Plan.
- 6.6.16 When additional triggers are supported by BellSouth, BellSouth will make these triggers available to AT&T:
- 6.6.16.1 Private EAMF Trunk,
- 6.6.16.2 Shared Interoffice Trunk (EAMF, SS7),
- 6.6.16.3 N11,
- 6.6.16.4 Automatic Route Selection.
- 6.6.17 If an AT&T end user subscribes to AT&T provided voice mail and messaging services, BellSouth shall redirect incoming calls to the AT&T system based upon presubscribed service arrangements (e.g., busy, don't answer, number of rings) through dedicated trunks provided by AT&T. In addition, BellSouth shall provide a Standard Message Desk Interface-Enhanced ("SMDI-E") interface to the AT&T system. BellSouth shall support the Inter-switch Voice Messaging Service ("IVMS") capability.

6.7 Tandem Switching

- 6.7.1 Definition
- 6.7.1.1 The Tandem Switching Capability is defined as:
- 6.7.2 Trunk-connect facilities, which include, but are not limited to, the connection between trunk termination at a cross connect panel and switch trunk card;
- 6.7.3 The basic switch trunk function of connecting trunks to trunks; and
- 6.7.4 The functions that are centralized in tandem switches (as distinguished from separate end office switches), including but not limited, to call recording, the routing of calls to operator services, and signaling conversion features.
- 6.7.4.1 BellSouth shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its

interconnections. When requested by AT&T, the results and reports of the testing shall be made immediately available to AT&T.

- 6.7.4.2 BellSouth shall maintain AT&T's trunks and interconnections associated with Tandem Switching at least at parity to its own trunks and interconnections.
- 6.7.4.3 BellSouth shall control congestion points and network abnormalities. Congestion control provided or imposed on AT&T traffic shall be at parity with controls being provided or imposed on BellSouth traffic (e.g., BellSouth shall not block AT&T traffic and leave its traffic unaffected or less affected).
- 6.7.4.4 Tandem Switching shall process originating toll-free traffic received from an AT&T local switch.
- 6.7.4.5 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element, to the extent such Tandem Switch has such capability.
- 6.7.4.6 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

6.8 Interface Requirements

- 6.8.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.
- 6.8.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which BellSouth interconnects.
- 6.8.3 BellSouth shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
- 6.8.4 Tandem Switching shall interconnect with AT&T's switch, using two-way trunks, for traffic that is transiting via BellSouth network to interLATA or intraLATA carriers. At AT&T's request, Tandem Switching shall record and keep records of traffic for billing.

6.9 Packet Switching

- 6.9.1 Definition

- 6.9.1.1 Packet Switching Capability. The packet switching capability Network Element is defined as the basic packet switching function of routing or forwarding packets, frames, cells or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by Digital Subscriber Line Access Multiplexer, including but not limited to:
- 6.9.2 The ability to terminate copper loops (which includes both a low band voice channel and a high-band data channel, or solely a data channel);
- 6.9.3 The ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches;
- 6.9.4 The ability to extract data units from the data channels on the loops, and
- 6.9.5 The ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.
- 6.9.6 BellSouth shall be required to provide nondiscriminatory access to unbundled packet switching capability only where each of the following conditions are satisfied:
 - 6.9.6.1 BellSouth has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);
 - 6.9.6.2 There are no spare copper loops capable of supporting the xDSL services AT&T seeks to offer;
 - 6.9.6.3 BellSouth has not permitted AT&T to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has AT&T obtained a virtual collocation arrangement at these subloop interconnection points as defined by 47 C.F.R. § 51.319(b); and
 - 6.9.6.4 BellSouth has deployed packet switching capability for its own use.
- 6.9.7 If there is a dispute as to whether BellSouth must provide Packet Switching, such dispute will be resolved according to the dispute resolution process set forth in Section 16 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.

7 Operator Service and Directory Assistance Service

7.1 AT&T PROPOSAL

7.1.1 BellSouth shall provide operator services and directory assistance on an unbundled basis at the rates set forth in Exhibit A to this Attachment only where BellSouth does not offer to AT&T customized (selective) routing or compatible signalling protocol. In cases where AT&T requests operator services and directory assistance and BellSouth offers customized (selective) routing, BellSouth and AT&T will negotiate the rates, terms and conditions of said operator services and directory assistance services.

7.1.2 BellSouth and AT&T will jointly test BellSouth's capability to provide customized (selective) routing as described in this Attachment. If this test demonstrates that customized (selective) routing is not provided at parity with that routing provided by BellSouth to itself, the Parties agree to negotiate terms and conditions for BellSouth's provision to AT&T of Operator Services and Directory Assistance as Network Elements.

7.1.3 When BellSouth provides Operator Services and Directory Assistance as Network Elements to AT&T pursuant to Section 7.2. above, Sections 7.3.1 and 7.3.2 below shall apply.

7.2 Operator Systems

7.2.1 Operator Systems is the Network Element that provides operator and automated call handling and billing, special services, end user telephone listings and optional call completion services. The Operator Systems, Network Element provides two types of functions: Operator Service functions and Directory Assistance Service functions, each of which are described in detail below.

7.3 Operator Service

7.3.1 Operator Service provides: (1) operator handling for call completion (for example, collect, third number billing, and manual credit card calls), (2) operator or automated assistance for billing after the end user has dialed the called number (for example, credit card calls); and (3) special services including but not limited to Busy Line Verification and Emergency Line Interrupt (ELI), Emergency Agency Call, Operator-assisted Directory Assistance, and Rate Quotes.

