

**AMENDMENT
TO THE
AGREEMENT BETWEEN
PATHNET
BELLSOUTH TELECOMMUNICATIONS, INC.
DATED June 20, 2000**

Pursuant to this Agreement, (the "Amendment"), PATHNET, Inc. ("PATHNET"), and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend certain Interconnection Agreement between the Parties dated June 20, 2000 ("Agreement").

WHEREAS, BellSouth and PATHNET entered into the Agreement on June 20, 2000, and;

WHEREAS, the Parties desire to amend the agreement to correct for typographical errors included in the executed agreement;

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby covenant and agree as follows:

1. The word "CLEC-1" has been replaced with the word "Pathnet" in Attachment 1, and Attachment 2.
2. Revision marks in Attachment 3 have been removed.
3. All of the other provisions of the Agreement, dated June 20, 2000, shall remain in full force and effect.
4. Either or both of the Parties is authorized to submit this Amendment to the respective state regulatory authorities for approval subject to Section 252(e) of the Federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

PATHNET

BellSouth Telecommunications, Inc.

By: Signature on File

By: Signature on File

Name: J. Alfred Baird

Name: Jerry Hendrix

Title: Vice President Access Policy and Planning

Title: Senior Director

Date: 10/16/2000

Date: 10/25/2000

Attachment 1

Resale

TABLE OF CONTENTS

1.	Discount Rates.....	3
2.	Definition of Terms.....	3
3.	General Provisions	4
4.	Bellsouth’s Provision of Services To Pathnet	8
5.	Maintenance of Services	8
6.	Establishment of Service	9
7.	Payment and Billing Arrangements	11
8.	Discontinuance of Service.....	13
9.	Line Information Database (LIDB).....	15
10.	RAO Hosting.....	15
11.	Optional Daily Usage File (ODUF).....	15
12.	Enhanced Optional Daily Usage File (EODUF).....	15
13.	Calling Name Delivery (CNAM) Database Service.....	15
	Exhibit A – Applicable Discounts/OSS Rates.....	17
	Exhibit B – Resale Restrictions.....	20
	Exhibit C – Line Information Database (LIDB) Storage Agreement.....	22
	Exhibit D – CMDS/ROA Hosting.....	28
	Exhibit E – Optional Daily Usage File ODUF).....	33
	Exhibit F – Enhanced Option Daily Usage File (EODUF).....	37
	Exhibit G – Calling Name Delivery (CNAM) Database Services.....	40
	Exhibit H – ODUF/EODUF/CMDS Rates.....	Rate Table

RESALE

1. Discount Rates

The rates pursuant by which Pathnet is to purchase services from BellSouth for resale shall be at a discount rate off of the retail rate for the telecommunications service. The discount rates shall be as set forth in Exhibit A, attached hereto and incorporated herein by this reference. Such discount shall reflect the costs avoided by BellSouth when selling a service for wholesale purposes.

2. Definition of Terms

- 2.1 CUSTOMER OF RECORD means the entity responsible for placing application for service; requesting additions, rearrangements, maintenance or discontinuance of service; payment in full of charges incurred such as non-recurring, monthly recurring, toll, directory assistance, etc.
- 2.2 DEPOSIT means assurance provided by a customer in the form of cash, surety bond or bank letter of credit to be held by BellSouth.
- 2.3 END USER means the ultimate user of the telecommunications services.
- 2.4 END USER CUSTOMER LOCATION means the physical location of the premises where an end user makes use of the telecommunications services.
- 2.5 NEW SERVICES means functions, features or capabilities that are not currently offered by BellSouth. This includes packaging of existing services or combining a new function, feature or capability with an existing service.
- 2.6 OTHER/COMPETITIVE LOCAL EXCHANGE COMPANY (OLEC/CLEC) means a telephone company certificated by the public service commissions of BellSouth's franchised area to provide local exchange service within BellSouth's franchised area.
- 2.7 RESALE means an activity wherein a certificated CLEC, such as Pathnet subscribes to the telecommunications services of BellSouth and then reoffers those telecommunications services to the public (with or without "adding value").
- 2.8 RESALE SERVICE AREA means the area, as defined in a public service commission approved certificate of operation, within which a CLEC, such as Pathnet, may offer resold local exchange telecommunications service.

3. General Provisions

- 3.1 Pathnet may resell the tariffed local exchange and toll telecommunications services of BellSouth contained in the General Subscriber Service Tariff and Private Line Service Tariff subject to the terms, and conditions specifically set forth herein. Notwithstanding the foregoing, the exclusions and limitations on services available for resale will be as set forth in Exhibit B, attached hereto and incorporated herein by this reference.
- 3.2 All of the negotiated rates, terms and conditions set forth in this Attachment pertain to the resale of BellSouth's retail telecommunications services and other services specified in this Attachment. BellSouth shall make available telecommunications services for resale at the rates set forth in Exhibit A to this Agreement and subject to the exclusions and limitations set forth in Exhibit B to this Agreement. BellSouth does not however waive its rights to appeal or otherwise challenge any decision regarding resale that resulted in the discount rates contained in Exhibit A or the exclusions and limitations contained in Exhibit B. BellSouth reserves the right to pursue any and all legal and/or equitable remedies, including appeals of any decisions. If such appeals or challenges result in changes in the discount rates or exclusions and limitations, the parties agree that appropriate modifications to this Agreement will be made promptly to make its terms consistent with the outcome of the appeal.
- 3.3 Pathnet may purchase resale services from BellSouth for their own use in operating their business. The resale discount will apply to those services under the following conditions:
- 3.3.1 Pathnet must resell services to other end users.
- 3.3.2 Pathnet must order services through resale interfaces, i.e., the Local Carrier Service Center (LCSC) and/or appropriate Resale Account Teams pursuant to Section 3 of the General Terms and Conditions.
- 3.3.3 Pathnet cannot be an alternative local exchange telecommunications company for the single purpose of selling to themselves.
- 3.4 The provision of services by BellSouth to Pathnet does not constitute a joint undertaking for the furnishing of any service.
- 3.5 Pathnet will be the customer of record for all services purchased from BellSouth. Except as specified herein, BellSouth will take orders from, bill and expect payment from Pathnet for all services.
- 3.6 Pathnet will be BellSouth's single point of contact for all services purchased pursuant to this Agreement. BellSouth shall have no contact with the end user except to the extent provided for herein.