7.3.2 Requirements

- 7.3.2.1** When AT&T requests BellSouth to provide Operator Services, the following requirements apply:
 - 7.3.2.1.1** BellSouth shall complete 0+ and 0- dialed local calls.
 - 7.3.2.1.2** BellSouth shall complete 0+ intraLATA toll calls.
 - 7.3.2.1.3** BellSouth shall process calls that are billed to AT&T end user calling cards that can be validated by BellSouth.
 - 7.3.2.1.4** BellSouth shall complete person-to-person calls.
 - 7.3.2.1.5** BellSouth shall complete collect calls.
 - 7.3.2.1.6** BellSouth shall provide the capability for callers to bill to a third party and complete such calls.
 - 7.3.2.1.7** BellSouth shall complete station-to-station calls.
 - 7.3.2.1.8** BellSouth shall process emergency calls.
 - 7.3.2.1.9** BellSouth shall process Busy Line Verify and Emergency Line Interrupt requests.
 - 7.3.2.1.10** BellSouth shall process emergency call trace, as it does for its end users prior to the Effective Date. The call must originate from a 911 provider.
 - 7.3.2.1.11** BellSouth shall process operator-assisted directory assistance calls.
 - 7.3.2.1.12** BellSouth shall adhere to equal access requirements, providing AT&T local end users the same IXC access as provided to BellSouth end users.
 - 7.3.2.1.13** BellSouth shall exercise at least the same level of fraud control in providing Operator Service to AT&T that BellSouth provides for its own operator service.
 - 7.3.2.1.14** BellSouth shall perform Billed Number Screening when handling Collect, Person-to-Person, and Billed-to-Third-Party calls.
 - 7.3.2.1.15** BellSouth shall direct customer account and other similar inquiries to the customer service center designated by AT&T.

- 7.3.2.1.16 **BellSouth shall provide a feed of end user call records in "EMI" format to AT&T in accordance with CLEC ODUF standards specified in Attachment 6, incorporated herein by this reference.**
- 7.3.2.2 **Interface Requirements**
- 7.3.2.2.1 **With respect to Operator Services for calls that originate on local switching capability provided by or on behalf of AT&T, the interface requirements shall conform to the then current established system interface specifications for the platform used to provide Operator Service and the interface shall conform to the applicable industry standards.**
- 7.3.3 **Directory Assistance Service**
- 7.3.3.1 **Directory Assistance Service provides local end user telephone number listings with the option to complete the call at the caller's direction separate and distinct from local switching.**
- 7.3.3.2 **Requirement. Directory Assistance Service shall provide up to two listing requests per call. If available and if requested by AT&T's end user, BellSouth shall provide caller-optional directory assistance call completion service at rates contained in this Attachment to one of the provided listings, equal to that which BellSouth provides its end users. If not available, AT&T may request such requirement pursuant to the Bona Fide Request/New Business Process as set forth in General Terms and Conditions.**
- 7.3.3.3 **Directory Assistance Service Updates**
- 7.3.3.3.1 **BellSouth shall update end user listings changes daily. These changes include:**
- 7.3.3.3.1.1 **New end user connections: BellSouth will provide service to AT&T that is equal to the service it provides to itself and its end users;**
- 7.3.3.3.1.2 **End user disconnections: BellSouth will provide service to AT&T that is equal to the service it provides to itself and its end users; and**
- 7.3.3.3.1.3 **End user address changes: BellSouth will provide service to AT&T that is equal to the service it provides to itself and its end users;**

- 7.3.3.3.1.4 These updates shall also be provided for non-listed and non-published numbers for use in emergencies.
- 7.3.4 Branding for Operator Call Processing and Directory Assistance
 - 7.3.4.1 The BellSouth Operator Systems Branding Feature provides a definable announcement to AT&T end users using Directory Assistance (DA)/Operator Call Processing (OCP) prior to placing them in queue or connecting them to an available operator or automated operator system. This feature allows AT&T to have its calls custom branded with AT&T's name on whose behalf BellSouth is providing Directory Assistance and/or Operator Call Processing. Rates for Custom Branding, Operator Call Process and Directory Assistance are set forth in this Attachment.
 - 7.3.4.2 BellSouth offers four service levels of branding to AT&T when ordering Directory Assistance and/or Operator Call Processing.
 - 7.3.4.2.1 Service Level 1 - BellSouth Branding
 - 7.3.4.2.2 Service Level 2 - Unbranded
 - 7.3.4.2.3 Service Level 3 - Custom Branding
 - 7.3.4.2.4 Service Level 4 - Self Branding (applicable only to AT&T for Resale or use with an Unbundled Port when routing to an operator service provider other than BellSouth).
 - 7.3.4.3 For Resellers and Use with an Unbundled Port
 - 7.3.4.3.1 BellSouth Branding is the Default Service Level.
 - 7.3.4.4 Unbranding, Custom Branding, and Self Branding require AT&T to order selective routing for each originating BellSouth end office identified by AT&T. Rates for Selective Routing are set forth in this Attachment.
 - 7.3.4.5 Customer Branding and Self Branding require AT&T to order dedicated trunking from each BellSouth end office identified by AT&T, to either the BellSouth Traffic Operator Position System (TOPS) or AT&T Operator Service Provider. Rates for trunks are set forth in applicable BellSouth tariffs.
 - 7.3.4.6 Unbranding - Unbranded Directory Assistance and/or Operator Call Processing calls ride common trunk groups provisioned by BellSouth from those end offices identified by AT&T to the BellSouth TOPS. These calls are routed to "No Announcement."