- 3.7 BellSouth will continue to bill the end user for any services that the end user specifies to BellSouth that the end user wishes to receive directly from BellSouth.
- 3.8 BellSouth maintains the right to serve directly any end user within the service area of Pathnet. BellSouth will continue to directly market its own telecommunications products and services and in doing so may establish independent relationships with end users of Pathnet.
- 3.9 Neither Party shall interfere with the right of any person or entity to obtain service directly from the other Party.
- 3.10 Current telephone numbers may normally be retained by the end user and are assigned to the service furnished. However, neither Party nor the end user has a property right to the telephone number or any other call number designation associated with services furnished by BellSouth, and no right to the continuance of service through any particular central office. BellSouth reserves the right to change such numbers, or the central office designation associated with such numbers, or both, whenever BellSouth deems it necessary to do so in the conduct of its business, and in accordance with BellSouth practices and procedures on a nondiscriminatory basis. BellSouth will use its best efforts to provide 90 days advanced notice to Pathnet at parity with BellSouth's own end users, its affiliates, and any other CLEC.
- 3.11 For the purpose of the resale of BellSouth's telecommunications services by Pathnet, BellSouth will provide Pathnet with an on line access to telephone numbers for reservation on a first come first serve basis. Such reservations of telephone numbers, on a pre-ordering basis shall be for a period of nine (9) days. Pathnet acknowledges that there may be instances where there is a shortage of telephone numbers in a particular Common Language Location Identifier Code (CLLIC) and in such instances BellSouth may on a non-discriminatory basis, request that Pathnet cancel its reservations of numbers. Pathnet shall comply with such request. BellSouth will also work cooperatively with all affected CLEC's to ensure an equal opportunity is provided for number reservations.
- 3.12 Further, upon Pathnet's request, and for the purpose of the resale of BellSouth's telecommunications services by Pathnet, BellSouth will reserve up to 100 telephone numbers per CLLIC, for Pathnet's sole use. Such telephone number reservations shall be valid for ninety (90) days from the reservation date. Pathnet acknowledges that there may be instances where there is a shortage of telephone numbers in a particular CLLIC and in such instances BellSouth shall use its best efforts to reserve for a ninety (90) day period a sufficient quantity Pathnet's reasonable need in that particular CLLIC. BellSouth will proportion the telephone number pool and will provide spare telephone numbers to Pathnet at parity to BellSouth end users and any other CLECs.
- 3.13 BellSouth may provide any service or facility for which a charge is not established herein, as long as it is offered on the same terms to Pathnet.

- 3.14 Service is furnished subject to the condition that it will not be used for any unlawful purpose.
- 3.15 Service will be discontinued if any law enforcement agency advises that the service being used is in violation of the law.
- 3.16 BellSouth can refuse service when it has reasonable grounds, to believe that service will be used in violation of the law.
- 3.17 BellSouth accepts no responsibility to any person for any unlawful act committed by Pathnet or its end users as part of providing service to Pathnet for purposes of resale or otherwise.
- 3.18 BellSouth will cooperate fully with law enforcement agencies with subpoenas and court orders for assistance with BellSouth's end users. Law enforcement agency subpoenas and court orders regarding end users of Pathnet will be directed to Pathnet. To the extent that BellSouth does not receive compensation from law enforcement for such assistance, BellSouth will bill Pathnet for costs it incurs in implementing any requests by law enforcement agencies regarding Pathnet end users.
- 3.19 The characteristics and methods of operation of any circuits, facilities or equipment provided by any person or entity other than BellSouth shall not:
- 3.19.1 Consistent with the Federal Communications Commission's decisions and rules on spectrum management , cause interference with or impair service over any facilities of BellSouth, its affiliates, or its connecting and concurring carriers involved in its service;
Cause damage to BellSouth's plant;
- 3.19.2 Impair the privacy of any communications; or
- 3.19.3 Create hazards to any BellSouth employees or the public.
- 3.20 Pathnet assumes the responsibility of notifying BellSouth regarding material, less than standard operations with respect to services provided by Pathnet.
- 3.21 Facilities and/or equipment utilized by BellSouth to provide service to Pathnet remain the property of BellSouth.
- 3.22 White page directory listings will be provided in accordance with regulations set forth in Section A6 of the General Subscriber Services Tariff and will be available for resale.
- 3.23 BellSouth provides electronic access to customer record information. Access is provided through the Local Exchange Navigation System (LENS) and the Telecommunications Access Gateway (TAG). Customer Record Information includes

but is not limited to, customer specific information in CRIS and RSAG. In addition, Pathnet shall provide to BellSouth access to customer record information including electronic access where available. Otherwise, Pathnet shall provide paper copies of customer record information within a reasonable period of time upon request by BellSouth. Customer Record Information is equivalent to but not limited to the type of customer specific information contained in CRIS and RSAG. The Parties agree not to view, copy, or otherwise obtain access to the customer record information of any customer without that customer's permission, and further agrees that Pathnet and BellSouth will obtain access to customer record information only in strict compliance with applicable laws, rules, or regulations of the State in which the service is provided.

3.24 All costs incurred by BellSouth to develop and implement operational interfaces shall be recovered from Resellers who utilize the services. Charges for use of Operational Support Systems (OSS) shall be as set forth in Exhibit A of this Attachment.

3.25 Where available to BellSouth's end users, BellSouth shall provide the following telecommunications services at a discount to allow for voice mail services:

- Simplified Message Desk Interface - Enhanced ("SMDI-E")
- Simplified Message Desk Interface ("SMDI") Message Waiting Indicator ("MWI") stutter dialtone and message waiting light feature capabilities
- Call Forward on Busy/Don't Answer ("CF-B/DA")
- Call Forward on Busy ("CF/B")
- Call Forward Don't Answer ("CF/DA")

Further, BellSouth messaging services set forth in BellSouth's Messaging Service Information Package shall be made available for resale without the wholesale discount.

3.26 BellSouth's Inside Wire Maintenance Service Plans may be made available for resale at rates, terms and conditions as set forth by BellSouth and without the wholesale discount.

3.27 All costs incurred by BellSouth for providing services requested by Pathnet that are not covered in the BellSouth tariffs shall be recovered from Pathnet if Pathnet utilizes those services.

3.28 Recovery of charges associated with implementing Number Portability through monthly charges assessed to end users has been authorized by the FCC. This end user line charge will be billed to Resellers of BellSouth's telecommunications services and will be as filed in FCC No. 1. This charge will not be discounted.

4. BellSouth's Provision of Services to Pathnet

4.1 Pathnet agrees that its resale of BellSouth services shall be as follows:

4.1.1 The resale of telecommunications services shall be limited to users and uses conforming to the class of service restrictions.

4.1.2 Hotel and Hospital PBX services are the only telecommunications services available for resale to Hotel/Motel and Hospital end users, respectively. Similarly, Access Line Service for Customer Provided Coin Telephones is the only local service available for resale to Independent Payphone Provider (IPP) customers. Shared Tenant Service customers can only be sold those local exchange access services available in BellSouth's A23 Shared Tenant Service Tariff in the states of Florida, Georgia, North Carolina and South Carolina, and in A27 in the states of Alabama, Kentucky, Louisiana, Mississippi and Tennessee.

4.1.3 BellSouth reserves the right to periodically audit services purchased by Pathnet to establish authenticity of use. Such audit shall not occur more than once in a calendar year. Pathnet shall make any and all records and data available to BellSouth or BellSouth's auditors on a reasonable basis. BellSouth shall bear the cost of said audit.

4.2 Resold services can only be used in the same manner as specified in BellSouth's Tariffs. Resold services are subject to the same terms and conditions as are specified for such services when furnished to an individual end user of BellSouth in the appropriate section of BellSouth's Tariffs. Specific tariff features (e.g. a usage allowance per month), shall not be aggregated across multiple resold services.

4.3 Pathnet may resell services only within the specific resale service area as defined in its certificate.

4.4 Telephone numbers transmitted via any resold service feature are intended solely for the use of the end user of the feature. Resale of this information is prohibited.

5. Maintenance of Services

5.1 Pathnet will adopt and adhere to the standards contained in the applicable CLEC Work Center Operation Understanding Agreement regarding maintenance and installation of service. Services resold under BellSouth's Tariffs and facilities and equipment provided by BellSouth shall be maintained by BellSouth.

5.2 Pathnet or its end users may not rearrange, move, disconnect, remove or attempt to repair any facilities owned by BellSouth, other than by connection or disconnection to any interface means used, except with the written consent of BellSouth.

- 5.3 Pathnet accepts responsibility to notify BellSouth of situations that arise that may result in a service problem.
- 5.4 Pathnet will be BellSouth's single point of contact for all repair calls on behalf of Pathnet's end users. The parties agree to provide one another with toll-free contact numbers for such purposes.
- 5.5 Pathnet will contact the appropriate repair centers in accordance with procedures established by BellSouth.
- 5.6 For all repair requests, Pathnet accepts responsibility for adhering to BellSouth's prescreening guidelines prior to referring the trouble to BellSouth.
- 5.7 BellSouth will bill Pathnet for handling troubles that are found not to be in BellSouth's network pursuant to its standard time and material charges. The standard time and material charges will be no more than what BellSouth charges to other CLEC's for the same services.
- 5.8 BellSouth reserves the right to contact Pathnet's end users on behalf of Pathnet, if deemed necessary, for maintenance purposes, and if such contact is made, BellSouth shall inform the end user that they are acting on behalf of Pathnet.

6. Establishment of Service

- 6.1 After receiving certification as a local exchange company from the appropriate regulatory agency, Pathnet will provide the appropriate BellSouth service center the necessary documentation to enable BellSouth to establish a master account for Pathnet's resold services. Such documentation shall include the Application for Master Account, proof of authority to provide telecommunications services, an Operating Company Number ("OCN") assigned by the National Exchange Carriers Association ("NECA") and a tax exemption certificate, if applicable. When necessary deposit requirements are met, BellSouth will begin taking orders for the resale of service.
- 6.2 Service orders will be in a standard format designated by BellSouth.
- 6.3 When notification is received from Pathnet that a current end user of BellSouth will subscribe to Pathnet's service, standard service order intervals for the appropriate class of service will apply.
- 6.4 BellSouth will not require end user confirmation prior to establishing service for Pathnet's end user customer. Pathnet must, however, be able to demonstrate end user authorization upon request.

- 6.5 Pathnet will be the single point of contact with BellSouth for all subsequent ordering activity resulting in additions or changes to resold services except that BellSouth will accept a request directly from the end user for conversion of the end user's service from Pathnet to BellSouth or will accept a request from another CLEC for conversion of the end user's service from Pathnet to the other LEC. BellSouth will notify Pathnet that such a request has been processed.
- 6.6 If BellSouth determines that an unauthorized change in local service to Pathnet has occurred, BellSouth will reestablish service with the appropriate local service provider and will assess Pathnet as the CLEC initiating the unauthorized change, the unauthorized change charge described in F.C.C. Tariff No. 1, Section 13 or applicable state tariff. Appropriate nonrecurring charges, as set forth in Section A4 of the General Subscriber Service Tariff, will also be assessed to Pathnet. These charges shall be eliminated from CLEC's bill if Pathnet provides satisfactory proof of authorization.
- 6.7 In order to safeguard its interest, BellSouth reserves the right to secure the account with a suitable form of security deposit, unless satisfactory credit has already been established.
- 6.7.1 Such security deposit shall take the form of an irrevocable Letter of Credit or other forms of security acceptable to BellSouth. Any such security deposit may be held during the continuance of the service as security for the payment of any and all amounts accruing for the service, until the credit worthiness, as determined by BellSouth, of Pathnet is established and at that time the security deposit will be returned with interest.
- 6.7.2 If a security deposit is required, such security deposit shall be made prior to the inauguration of service.
- 6.7.3 Such security deposit may not exceed two months' estimated billing.
- 6.7.4 The fact that a security deposit has been made in no way relieves Pathnet from complying with BellSouth's regulations as to advance payments and the prompt payment of bills on presentation nor does it constitute a waiver or modification of the regular practices of BellSouth providing for the discontinuance of service for non-payment of any sums due BellSouth.
- 6.7.5 BellSouth reserves the right to increase the security deposit requirements as long as the process is consistent with that process implementation of all other carriers and CLECs when, in its sole judgment, circumstances so warrant and/or gross monthly billing has increased beyond the level initially used to determine the security deposit.
- 6.7.6 In the event that Pathnet defaults on its account, service to Pathnet will be terminated and any security deposits held will be applied to its account.

6.7.7 Interest on a security deposit shall accrue and be paid in accordance with the terms in the appropriate BellSouth tariff.

7. Payment And Billing Arrangements

7.1 Prior to submitting orders to BellSouth for local service, a master account must be established for Pathnet. Pathnet is required to provide the following before a master account is established: proof of PSC/PUC certification, the Application for Master Account, an Operating Company Number (“OCN”) assigned by the National Exchange Carriers Association (“NECA”) and a tax exemption certificate, if applicable.

7.2 BellSouth shall bill Pathnet on a current basis all applicable charges and credits.

7.3 Payment of all charges will be the responsibility of Pathnet. Pathnet shall make payment to BellSouth for all services billed. BellSouth is not responsible for payments not received by Pathnet from Pathnet's end user. BellSouth will not become involved in billing disputes that may arise between Pathnet and its end user. Payments made to BellSouth as payment on account will be credited to an accounts receivable master account and not to an end user's account.

7.4 BellSouth will render bills each month on established bill days for each of Pathnet's accounts.

7.5 BellSouth will bill Pathnet in advance charges for all services to be provided during the ensuing billing period except charges associated with service usage, which will be billed in arrears. Charges will be calculated on an individual end user account level, including, if applicable, any charge for usage or usage allowances. BellSouth will also bill Pathnet, and Pathnet will be responsible for and remit to BellSouth, all charges applicable to resold services including but not limited to 911 and E911 charges, telecommunications relay charges (TRS), and franchise fees.

7.6 The payment will be due by the next bill date (i.e., same date in the following month as the bill date) and is payable in immediately available funds. Payment is considered to have been made when received by BellSouth.

7.6.1 If the payment due date falls on a Sunday or on a Holiday which is observed on a Monday, the payment due date shall be the first non-Holiday day following such Sunday or Holiday. If the payment due date falls on a Saturday or on a Holiday which is observed on Tuesday, Wednesday, Thursday, or Friday, the payment due date shall be the last non-Holiday day preceding such Saturday or Holiday. If payment is not received by the payment due date, a late payment penalty, as set forth in section 7.8 following, shall apply.