- 7.3.4.7 For Facilities Based Carriers
 - 7.3.4.7.1 All Service Levels require AT&T to order dedicated trunking from AT&T's end office(s) point of interface to the BellSouth TOPS Switches. Rates for trunks are set forth in applicable BellSouth tariffs.
 - 7.3.4.7.2 Customized Branding includes charges for the recording of the branding announcement and the loading of the audio units in each TOPS Switch, IVS and NAV equipment for which AT&T requires service.
- 7.3.5 Directory Assistance customized branding uses:
 - 7.3.5.1 the recording of the name;
 - 7.3.5.2 the front-end loading of the Digital Recorded Announcement Machine (DRAM) in each TOPS switch.
- 7.3.6 Operator Call Processing customized branding uses:
 - 7.3.6.1 the recording of the name;
 - 7.3.6.2 the front-end loading of the DRAM in the TOPS Switch;
 - 7.3.6.3 the back-end loading in the audio units in the Automated Alternate Billing System (AABS) in the Interactive Voice Subsystem (IVS);
 - 7.3.6.4 the 0- automation loading for the audio units in the Enhanced Billing and Access Service (EBAS) in the Network Applications Vehicle (NAV).
- 7.4 BellSouth will provide to AT&T purchasing local BellSouth switching and reselling BellSouth local exchange service, selective routing of calls to a requested directory assistance services platform or operator services platform. AT&T end users may use the same dialing arrangements as BellSouth end users, but obtain a AT&T branded service.
- 8 Interoffice Transmission Facilities
 - 8.1 BellSouth shall:
 - 8.1.1 Provide AT&T, upon request, exclusive use of interoffice transmission facilities dedicated to a particular end user or carrier, or use the

features, functions, and capabilities of interoffice transmission facilities shared by more than one customer or carrier;

- 8.1.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that AT&T, upon request, could use to provide telecommunications services; and
- 8.1.3 Permit, to the extent technically feasible, AT&T, upon request, to connect such interoffice facilities to equipment designated by AT&T, including but not limited to, AT&T's collocated facilities.

8.2 Shared Transport

8.2.1 Definition

- 8.2.1.1 Shared Transport is defined as transmission facilities shared by more than one telecommunications carrier, including BellSouth, between end office switches, between end office switches and tandem switches, and between tandem switches in BellSouth's network.

8.2.2 Technical Requirements

- 8.2.2.1 Shared Transport provided on DS1 or VT1.5 circuits, shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for central office to central office connections in accordance with the applicable industry standard technical references.
- 8.2.2.2 Shared Transport provided on DS3 circuits, STS-1 circuits, and higher transmission bit rate circuits shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for central office to central office connections in accordance with the applicable industry standard technical references.
- 8.2.2.3 BellSouth shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Shared Transport.
- 8.2.2.4 At a minimum, Shared Transport shall meet all of the requirements set forth in the applicable industry standard technical references.

8.3 Dedicated Transport

8.3.1 Definition

- 8.3.1.1 Dedicated transport is defined as BellSouth transmission facilities, including all technically feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, dedicated to a particular

customer or carrier, that provide telecommunications between wire centers owned by BellSouth or requesting telecommunications carriers, or between switches owned by BellSouth or requesting telecommunications carriers.

- 8.3.1.2 BellSouth will, to the extent technically feasible, permit AT&T to obtain the functionality provided by BellSouth's digital cross-connect systems in the same manner that BellSouth provides such functionality to interexchange carriers.
- 8.3.1.3 Local Channel
- 8.3.2 The Local Channel is the dedicated transmission path between AT&T's point of presence and the BSWC.
- 8.3.3 Local Channels may be used for either switched or non-switched traffic. Rates for Local Channels are contained in Exhibit A of this Attachment 2.
- 8.3.3.1 Technical Requirements
- 8.3.4 This Section sets forth technical requirements for all Dedicated Transport.
- 8.3.5 When BellSouth provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS1, DS3, STS-1) shall be dedicated to AT&T designated traffic.
- 8.3.6 BellSouth shall offer Dedicated Transport in all documented bandwidth interfaces used within BellSouth's network, including, but not limited to, DS1 and DS3 and OCN.
- 8.3.7 For DS1 or VT1.5 circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for end user interface to central office connections in the technical reference set forth in the applicable industry standard technical reference.
- 8.3.8 For DS3 circuits, STS-1 circuits, and higher rate circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for end user interface to central office connections in the technical reference set forth in the applicable industry standard technical reference.
- 8.3.9 When requested by AT&T, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in

such a way that no single failure of facilities or equipment will cause a failure on both circuits.

- 8.3.10 When physical diversity is requested by AT&T, BellSouth shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by AT&T). BellSouth shall take appropriate steps to assure physical diversity continues to be provided for the duration of the period that AT&T employs or until such time that AT&T notifies BellSouth that physical diversity is no longer required.
- 8.3.11 Upon AT&T's request, BellSouth shall provide nondiscriminatory performance monitoring and alarming.

8.4 DARK FIBER

8.4.1 Definition

- 8.4.1.1 Dark Fiber is optical transmission facilities without attached multiplexing, aggregation or other electronics that connects two points within BellSouth's network. Dark Fiber also includes strands of optical fiber existing in aerial or underground cable which may have lightwave repeater (regenerator or optical amplifier) equipment interspliced to it at appropriate distances, but which has no line terminating elements terminated to such strands to operationalize its transmission capabilities.

8.4.2 Requirements

- 8.4.2.1 BellSouth shall make available Dark Fiber where it exists in BellSouth's network and where, as a result of future building or deployment, it becomes available. If BellSouth has plans to use the fiber within a two-year planning period, there is no requirement to provide said fiber to AT&T.
- 8.4.2.2 If the requested dark fiber has any lightwave repeater equipment interspliced to it, BellSouth will remove such equipment at AT&T's request subject to time and materials charges.
- 8.4.2.3 AT&T may test the quality of the Dark Fiber to confirm its usability and performance specifications.
- 8.4.2.4 BellSouth shall use its best efforts to provide to AT&T information regarding the location, availability and performance of Dark Fiber within ten (10) business days for a records based answer and twenty (20) business days for a field based answer, after receiving a request

from AT&T ("Request"). Within such time period, BellSouth shall send written confirmation of availability of the Dark Fiber ("Confirmation"). From the time of the Request to forty-five (45) days after Confirmation, BellSouth shall hold such requested Dark Fiber for AT&T's use and may not allow any other party to use such media, including BellSouth.