- 7.6.2 If Pathnet requests multiple billing media or additional copies of bills, BellSouth will provide these at an appropriate charge to Pathnet.
- 7.6.3 Billing Disputes
- 7.6.3.1 Each Party agrees to notify the other Party upon the discovery of a billing dispute. In the event of a billing dispute, the Parties will endeavor to resolve the dispute within sixty (60) calendar days of the Bill Date on which such disputed charges appear. Resolution of the dispute is expected to occur at the first level of management resulting in a recommendation for settlement of the dispute and closure of a specific billing period. If the issues are not resolved within the allotted time frame, the following resolution procedure will begin:
- 7.6.3.2 If the dispute is not resolved within sixty (60) days of the Bill Date, the dispute will be escalated to the second level of management for each of the respective Parties for resolution. If the dispute is not resolved within ninety (90) days of the Bill Date, the dispute will be escalated to the third level of management for each of the respective Parties for resolution
- 7.6.3.3 If the dispute is not resolved within one hundred and twenty (120) days of the Bill Date, the dispute will be escalated to the fourth level of management for each of the respective Parties for resolution.
- 7.6.3.4 If a Party disputes a charge and does not pay such charge by the payment due date, such charges shall be subject to late payment charges as set forth in the Late Payment Charges provision of this Attachment. If a Party disputes charges and the dispute is resolved in favor of such Party, the other Party shall credit the bill of the disputing Party for the amount of the disputed charges along with any late payment charges assessed no later than the second Bill Date after the resolution of the dispute. Accordingly, if a Party disputes charges and the dispute is resolved in favor of the other Party, the disputing Party shall pay the other Party the amount of the disputed charges and any associated late payment charges assessed no later than the second bill payment due date after the resolution of the dispute. BellSouth shall only assess interest on previously assessed late payment charges in a state where it has authority pursuant to its tariffs.
- 7.7 Upon proof of tax exempt certification from Pathnet, the total amount billed to Pathnet will not include any taxes due from the end user to reflect the tax exempt certification and local tax laws. Pathnet will be solely responsible for the computation, tracking, reporting, and payment of taxes applicable to Pathnet's end user.
- 7.8 If any portion of the payment is received by BellSouth after the payment due date as set forth preceding, or if any portion of the payment is received by BellSouth in funds

- that are not immediately available to BellSouth, then a late payment penalty shall be due to BellSouth. The late payment penalty shall be the portion of the payment not received by the payment due date times a late factor and will be applied on a per bill basis. The late factor shall be as set forth in Section A2 of the General Subscriber Services Tariff and Section B2 of the Private Line Service Tariff. Pathnet will be charged a fee for all returned checks as set forth in Section to A2 of the General Subscriber Services Tariff or in applicable state law.
- 7.9 Any switched access charges associated with interexchange carrier access to the resold local exchange lines will be billed by, and due to, BellSouth. No additional charges are to be assessed to Pathnet
- 7.10 BellSouth will not perform billing and collection services for Pathnet as a result of the execution of this Agreement. All requests for billing services should be referred to the appropriate entity or operational group within BellSouth.
- 7.11 Pursuant to 47 CFR Section 51.617, BellSouth will bill Pathnet end user common line charges identical to the end user common line charges BellSouth bills its end users.
- 7.12 In general, BellSouth will not become involved in disputes between Pathnet and Pathnet's end user customers over resold services. If a dispute does arise that cannot be settled without the involvement of BellSouth, Pathnet shall contact the designated Service Center for resolution. BellSouth will make every effort to assist in the resolution of the dispute and will work with Pathnet to resolve the matter in as timely a manner as possible. Pathnet may be required to submit documentation to substantiate the claim.
- 8. Discontinuance of Service**
- 8.1 The procedures for discontinuing service to an end user are as follows:
- 8.1.1 Where possible, BellSouth will deny service to Pathnet's end user on behalf of, and at the request of, Pathnet. Upon restoration of the end user's service, restoral charges will apply and will be the responsibility of Pathnet.
- 8.1.2 At the request of Pathnet, BellSouth will disconnect a Pathnet end user customer.
- 8.1.3 All requests by Pathnet for denial or disconnection of an end user for nonpayment must be in writing.
- 8.1.4 Pathnet will be made solely responsible for notifying the end user of the proposed disconnection of the service.
- 8.1.5 BellSouth will continue to process calls made to the Annoyance Call Center and will advise Pathnet when it is determined that annoyance calls are originated from one of their end user's locations. BellSouth shall be indemnified, defended and held

- harmless by Pathnet and/or the end user against any claim, loss or damage arising from providing this information to Pathnet. It is the responsibility of Pathnet to take the corrective action necessary with its end users who make annoying calls. Failure to do so will result in BellSouth's disconnecting the end user's service.
- 8.1.6 BellSouth may disconnect and reuse facilities when the facility is in a denied state and BellSouth has received an order to establish new service or transfer of service from an end user or an end user's CLEC at the same address served by the denied facility.
- 8.2 The procedures for discontinuing service to Pathnet are as follows:
- 8.2.1 BellSouth reserves the right to suspend or terminate service for nonpayment or in the event of prohibited, unlawful or improper use of the facilities or service, abuse of the facilities, or any other violation or noncompliance by Pathnet of the rules and regulations of BellSouth's Tariffs.
- 8.2.2 If payment of account is not received by the bill day in the month after the original bill day, BellSouth may provide written notice to Pathnet, that additional applications for service will be refused and that any pending orders for service will not be completed if payment is not received by the fifteenth day following the date of the notice. In addition BellSouth may, at the same time, give thirty days notice to the person designated by Pathnet to receive notices of noncompliance, and discontinue the provision of existing services to Pathnet at any time after expiration of such thirty-day period unless payment is received by such date.
- 8.2.3 In the case of such discontinuance, all billed charges, as well as applicable termination charges, shall become due.
- 8.2.4 If BellSouth does not discontinue the provision of the services involved on the date specified in the thirty days notice and Pathnet's noncompliance continues, nothing contained herein shall preclude BellSouth's right to discontinue the provision of the services to Pathnet without further notice.
- 8.2.5 If payment is not received or arrangements made for payment by the date given in the written notification, Pathnet's services will be discontinued. Upon discontinuance of service on a Pathnet's account, service to Pathnet's end users will be denied. BellSouth will also reestablish service at the request of the end user or Pathnet upon payment of the appropriate connection fee and subject to BellSouth's normal application procedures. Pathnet is solely responsible for notifying the end user of the proposed disconnection of the service.
- 8.2.6 If within fifteen days after an end user's service has been denied no contact has been made in reference to restoring service, the end user's service will be disconnected.

9. Line Information Database (LIDB)

- 9.1 BellSouth will store in its Line Information Database (LIDB) records relating to service only in the BellSouth region. The LIDB Storage Agreement is included in this Attachment as Exhibit C.
- 9.2 BellSouth will provide LIDB Storage upon written request to Pathnet Account Manager stating requested activation date.

10. RAO Hosting

- 10.1 The RAO Hosting Agreement is included in this Attachment as Exhibit D. Rates for BellSouth's Centralized Message Distribution System (CMDS) are as set forth in Exhibit H of this Attachment.
- 10.2 BellSouth will provide RAO Hosting upon written request to its Account Manager stating requested activation date.