8.4.2.5 BellSouth shall use its best efforts to make Dark Fiber available to AT&T within thirty (30) business days after it receives written confirmation from AT&T that the Dark Fiber previously deemed available by BellSouth is wanted for use by AT&T. This includes identification of appropriate connection points (e.g., Light Guide Interconnection ("LGX") or splice points) to enable AT&T to connect or splice AT&T provided transmission media (e.g., optical fiber) or equipment to the Dark Fiber.

8.4.2.6 Dark fiber shall meet the manufacturers' design specifications.

8.4.2.7 AT&T may splice and test Dark Fiber obtained from BellSouth using AT&T or AT&T designated personnel. BellSouth shall provide appropriate interfaces to allow splicing and testing of Dark Fiber. BellSouth shall provide an excess cable length of 25 feet minimum (for fiber in underground conduit) to allow the uncoiled fiber to reach from the manhole to a splicing van.

9 Signaling Networks and Call-Related Databases

9.1 BellSouth shall provide AT&T access to signaling networks, call-related databases, and service management systems on an unbundled basis for the provision of a telecommunications service.

9.2 Signaling Networks

9.2.1 Signaling networks include, but are not limited to, signaling links and signaling transfer points. When AT&T purchases unbundled switching capability from BellSouth, BellSouth shall provide access to its signaling network from that switch in the same manner in which it obtains access itself. BellSouth shall provide AT&T with its own switching facilities access to BellSouth's signaling network for each of the AT&T switches. This connection shall be made in the same manner as BellSouth connects one of its own switches to a signaling transfer point.

9.2.2 Signaling Link Transport is a set of two or four dedicated 56 Kbps. transmission paths between AT&T-designated Signaling Points of

- Interconnection ("SPOI") and BellSouth Point of Interconnection that provides appropriate physical diversity.
- 9.2.3 The network termination point where this interconnection takes place is called the STP port termination.
- 9.2.4 Technical Requirements
- 9.2.4.1 Signaling Link Transport shall consist of full duplex mode 56 kbps transmission paths.
- 9.2.4.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:
- 9.2.5 As an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch ("STPS") pair and consists of two links; and
- 9.2.6 As a "D/B-link" which is a connection between two STPS pairs in different company networks (e.g., between two STPS pairs for two Competitive Local Exchange Carriers ("CLECs")) and consists of four links.
- 9.2.6.1 A signaling link layer shall satisfy a performance objective such that:
- 9.2.7 There shall be no more than two minutes down time per year for an A-link layer; and
- 9.2.8 There shall be negligible (less than 2 seconds) down time per year for a B-link layer.
- 9.2.8.1 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
- 9.2.9 No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two separate physical paths end-to-end); and
- 9.2.10 No two concurrent failures of facilities or equipment shall cause the failure of all four links in a D/B-link layer (i.e., the links should be provided on a minimum of three separate physical paths end-to-end).
- 9.2.10.1 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the central office where BellSouth STPS is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate

interface. BellSouth shall offer higher rate DS1 signaling for interconnecting AT&T local switching systems or STPSs with BellSouth STPSs as soon as these become approved ANSI standards and available capabilities of BellSouth STPSs. BellSouth and AT&T will work jointly to establish mutually acceptable SPOIs.

9.2.11 Signaling Transfer Points

9.2.11.1 Definition

9.2.12 Signaling Transfer Points is a signaling network function that includes all of the capabilities provided by the STPSs and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and STPS.

9.2.12.1 Technical Requirements

9.2.13 STPs shall provide access to Network Elements connected to BellSouth SS7 network. These include:

9.2.13.1 BellSouth Service Control Points/DataBases and

9.2.13.2 Third-party-provided STPSs.

9.2.14 The connectivity provided by STPs shall fully support the functions of all Network Elements and AT&T or other third-party switching systems and STPs connected to BellSouth's SS7 network. This explicitly includes the use of BellSouth's SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to BellSouth's SS7 network (i.e., transient messages). When BellSouth SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part ("ISDNUP") or Transaction Capabilities Application Part ("TCAP") user data that constitutes the content of the message.

9.2.15 If a BellSouth tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an AT&T local switch and third party local switch, BellSouth SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the AT&T local STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to BellSouth STPSs.

9.2.16 STPs shall provide all functions of the MTP as defined in the applicable industry standard technical references.

- 9.2.17 STPs shall provide on a non-discriminatory basis all functions of the Operations, Maintenance and Administration Part ("OMAP") commonly provided by STPSs. All OMAP functions will be on a "where available" basis and can include:
 - 9.2.17.1 MTP Routing Verification Test ("MRVT") and
 - 9.2.17.2 SCCP Routing Verification Test ("SRVT").
- 9.2.18 In cases where the destination signaling point is a BellSouth local or tandem switching system or database, or is an AT&T or third party local or tandem switching system directly connected to the BellSouth SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPSs in an SS7 network connected with the BellSouth SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of BellSouth STPSs, and if mutually agreed upon by AT&T and BellSouth.
- 9.2.19 BellSouth STPs shall route mutually agreeable AIN responses from the AT&T SCP via SS7 network interconnect to the local switch designated in the Signaling Connection Control Part ("SCCP") called party address.
- 9.2.20 STPs shall be equal to or better than the technical specifications set forth in the applicable industry standard technical references.
 - 9.2.20.1 Message Screening
 - 9.2.21 BellSouth shall set message screening parameters so as to accept messages from AT&T local or tandem switching systems destined to any signaling point in the BellSouth SS7 network or any network interconnected to the BellSouth SS7 network with which the AT&T switching system has a legitimate signaling relationship.
 - 9.2.22 BellSouth shall set message screening parameters so as to accept messages destined to/from an AT&T local or tandem switching system or to/from an AT&T Service Control Point from any signaling point or network interconnected to the BellSouth SS7 network with which the AT&T switching system has a legitimate signaling relationship.
- 9.3 **SS7 Advanced Intelligent Network ("AIN") Access**

- 9.3.1 SS7 AIN Access shall provide the AT&T SCP access to BellSouth local switch via interconnection of BellSouth SS7 and AT&T SS7 Networks. BellSouth shall offer SS7 access through its STPs. If BellSouth requires a mediation device on any part of its network, BellSouth must route its calls in the same manner. The interconnection arrangement shall result in the BellSouth local switch recognizing the AT&T SCP as at least at parity with BellSouth's SCP's in terms of interfaces, performance and capabilities.
- 9.3.2 SS7 AIN Access is the provisioning of AIN triggers in a BellSouth local switch and interconnection of the BellSouth SS7 network with the AT&T SS7 network to exchange TCAP queries and responses with an AT&T SCP.

9.4 Call-Related DataBases

9.4.1 Definition

- 9.4.1.1 Call-related databases are defined as databases, other than operations support systems, that are used in signaling networks for billing and collection, or the transmission, routing, or other provision of a telecommunications service. For purposes of switch query and database response through a signaling network, BellSouth shall provide access to its call-related databases, including but not limited to, the Calling Name Database, 911 Database, E911 Database, Line Information Database, Toll Free Calling Database, Advanced Intelligent Network Databases, and downstream number portability databases by means of physical access at the signaling transfer point linked to the unbundled databases. BellSouth shall not be required to unbundle the services created in the AIN platform and architecture that qualify for proprietary treatment. BellSouth shall allow AT&T when AT&T has purchased BellSouth's local switching capability to use BellSouth's service control point element in the same manner, and via the same signaling links, as BellSouth itself. BellSouth shall allow AT&T when it has deployed its own switch, and has linked that switch to BellSouth's signaling system, to gain access to BellSouth's service control point in a manner that allows AT&T to provide any call-related database-supported services to customers served by AT&T's switch. BellSouth shall provide AT&T, upon request, with access to call-related databases in a manner that complies with Section 222 of the Act.

- 9.4.2 A Service Control Point ("SCP") is a specific type of Database functionality deployed in a Signaling System 7 ("SS7") network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network.

- 9.4.3 Technical Requirements
- 9.4.3.1 Requirements for call-related databases within this section address storage of information, access to information (e.g., signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance). All call-related databases shall be provided in accordance with the following requirements:
- 9.4.4 BellSouth shall provide physical access to SCPs through the SS7 network and protocols, as specified in this Attachment 2, with TCAP as the application layer protocol.
- 9.4.5 BellSouth shall provide physical interconnection to databases via industry standard interfaces and protocols.
- 9.4.5.1 The reliability of interconnection options shall be consistent with requirements for diversity and survivability.
- 9.4.6 Database Availability
- 9.4.6.1 Call-related databases shall have a maximum unscheduled unavailability of 30 minutes per year. Unavailability due to software and hardware upgrades shall be scheduled during minimal usage periods and only be undertaken upon proper notification to providers which might be impacted. Any downtime associated with the provision of call-related databases will impact all service providers, including BellSouth, equally.
- 9.4.6.2 Any AT&T order for data to be added, modified or deleted from the databases shall be consistent with the ordering and provisioning requirements of this Agreement.
- 9.4.6.3 BellSouth shall make available call-related database functionality and complete database transactions (e.g., add, modify or delete) for AT&T customer records stored in BellSouth's databases on a basis that is equivalent to that which it provides to itself or third-party requesting telecommunications carriers.
- 9.4.7 Line Information Database ("LIDB")
- 9.4.7.1 AT&T acknowledges that BellSouth will store in its LIDB only records relating to service in the BellSouth region.
- 9.4.7.2 Definition.
- 9.4.8 The LIDB is a transaction-oriented database accessible through Common Channel Signaling ("CCS") networks. It contains records

associated with customer Line Numbers and Special Billing Numbers relating to service in the BellSouth region.

- 9.4.9 The LIDB Storage Agreement, which contains the terms and conditions for AT&T's access to LIDB, is attached as Exhibit A to Attachment 6, incorporated herein by this reference.
- 9.4.10 Toll Free Number Database
 - 9.4.10.1 The Toll Free Number Database is a SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional so-called vertical features during call set-up in response to queries from SSPs. BellSouth shall provide the Toll Free Number Database in accordance with the following:
 - 9.4.11 BellSouth shall make BellSouth Toll Free Number Database available for AT&T to query with a toll-free number and originating information.
 - 9.4.12 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a BellSouth switch.
 - 9.4.12.1 Interface Requirements
 - 9.4.13 The signaling interface between the AT&T or other local switch and the Toll-Free Number database shall use the TCAP protocol and in the signaling network interface as specified in the applicable industry standard technical references.
 - 9.4.14 Automatic Location Identification/Data Management System ("ALI/DMS")
 - 9.4.14.1 The ALI/DMS Database contains end user information (including name, address, telephone information, and sometimes special information from the local service provider or end user) used to determine to which PSAP to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than 911. BellSouth shall provide the Emergency Services Database in accordance with the following:
 - 9.4.14.2 Technical Requirements
 - 9.4.15 BellSouth shall provide an electronic interface to the ALI/DMS database, through which AT&T or its agent may provide a daily update of AT&T end user information. BellSouth shall provide AT&T with record input format, consistent with the requirements imposed on

BellSouth by the governmental body administering 911 services. BellSouth shall provide error reports from the ALI/DMS data base to AT&T as soon as possible, but in any event, within 24 hours after AT&T or its agents enters information into the ALI/DMS data base. The error reports may be provided electronically if AT&T purchases the capability. If an electronic interface is not available as an offering or because of a system outage for AT&T or its agents to provide daily updates to the ALI/DMS database or for BellSouth to provide error reports from the ALI/DMS database, BellSouth shall establish a process or procedure to receive, send and process within one business day AT&T end user information. The error files will contain the AT&T reference date and file number of the original record sent.