11. Optional Daily Usage File (ODUF)

- 11.1 The Optional Daily Usage File (ODUF) Agreement with terms and conditions is included in this Attachment as Exhibit E. Rates for ODUF are as set forth in Exhibit H of this Attachment.
- 11.2 BellSouth will provide Optional Daily Usage File (ODUF) service upon written request to its Account Manager stating requested activation date.

12. Enhanced Optional Daily Usage File (EODUF)

- 12.1 The Enhanced Optional Daily Usage File (EODUF) service Agreement with terms and conditions is included in this Attachment as Exhibit F. Rates for EODUF are as set forth in Exhibit H of this Attachment.
- 12.2 BellSouth will provide Enhanced Optional Daily Usage File (EODUF) service upon written request to its Account Manager stating requested activation date.

13. Calling Name Delivery (CNAM) Database Service

- 13.1 Calling Name Delivery (CNAM) Database Service Agreement is included in this Attachment as Exhibit G. Rates for CNAM are as set forth in Exhibit H of this Attachment.
- 13.2 BellSouth will provide Calling Name Delivery (CNAM) Database service upon written request to its Account Manager stating requested activation date.

APPLICABLE DISCOUNTS

The telecommunications services available for purchase by Pathnet for the purposes of resale to Pathnet end users shall be available at the following discount off of the retail rate.

DISCOUNT*

STATE	RESIDENCE	BUSINESS	CSAs***
ALABAMA	16.3%	16.3%	
FLORIDA	21.83%	16.81%	
GEORGIA	20.3%	17.3%	
KENTUCKY	16.79%	15.54%	
LOUISIANA	20.72%	20.72%	9.05%
MISSISSIPPI	15.75%	15.75%	
NORTH CAROLINA	21.5%	17.6%	
SOUTH CAROLINA	14.8%	14.8%	8.98%
TENNESSEE**	16%	16%	

- * When a CLEC provides Resale service in a cross boundary area (areas that are part of the local serving area of another state's exchange) the rates, regulations and discounts for the tariffing state will apply. Billing will be from the serving state.
- ** In Tennessee, if a CLEC provides its own operator services and directory services, the discount shall be 21.56%. CLEC must provide written notification to BellSouth within 30 days prior to providing its own operator services and directory services to qualify for the higher discount rate of 21.56%.
- *** Unless noted in this column, the discount for Business will be the applicable discount rate for CSAs.

OPERATIONAL SUPPORT SYSTEMS (OSS) RATES

BellSouth has developed and made available the following mechanized systems by which Pathnet may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interface
EDI-PC	Electronic Data Interface – Personal Computer
TAG	Telecommunications Access Gateway

LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the Table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS (OSS) RATES	<u>Electronic</u> Per LSR received from the CLEC by one of the OSS interactive interfaces	<u>Manual</u> Per LSR received from the CLEC by means other than one of the OSS interactive interfaces
OSS LSR Charge	\$3.50	\$19.99
USOC	SOMEK	SOMAN

Note: In addition to the OSS charges, applicable discounted service order and related discounted charges apply per the tariff.

Denial/Restoral OSS Charge

In the event Pathnet provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

Cancellation OSS Charge

Pathnet will incur an OSS charge for an accepted LSR that is later canceled by Pathnet.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

Threshold Billing Plan

The Parties agree that Pathnet will incur the mechanized rate for all LSRs, both mechanized and manual, if the percentage of mechanized LSRs to total LSRs **meets or** exceeds the threshold percentages shown below:

Year	Ratio: Mechanized/Total LSRs
1999	70%
2000	80%
2001	90%

The threshold plan will be discontinued in 2002.

BellSouth will track the total LSR volume for each CLEC for each quarter. At the end of that time period, a Percent Electronic LSR calculation will be made for that quarter based on the LSR data tracked in the LCSC. If this percentage exceeds the threshold volume, all of that CLECs' future manual LSRs will be billed at the mechanized LSR rate. To allow time for obtaining and analyzing the data and updating the billing system, this billing change will take place on the first day of the second month following the end of the quarter (e.g. May 1 for 1Q, Aug 1 for 2Q, etc.). There will be no adjustments to the amount billed for previously billed LSRs.

**EXCLUSIONS AND LIMITATIONS
ON SERVICES AVAILABLE FOR RESALE**

Type of Service		AL		FL		GA		KY		LA	
		Resale?	Discount?	Resale?	Discount?	Resale?	Discount?	Resale?	Discount?	Resale?	Discount?
1.	Grandfathered Services (Note 1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Contract Service Arrangements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Promotions - > 90 Days(Note 2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Promotions - < 90 Days (Note 2)	Yes	No	Yes	No	Yes	No	No	No	Yes	No
5.	Lifeline/Link Up Services	Yes	Yes	Yes	Yes	Yes	Yes	Note 4	Note 4	Yes	Yes
6.	911/E911 Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
7.	N11 Services	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
8.	AdWatch SM Svc (See Note 6)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9.	MemoryCall [®] Service	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
10.	Mobile Services	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
11.	Federal Subscriber Line Charges	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
12.	Non-Recurring Charges	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13.	End User Line Charge – Number Portability	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
14.	Public Telephone Access Service (PTAS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Type of Service		MS		NC		SC		TN			
		Resale?	Discount?	Resale?	Discount?	Resale?	Discount?	Resale?	Discount ?		
1.	Grandfathered Services (Note 1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
2.	Contract Service Arrangements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
3.	Promotions - > 90 Days(Note 2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Note 3		
4.	Promotions - < 90 Days (Note 2)	Yes	No	Yes	No	Yes	No	No	No		
5.	Lifeline/Link Up Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
6.	911/E911 Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
7.	N11 Services	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
8.	AdWatch SM Svc (See Note 6)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
9.	MemoryCall [®] Service	Yes	No	Yes	No	Yes	No	Yes	No		
10.	Mobile Services	Yes	No	Yes	No	Yes	No	Yes	No		
11.	Federal Subscriber Line Charges	Yes	No	Yes	No	Yes	No	Yes	No		
12.	Non-Recurring Charges	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
13.	End User Line Charge – Number Portability	Yes	No	Yes	No	Yes	No	Yes	No		

Exhibit B
Page 2 of 2

14.	Public Telephone Access Service (PTAS)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
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Applicable Notes:

1. **Grandfathered services** can be resold only to existing subscribers of the grandfathered service.
2. Where available for resale, **promotions** will be made available only to end users who would have qualified for the promotion had it been provided by BellSouth directly.
3. In Tennessee, long-term **promotions** (offered for more than ninety (90) days) may be obtained at one of the following rates:
 - (a) the stated tariff rate, less the wholesale discount;
 - (b) the promotional rate (the promotional rate offered by BellSouth will not be discounted further by the wholesale discount rate)
4. **Lifeline/Link Up** services may be offered only to those subscribers who meet the criteria that BellSouth currently applies to subscribers of these services as set forth in Sections A3 and A4 of the BellSouth General Subscriber Services Tariff.
5. Some of BellSouth's local exchange and toll telecommunications services are not available in certain central offices and areas.
6. AdWatchSM Service is tariffed as BellSouth[®] AIN Virtual Number Call Detail Service.

**LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

I. SCOPE

- A. This Agreement sets forth the terms and conditions pursuant to which BellSouth agrees to store in its LIDB certain information at the request of Pathnet and pursuant to which BellSouth, its LIDB customers and Pathnet shall have access to such information. Pathnet understands that BellSouth provides access to information in its LIDB to various telecommunications service providers pursuant to applicable tariffs and agrees that information stored at the request of Pathnet, pursuant to this Agreement, shall be available to those telecommunications service providers. The terms and conditions contained in the attached Addendum(s) are hereby made a part of this Agreement as if fully incorporated herein.
- B. LIDB is accessed for the following purposes:
1. Billed Number Screening
 2. Calling Card Validation
 3. Fraud Control
- C. BellSouth will provide seven days per week, 24-hours per day, fraud monitoring on Calling Cards, bill-to-third and collect calls made to numbers in BellSouth's LIDB, provided that such information is included in the LIDB query. BellSouth will establish fraud alert thresholds and will notify Pathnet of fraud alerts so that Pathnet may take action it deems appropriate. Pathnet understands and agrees BellSouth will administer all data stored in the LIDB, including the data provided by Pathnet pursuant to this Agreement, in the same manner as BellSouth's data for BellSouth's end user customers. BellSouth shall not be responsible to Pathnet for any lost revenue which may result from BellSouth's administration of the LIDB pursuant to its established practices and procedures as they exist and as they may be changed by BellSouth in its sole discretion from time to time.

Pathnet understands that BellSouth currently has in effect numerous billing and collection agreements with various interexchange carriers and billing clearing houses. Pathnet further understands that these billing and collection customers of BellSouth query BellSouth's LIDB to determine whether to accept various billing options from end users. Additionally, Pathnet understands that presently BellSouth has no method to differentiate between BellSouth's own billing and line data in the LIDB and such data which it includes in the LIDB on Pathnet's behalf pursuant to this Agreement. Therefore, until such time as BellSouth can and does implement in its LIDB and its supporting systems the means to differentiate Pathnet's data from BellSouth's data and the Parties to this Agreement execute appropriate amendments hereto, the following terms and conditions shall apply:

- (a) Pathnet agrees that it will accept responsibility for telecommunications services billed by BellSouth for its billing and collection customers for Pathnet's end user accounts which are resident in LIDB pursuant to this Agreement. Pathnet authorizes BellSouth to place such charges on Pathnet's bill from BellSouth and agrees that it shall pay all such charges. Charges for which Pathnet hereby takes responsibility include, but are not limited to, collect and third number calls.
- (b) Charges for such services shall appear on a separate BellSouth bill page identified with the name of the entity for which BellSouth is billing the charge.
- (c) Pathnet shall have the responsibility to render a billing statement to its end users for these charges, but Pathnet's obligation to pay BellSouth for the charges billed shall be independent of whether Pathnet is able or not to collect from Pathnet's end users.
- (d) BellSouth shall not become involved in any disputes between Pathnet and the entities for which BellSouth performs billing and collection. BellSouth will not issue adjustments for charges billed on behalf of an entity to Pathnet. It shall be the responsibility of Pathnet and the other entity to negotiate and arrange for any appropriate adjustments.

II. TERM

This Agreement will be effective as of _____, and will continue in effect for one year, and thereafter may be continued until terminated by either Party upon thirty (30) days written notice to the other Party.

III. FEES FOR SERVICE AND TAXES

- A. Pathnet will not be charged a fee for storage services provided by BellSouth to Pathnet, as described in Section I of this Agreement.
- B. Sales, use and all other taxes (excluding taxes on BellSouth's income) determined by BellSouth or any taxing authority to be due to any federal, state or local taxing jurisdiction with respect to the provision of the service set forth herein will be paid by Pathnet. Pathnet shall have the right to have BellSouth contest with the imposing jurisdiction, at Pathnet's expense, any such taxes that Pathnet deems are improperly levied.

IV. INDEMNIFICATION

To the extent not prohibited by law, each Party will indemnify the other and hold the other harmless against any loss, cost, claim, injury, or liability relating to or arising out of negligence or willful misconduct by the indemnifying Party or its agents or contractors in connection with the indemnifying Party's provision of services, provided, however, that any indemnity for any loss, cost, claim, injury or liability arising out of or relating to errors or omissions in the provision of services under this Agreement shall be limited as otherwise specified in this Agreement. The indemnifying Party under this Section agrees to defend any suit brought against the other Party for any such loss, cost, claim, injury or liability. The indemnified Party agrees to notify the other Party promptly, in writing, of any written claims, lawsuits, or demands for which the other Party is responsible under this Section and to cooperate in every reasonable way to facilitate defense or settlement of claims. The indemnifying Party shall not be liable under this Section for settlement by the indemnified Party of any claim, lawsuit, or demand unless the defense of the claim, lawsuit, or demand has been tendered to it in writing and the indemnifying Party has unreasonably failed to assume such defense.

V. LIMITATION OF LIABILITY

Neither Party shall be liable to the other Party for any lost profits or revenues or for any indirect, incidental or consequential damages incurred by the other Party arising from this Agreement or the services performed or not performed hereunder, regardless of the cause of such loss or damage,

VI. MISCELLANEOUS

- A. It is understood and agreed to by the Parties that BellSouth may provide similar services to other companies.
- B. All terms, conditions and operations under this Agreement shall be performed in accordance with, and subject to, all applicable local, state or federal legal and regulatory tariffs, rulings, and other requirements of the federal courts, the U. S. Department of Justice and state and federal regulatory agencies. Nothing in this Agreement shall be construed to cause either Party to violate any such legal or regulatory requirement and either Party's obligation to perform shall be subject to all such requirements.
- C. Pathnet agrees to submit to BellSouth all advertising, sales promotion, press releases, and other publicity matters relating to this Agreement wherein BellSouth's corporate or trade names, logos, trademarks or service marks or those of BellSouth's affiliated companies are mentioned or language from which the connection of said names or trademarks therewith may be inferred or implied; and Pathnet further agrees not to publish or use advertising, sales promotions, press releases, or publicity matters without BellSouth's prior written approval. BellSouth's approval of any advertising, sales promotion, press releases, and other publicity matters relating to this Agreement shall not be unreasonably withheld.

- D. This Agreement constitutes the entire Agreement between Pathnet and BellSouth which supersedes all prior Agreements or contracts, oral or written representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.
- E. Except as expressly provided in this Agreement, if any part of this Agreement is held or construed to be invalid or unenforceable, the validity of any other Section of this Agreement shall remain in full force and effect to the extent permissible or appropriate in furtherance of the intent of this Agreement.
- F. Neither Party shall be held liable for any delay or failure in performance of any part of this Agreement for any cause beyond its control and without its fault or negligence, such as acts of God, acts of civil or military authority, government regulations, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, strikes, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities, or acts or omissions of transportation common carriers.
- G. This Agreement shall be deemed to be a contract made under the laws of the State of Georgia, and the construction, interpretation and performance of this Agreement and all transactions hereunder shall be governed by the domestic law of such State.