- 9.4.16 The ALI/DMS database shall contain the following end user information:
 - 9.4.16.1 Name;
 - 9.4.16.2 Address;
 - 9.4.16.3 Telephone number; and
 - 9.4.16.4 Other information as appropriate (e.g., whether an end user is blind or deaf or has another disability).
- 9.4.17 When BellSouth is responsible for administering the ALI/DMS database in its entirety, ported number NXXs entries for the ported numbers should be maintained unless AT&T requests otherwise and shall be updated if AT&T requests, provided AT&T supplies BellSouth with the updates.
- 9.4.18 When Remote Call Forwarding ("RCF") is used to provide number portability to the local end user and a remark or other appropriate field information is available in the database, the shadow or "forwarded-to" number and an indication that the number is ported shall be added to the end user record.
- 9.4.19 If BellSouth is responsible for configuring PSAP features (for cases when the PSAP or BellSouth supports an ISDN interface) it shall ensure that CLASS Automatic Recall (Call Return) is not used to call back to the ported number. Although BellSouth currently does not have ISDN interface, BellSouth agrees to comply with this requirement once ISDN interfaces are in place.
- 9.4.20 At either Party's option, however not to exceed annually unless otherwise agreed to by the Parties, the databases of both Parties shall

be compared for accuracy and uniformity. If any discrepancies are found as a result of the comparison, the Parties shall work cooperatively to correct the discrepancies within a reasonable time. The cost of the implementation of the request made other than annually shall be borne by the Party making the request.

9.4.20.1 Interface Requirements

9.4.21 The interface between the E911 Switch or Tandem and the ALI/DMS database for AT&T end users shall meet industry standards.

10 Directory Assistance Database Service ("DADS")

10.1 Directory Assistance ("DA") database contains all end user data in the database used by BellSouth to provide its own DA service and where BellSouth is authorized to include the end user data of a telecommunications carrier in the database available to AT&T. BellSouth shall provide access to the DA database in one of two manners.

10.2 BellSouth shall make its Directory Assistance Database Service ("DADS") available solely for the expressed purpose of providing Directory Assistance type services to AT&T end users. Directory Assistance type service is defined as a service that allows AT&T end users to obtain the name, telephone numbers and addresses of other subscribers of telecommunications services. AT&T agrees that Directory Assistance Database Service ("DADS") will not be used for any purpose which violates federal or state laws, statutes, regulatory orders or tariffs. Except for the permitted use, AT&T shall not disclose DADS and shall provide due care in providing for the security and confidentiality of DADS. Further, AT&T authorizes the inclusion of AT&T's Directory Assistance listings in the BellSouth Directory Assistance products.

10.3 BellSouth shall provide AT&T initially with a base file of subscriber listings which reflect all listing change activity occurring since AT&T's most recent update via magnetic tape, and subsequently using electronic connectivity such as Network Data Mover to be developed mutually by AT&T and BellSouth. AT&T agrees to assume the costs associated with CONNECT: Direct™ connectivity, which will vary depending upon volume and mileage.

10.4 BellSouth will require approximately one month after receiving an order to prepare the base file. BellSouth will provide daily updates to AT&T which will reflect listing change activity

occurring since AT&T's most recent update. BellSouth shall provide updates to AT&T on a business, residence, or combined business and residence basis. AT&T agrees that the updates shall be used solely to keep the information current. Delivery of daily updates will commence the day after AT&T receives the base file.

- 10.5 BellSouth is authorized to include AT&T Directory Assistance listing information in its Directory Assistance Database Service. Any other use by BellSouth of AT&T Directory Assistance listing information is not authorized and with the exception of a request for DADS, BellSouth shall refer any request for such information to AT&T.
- 10.6 BellSouth shall provide to AT&T, upon request, via DADS, the names and addresses for BellSouth.
- 10.7 AT&T and other telecommunication carriers' subscribers that have unlisted and non-published directory listings. The data files shall contain a special indicator showing that the subscribers account is either unlisted or unpublished.
- 10.8 Rates for DADS are as set forth in Exhibit A of this Attachment 2.
- 10.9 Direct Access to Directory Assistance Service ("DADAS") will provide AT&T's directory assistance operators with the ability to search all available BellSouth subscriber listings using the Directory Assistance search format. Subscription to DADAS will allow AT&T to utilize its own switch, operator workstations and optional audio subsystems.
- 10.10 BellSouth will provide DADAS from its DA location. AT&T will access the DADAS system via BellSouth provided point of availability. AT&T has the responsibility of providing the physical links required to connect to the point of availability. These facilities may be purchased from BellSouth at rates and charges billed separately from the charges associated with this offering.
- 10.11 A specified interface to each AT&T subsystem will be provided by BellSouth. Interconnection between AT&T's system and a specified BellSouth location will be pursuant to the use of AT&T-owned or AT&T-leased facilities and shall be appropriately sized based upon the volume of queries being generated by AT&T.
- 10.12 The specifications for the three interfaces necessary for interconnection are available in the following documents:

- 10.12.1 DADAS to Subscriber Operator Position System – Northern Telecom Document CSI-2300-07; Universal Gateway/Position Message Interface Format Specification;
- 10.12.2 DADAS to Subscriber Switch – Northern Telecom Document Q210-1 Version A107; NTDMS/CCIDAS System Application Protocol; and AT&T Document 250-900-535 Operator Services Position System Listing Service and Application Call Processing Data Link Interface Specification;
- 10.12.3 DADAS to Audio Subsystem (Optional) – Directory One Call Control to Audio Response Unit system interface specifications are available through Northern Telecom as a licensed access protocol – Northern Telecom Document 355-004424 and Gateway/Interactive Voice Subsystem Protocol Specification.
- 10.12.4 Rates for DADAS are as set forth in Exhibit A of this Attachment 2.
- 10.12.5 Calling Name Delivery Database Service
 - 10.12.5.1 Calling Name Delivery Database Service (“CNAM”) provides AT&T the ability to associate a name with the calling party number, allowing the end user subscriber (to which a call is being terminated) to view the calling party’s name before the call is answered. This service also provides AT&T the opportunity to load and store its subscriber name in the BellSouth CNAM SCPs.
 - 10.12.5.2 The CNAM Database Service Agreement is included as Exhibit D to this Attachment 2 and incorporated herein by this reference.

11 Service Management System

11.1 Definition

- 11.1.1 A Service Management System is defined as a computer database or system not part of the public switched network that, among other things: (1) interconnects to the service control point and sends to that service control point the information and call processing instructions needed for a network switch to process and complete a telephone call; and (2) provides telecommunications carriers with the capability of entering and storing data regarding the processing and completing of a telephone call. BellSouth shall provide AT&T, upon request, with access to a Service Management System in a manner that complies with Section 222 of the Act.

- 11.2 BellSouth shall provide AT&T with the information necessary to enter correctly, or format for entry, the information relevant for input into BellSouth's Service Management System.
- 11.3 BellSouth shall provide AT&T the same access to design, create, test, and deploy Advanced Intelligent Network-based services at the Service Management System, through a Service Creation Environment, that BellSouth provides itself.
- 11.4 BellSouth shall provide access to any and all BellSouth non-proprietary service applications resident in BellSouth's SCP. Such access may be from AT&T's switch or BellSouth's unbundled Local Switching element.
- 11.5 Service Management Systems provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data stored in SCPs.
- 11.6 BellSouth's Service Creation Environment ("SCE") and Service Management System ("SMS") Advanced Intelligent Network ("AIN") Access shall provide AT&T the capability that will allow AT&T to create service applications in a BellSouth Service Creation Environment and deploy those applications in a BellSouth SMS to a BellSouth SCP. AT&T's service applications interact with AIN triggers provisioned on a BellSouth SSP. BellSouth shall provide AT&T access to the BellSouth Service Creation Environment in a manner equal to what BellSouth provides itself or requesting telecommunications carriers.
- 11.7 BellSouth's SCE/SMS AIN Access shall provide access to SCE hardware, software, testing and technical support (e.g., help desk, system administrator) resources available to AT&T. Scheduling procedures shall provide AT&T equivalent priority to these resources.
- 11.8 BellSouth SCP shall partition and protect AT&T service logic and data from unauthorized access, execution or other types of compromise.
- 11.9 When AT&T selects SCE/SMS AIN Access, BellSouth shall provide training, documentation, and technical support to enable AT&T to use BellSouth's SCE/SMS AIN Access to create and administer applications. Training, documentation, and technical support will address use of SCE and SMS access and administrative functions, but will not include support for the creation of a specific service application.

- 11.10 **When AT&T selects SCE/SMS AIN Access, BellSouth shall provide for a secure, controlled access environment in association with its internal use of AIN components.**
- 11.11 **When AT&T selects SCE/SMS AIN Access for providing services on AT&T's network, BellSouth and AT&T will work cooperatively to resolve technical and provisioning issues.**
- 12 **Trunk Interface Requirements**
- 12.1 **If a municipality has converted to E911 service, AT&T will forward 911 calls to the appropriate E911 primary tandem, along with ANI, based upon the current E911 end office to tandem homing arrangement as provided by BellSouth. If the primary tandem trunks are not available, AT&T will alternatively route the call to a designated 7-digit local number residing in the appropriate PSAP. This call will be transported over BellSouth's interoffice network and will not carry the ANI of the calling party, which is in parity with BellSouth's handling of 911 calls from its customers.**
- 12.2 **911/E911 Trunks**
- 12.2.1 **Local Switch and Access Tandem Trunks**
- 12.2.1.1 **BellSouth shall provide trunk groups provisioned exclusively to carry intraLATA traffic, as designated by AT&T.**
- 12.2.1.2 **BellSouth shall provide trunk groups provisioned exclusively to carry interLATA traffic, as designated by AT&T.**
- 12.2.1.3 **BellSouth shall provide SS7 trunks which provide SS7 interconnection. At AT&T's request, MF trunks may be substituted for SS7 trunks where applicable.**
- 12.2.1.4 **BellSouth shall simultaneously route calls based on dialed digits (in accordance with the standard GR-317-CORE), and Carrier Identification Code (in accordance with the standard GR-394-CORE) over a single SS7 trunk group.**
- 12.3 **911 and E911**
- 12.3.1 **If AT&T orders Services and Elements, then AT&T is also responsible for providing E911 to its end users. BellSouth agrees to offer access to the 911/E911 network pursuant to the following terms and conditions set forth in this Attachment.**
- 12.3.2 **Definition**

12.3.2.1 The 911 and E911 are requirements that provide a caller access to the applicable emergency service bureau by dialing a 3-digit universal telephone number (911). 911 Arrangements are arrangements for routing 911 calls from AT&T end users to the appropriate PSAP, passing certain end user information for display at the PSAP answering station based on the class of 911 service (911 or E911) deployed in the area. BellSouth shall provide 911 Arrangements to AT&T in accordance with the provisions below in areas where AT&T is authorized to provide local exchange service and BellSouth is the 911 service provider. The provisions in this Section apply only to 911 Arrangements. The 911 functionality for Local Services Resale shall be governed by provisions in Attachment 1 of this Agreement incorporated herein by reference. In providing 911 Arrangements to AT&T, BellSouth shall comply with all laws, rules and regulations concerning emergency services. The 911 and E911 functions provided to AT&T shall be at least equal in quality and functionality with the support and services that the BellSouth provides to its own retail end users.