**RESALE ADDENDUM
TO LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

This is a Resale Addendum to the Line Information Data Base Storage Agreement dated _____, 199 __, between BellSouth Telecommunications, Inc. (“BellSouth”), and Pathnet (“Pathnet”), effective the _____ day of _____, 199 __.

I. GENERAL

This Addendum sets forth the terms and conditions for Pathnet’s provision of billing number information to BellSouth for inclusion in BellSouth’s LIDB. BellSouth will store in its LIDB the billing number information provided by Pathnet, and BellSouth will provide responses to on-line, call-by-call queries to this information for purposes specified in Section I.B. of the Agreement.

II. DEFINITIONS

- A. Billing number - a number used by BellSouth for the purpose of identifying an account liable for charges. This number may be a line or a special billing number.
- B. Line number - a ten digit number assigned by BellSouth that identifies a telephone line associated with a resold local exchange service, or with a SPNP arrangement.
- B. Special billing number - a ten digit number that identifies a billing account established by BellSouth in connection with a resold local exchange service or with a SPNP arrangement.
- D. Calling Card number - a billing number plus PIN number assigned by BellSouth.
- E. PIN number - a four digit security code assigned by BellSouth which is added to a billing number to compose a fourteen digit calling card number.
- F. Toll billing exception indicator - associated with a billing number to indicate that it is considered invalid for billing of collect calls or third number calls or both, by the Pathnet.
- F. Billed Number Screening - refers to the activity of determining whether a toll billing exception indicator is present for a particular billing number.

- H. Calling Card Validation - refers to the activity of determining whether a particular calling card number exists as stated or otherwise provided by a caller.
- J. Billing number information - information about billing number or Calling Card number as assigned by BellSouth and toll billing exception indicator provided to BellSouth by the Pathnet.

III. RESPONSIBILITIES OF PARTIES

- A. BellSouth will include billing number information associated with resold exchange lines or SPNP arrangements in its LIDB. The Pathnet will request any toll billing exceptions via the Local Service Request (LSR) form used to order resold exchange lines, or the SPNP service request form used to order SPNP arrangements.
- B. Under normal operating conditions, BellSouth shall include the billing number information in its LIDB upon completion of the service order establishing either the resold local exchange service or the SPNP arrangement, provided that BellSouth shall not be held responsible for any delay or failure in performance to the extent such delay or failure is caused by circumstances or conditions beyond BellSouth's reasonable control. BellSouth will store in its LIDB an unlimited volume of the working telephone numbers associated with either the resold local exchange lines or the SPNP arrangements. For resold local exchange lines or for SPNP arrangements, BellSouth will issue line-based calling cards only in the name of Pathnet. BellSouth will not issue line-based calling cards in the name of Pathnet's individual end users. In the event that Pathnet wants to include calling card numbers assigned by the Pathnet in the BellSouth LIDB, a separate agreement is required.
- C. BellSouth will provide responses to on-line, call-by-call queries to the stored information for the specific purposes listed in the next paragraph.
- D. BellSouth is authorized to use the billing number information to perform the following functions for authorized users on an on-line basis:
 - 1. Validate a 14 digit Calling Card number where the first 10 digits are a line number or special billing number assigned by BellSouth, and where the last four digits (PIN) are a security code assigned by BellSouth.
 - 2. Determine whether the Pathnet has identified the billing number as one which should not be billed for collect or third number calls, or both.

RAO Hosting

1. RAO Hosting, Calling Card and Third Number Settlement System (CATS) and Non-Intercompany Settlement System (NICS) services provided to Pathnet by BellSouth will be in accordance with the methods and practices regularly adopted and applied by BellSouth to its own operations during the term of this Agreement, including such revisions as may be made from time to time by BellSouth.
2. Pathnet shall furnish all relevant information required by BellSouth for the provision of RAO Hosting, CATS and NICS.
3. Applicable compensation amounts will be billed by BellSouth to Pathnet on a monthly basis in arrears. Amounts due from one Party to the other (excluding adjustments) are payable within thirty (30) days of receipt of the billing statement.
4. Pathnet must have its own unique RAO code. Requests for establishment of RAO status where BellSouth is the selected Centralized Message Distribution System (CMDS) interfacing host, require written notification from Pathnet to the BellSouth RAO Hosting coordinator at least eight (8) weeks prior to the proposed effective date. The proposed effective date will be mutually agreed upon between the Parties with consideration given to time necessary for the completion of required Telcordia (formerly BellCore) functions. BellSouth will request the assignment of an RAO code from its connecting contractor, currently Telcordia (formerly BellCore), on behalf of Pathnet and will coordinate all associated conversion activities.
5. BellSouth will receive messages from Pathnet that are to be processed by BellSouth, another LEC or CLEC in the BellSouth region or a LEC outside the BellSouth region.
6. BellSouth will perform invoice sequence checking, standard EMI format editing, and balancing of message data with the EMI trailer record counts on all data received from Pathnet.
7. All data received from Pathnet that is to be processed or billed by another LEC or CLEC within the BellSouth region will be distributed to that LEC or CLEC in accordance with the agreement(s) which may be in effect between BellSouth and the involved LEC or CLEC.
8. All data received from Pathnet that is to be placed on the CMDS network for distribution outside the BellSouth region will be handled in accordance with the agreement(s) which may be in effect between BellSouth and its connecting contractor (currently Telcordia (formerly BellCore)).

9. BellSouth will receive messages from the CMDS network that are destined to be processed by Pathnet and will forward them to Pathnet on a daily basis.
10. Transmission of message data between BellSouth and Pathnet will be via CONNECT:Direct.
11. All messages and related data exchanged between BellSouth and Pathnet will be formatted in accordance with accepted industry standards for EMI formatted records and packed between appropriate EMI header and trailer records, also in accordance with accepted industry standards.
12. Pathnet will ensure that the recorded message detail necessary to recreate files provided to BellSouth will be maintained for back-up purposes for a period of three (3) calendar months beyond the related message dates.
13. Should it become necessary for Pathnet to send data to BellSouth more than sixty (60) days past the message date(s), Pathnet will notify BellSouth in advance of the transmission of the data. If there will be impacts outside the BellSouth region, BellSouth will work with its connecting contractor and Pathnet to notify all affected Parties.
14. In the event that data to be exchanged between the two Parties should become lost or destroyed, both Parties will work together to determine the source of the problem. Once the cause of the problem has been jointly determined and the responsible Party (BellSouth or Pathnet) identified and agreed to, the company responsible for creating the data (BellSouth or Pathnet) will make every effort to have the affected data restored and retransmitted. If the data cannot be retrieved, the responsible Party will be liable to the other Party for any resulting lost revenue. Lost revenue may be a combination of revenues that could not be billed to the end users and associated access revenues. Both Parties will work together to estimate the revenue amount based upon historical data through a method mutually agreed upon. The resulting estimated revenue loss will be paid by the responsible Party to the other Party within three (3) calendar months of the date of problem resolution, or as mutually agreed upon by the Parties.
15. Should an error be detected by the EMI format edits performed by BellSouth on data received from Pathnet, the entire pack containing the affected data will not be processed by BellSouth. BellSouth will notify Pathnet of the error condition. Pathnet will correct the error(s) and will resend the entire pack to BellSouth for processing. In the event that an out-of-sequence condition occurs on subsequent packs, Pathnet will resend these packs to BellSouth after the pack containing the error has been successfully reprocessed by BellSouth.