12.3.3 Requirements

12.3.3.1 911 Service Provisioning. For 911 service, BellSouth will provide to AT&T a list consisting of each municipality that subscribes to 911 service. The list will also provide, if known, the E911 conversion date for each municipality and, for network routing purposes, a ten-digit directory number representing the appropriate emergency answering position for each municipality subscribing to 911. AT&T will be required to arrange to accept 911 calls from its end users in municipalities that subscribe to 911 service and translate the 911 call to the appropriate 10-digit directory number as stated on the list provided by BellSouth. AT&T will be required to route that call to BellSouth at the appropriate to install dedicated facilities from its serving wire center to the appropriate BellSouth tandem or end office. When a municipality converts to E911 service, AT&T will be required to discontinue the 911 procedures and begin using E911 procedures.

12.3.3.2 E911 Service Provisioning. For E911 service, AT&T will be required to install a minimum of two dedicated trunks originating from the AT&T serving wire center and terminating to the appropriate E911 tandem. The dedicated trunks shall be, at a minimum, DS-0 level trunks configured either as a 2-wire analog interface or as part of a digital (1.544 Mb/s) interface. Either configuration shall use CAMA-type signaling with multifrequency ("MF") pulsing that will deliver automatic number identification ("ANI") with the voice portion of the call. If the user interface is digital, MF pulses, as well as other AC signals, shall be encoded per the u-255 Law convention. AT&T will be required to

provide BellSouth daily updates to the E911 database. AT&T will be required to forward 911 calls to the appropriate E911 tandem, along with ANI, based upon the current E911 end office to tandem homing arrangement as provided by BellSouth. If the E911 tandem trunks are not available, AT&T will be required to route the call to a designated 10-digit local number residing in the appropriate PSAP. This call will be transported over BellSouth's interoffice network and will not carry the ANI of the calling party. AT&T shall be responsible for providing BellSouth with complete and accurate data for submission to the 911/E911 database for the purpose of providing 911/E911 to its end users.

12.3.4 Technical Requirements

12.3.4.1 At AT&T's request, BellSouth and AT&T shall establish dedicated trunk groups to route E911 calls placed by AT&T end users to the appropriate BellSouth 911 tandem or selective router. Trunks shall be established as CAMA MF trunks until SS7 connectivity is available. Thereafter, trunks shall be established with SS7 signaling.

12.3.4.2 BellSouth shall provision 911 trunks within 30 calendar days of receipt of AT&T's order, or such shorter time as may be established by law, rule, regulation or Commission or F.C.C. order. Alternatively, at its option, AT&T may provide the trunks. Regardless of which party provides the trunks, prior to placing a trunk in service BellSouth and AT&T shall cooperate in testing to assure proper functioning of the E911 system for calls delivered over the trunk.

12.3.4.3 BellSouth shall assure sufficient capacity at the 911 tandem or selective router to meet AT&T's requests for interconnection within 30 calendar days after receipt of the request. There shall be no limit on the number of trunks used by AT&T to connect to the 911 tandem or selective router. Interconnection to the 911 tandem shall be established to provide path and route diversity.

12.3.4.4 BellSouth shall provide the following information to AT&T, and shall promptly notify AT&T of any changes:

12.3.5 BellSouth processes and requirements for ordering trunks for 911 trunks and interconnection to the 911 tandem or selective router.

12.3.6 Trunk group specifications.

12.3.7 E911 tandem CLLI codes, circuit IDs, point codes, LEC order number, and IS code and address.

- 12.3.8 Description of BellSouth's diversity for facility routing.
- 12.3.9 Maintenance procedures for 911 trunk groups, including, but not limited to, contact names and numbers, escalation lists, and the hours that maintenance is available.
- 12.3.10 E911 Call Routing and Provision Customer Information to PSAP
 - 12.3.10.1 BellSouth shall route E911 calls delivered by AT&T to BellSouth's 911 tandems or selective routers to PSAPs in the same manner that BellSouth routes E911 calls from its own retail customers. BellSouth shall provide and validate AT&T customer information from the ALI/ANI database in the same manner BellSouth provides and validates information for its own retail customers.
 - 12.3.10.2 BellSouth shall automatically update the ALI/DMS databases with respect to NPA split conversions.
- 12.3.11 Master Street Address Guide ("MSAG")
 - 12.3.11.1 BellSouth shall provide AT&T access to the MSAG at least equal in quality and functionality with the access BellSouth provides to itself. BellSouth shall provide AT&T with a complete copy of the MSAG via CD Rom which is usable with personal computers, free of charge, once each year. Quarterly updates for each state are available for an additional charge. BellSouth shall cooperate with AT&T to ensure the accuracy of information about AT&T Customers in the MSAG and shall assist in resolving any errors. If BellSouth discovers an error in the MSAG, BellSouth shall notify PSAPs and AT&T of any errors in the MSAG concerning AT&T Customers.
- 12.3.12 Other
 - 12.3.12.1 BellSouth shall provide AT&T with 10-digit emergency telephone numbers for operator handling of emergency calls, at least equal in quality and functionality with the provisions of such information to itself.
- 12.3.13 Technical References
 - 12.3.13.1 BellSouth shall provide 911 Arrangements to AT&T based upon modified NENA 2 Recommendations.
- 12.3.14 Rates. Charges for 911/E911 service are borne by the municipality purchasing the service. BellSouth will impose no charge on AT&T beyond applicable charges for BellSouth trunking arrangements.

- 12.3.15 The 911 and E911 functions provided to AT&T shall be at least at parity with the support and services that BellSouth provides to its end users for such similar functionality.
- 12.3.16 Detailed Practices and Procedures. The detailed practices and procedures contained in the E911 Local Exchange Carrier Guide For Facility-Based Providers as amended from time to time during the term of this Agreement will determine the appropriate practices and procedures for BellSouth and AT&T to follow in providing 911/E911 services.