16. In association with message distribution service, BellSouth will provide Pathnet with associated intercompany settlements reports (CATS and NICS) as appropriate.
17. In no case shall either Party be liable to the other for any direct or consequential damages incurred as a result of the obligations set out in this agreement.
18. RAO Compensation
- 18.1 Rates for message distribution service provided by BellSouth for Pathnet are as set forth in Exhibit A to this Attachment.
- 18.2 Rates for data transmission associated with message distribution service are as set forth in Exhibit A to this Attachment .
- 18.3 Data circuits (private line or dial-up) will be required between BellSouth and Pathnet for the purpose of data transmission. Where a dedicated line is required, Pathnet will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. Pathnet will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to Pathnet. Additionally, all message toll charges associated with the use of the dial circuit by Pathnet will be the responsibility of Pathnet. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the Parties.
- 18.4 All equipment, including modems and software, that is required on the Pathnet end for the purpose of data transmission will be the responsibility of Pathnet.
19. Intercompany Settlements Messages
- 19.1 This Section addresses the settlement of revenues associated with traffic originated from or billed by Pathnet as a facilities based provider of local exchange telecommunications services outside the BellSouth region. Only traffic that originates in one Bell operating territory and bills in another Bell operating territory is included. Traffic that originates and bills within the same Bell operating territory will be settled on a local basis between Pathnet and the involved company(ies), unless that company is participating in NICS.

- 19.2 Both traffic that originates outside the BellSouth region by Pathnet and is billed within the BellSouth region, and traffic that originates within the BellSouth region and is billed outside the BellSouth region by Pathnet, is covered by this Agreement (CATS). Also covered is traffic that either is originated by or billed by Pathnet, involves a company other than Pathnet, qualifies for inclusion in the CATS settlement, and is not originated or billed within the BellSouth region (NICS).
- 19.3 Once Pathnet is operating within the BellSouth territory, revenues associated with calls originated and billed within the BellSouth region will be settled via Telcordia (formerly BellCore)'s, its successor or assign, NICS system.
- 19.4 BellSouth will receive the monthly NICS reports from Telcordia (formerly BellCore), its successor or assign, on behalf of Pathnet. BellSouth will distribute copies of these reports to Pathnet on a monthly basis.
- 19.5 BellSouth will receive the monthly Calling Card and Third Number Settlement System (CATS) reports from Telcordia (formerly BellCore), its successor or assign, on behalf of Pathnet. BellSouth will distribute copies of these reports to Pathnet on a monthly basis.
- 19.6 BellSouth will collect the revenue earned by Pathnet from the Bell operating company in whose territory the messages are billed (CATS), less a per message billing and collection fee of five cents (\$0.05), on behalf of Pathnet. BellSouth will remit the revenue billed by Pathnet to the Bell operating company in whose territory the messages originated, less a per message billing and collection fee of five cents (\$0.05), on behalf on Pathnet. These two amounts will be netted together by BellSouth and the resulting charge or credit issued to Pathnet via a monthly Carrier Access Billing System (CABS) miscellaneous bill.
- 19.7 BellSouth will collect the revenue earned by Pathnet within the BellSouth territory from another CLEC also within the BellSouth territory (NICS) where the messages are billed, less a per message billing and collection fee of five cents (\$0.05), on behalf of Pathnet. BellSouth will remit the revenue billed by Pathnet within the BellSouth region to the CLEC also within the BellSouth region, where the messages originated, less a per message billing and collection fee of five cents (\$0.05). These two amounts will be netted together by BellSouth and the resulting charge or credit issued to Pathnet via a monthly Carrier Access Billing System (CABS) miscellaneous bill.

BellSouth and Pathnet agree that monthly netted amounts of less than fifty dollars (\$50.00) will not be settled.

Optional Daily Usage File

1. Upon written request from Pathnet, BellSouth will provide the Optional Daily Usage File (ODUF) service to Pathnet pursuant to the terms and conditions set forth in this section.
2. Pathnet shall furnish all relevant information required by BellSouth for the provision of the Optional Daily Usage File.
3. The Optional Daily Usage Feed will contain billable messages that were carried over the BellSouth Network and processed in the BellSouth Billing System, but billed to a Pathnet customer.

Charges for delivery of the Optional Daily Usage File will appear on Pathnets' monthly bills. The charges are as set forth in Exhibit A to this Attachment.

4. The Optional Daily Usage Feed will contain both rated and unrated messages. All messages will be in the standard Alliance for Telecommunications Industry Solutions (ATIS) EMI record format.
5. Messages that error in Pathnet's billing system will be the responsibility of Pathnet. If, however, Pathnet should encounter significant volumes of errored messages that prevent processing by Pathnet within its systems, BellSouth will work with the to determine the source of the errors and the appropriate resolution.
6. The following specifications shall apply to the Optional Daily Usage Feed.

6.1 Usage To Be Transmitted

6.1.1 The following messages recorded by BellSouth will be transmitted to Pathnet:

- Message recording for per use/per activation type services (examples: Three Way Calling, Verify, Interrupt, Call Return, ETC.)
- Measured billable Local
- Directory Assistance messages
- IntraLATA Toll
- WATS & 800 Service
- N11
- Information Service Provider Messages

- Operator Services Messages
 - Operator Services Message Attempted Calls (UNE only)
 - Credit/Cancel Records
 - Usage for Voice Mail Message Service
- 6.1.2 Rated Incollects (originated in BellSouth and from other companies) can also be on Optional Daily Usage File. Rated Incollects will be intermingled with BellSouth recorded rated and unrated usage. Rated Incollects will not be packed separately.
- 6.1.3 BellSouth will perform duplicate record checks on records processed to Optional Daily Usage File. Any duplicate messages detected will be deleted and not sent to Pathnet.
- 6.1.4 In the event that Pathnet detects a duplicate on Optional Daily Usage File they receive from BellSouth, Pathnet will drop the duplicate message (Pathnet will not return the duplicate to BellSouth).
- 6.2 Physical File Characteristics
- 6.2.1 The Optional Daily Usage File will be distributed to Pathnet via an agreed medium with CONNECT:Direct being the preferred transport method. The Daily Usage Feed will be a variable block format (2476) with an LRECL of 2472. The data on the Daily Usage Feed will be in a non-compacted EMI format (175 byte format plus modules). It will be created on a daily basis (Monday through Friday except holidays). Details such as dataset name and delivery schedule will be addressed during negotiations of the distribution medium. There will be a maximum of one dataset per workday per OCN.
- 6.2.2 Data circuits (private line or dial-up) may be required between BellSouth and Pathnet for the purpose of data transmission. Where a dedicated line is required, Pathnet will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. Pathnet will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to Pathnet. Additionally, all message toll charges associated with the use of the dial circuit by Pathnet will be the responsibility of Pathnet. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the parties. All equipment, including modems and software, that is required on Pathnet end for the purpose of data transmission will be the responsibility of Pathnet.

6.3 Packing Specifications

6.3.1 A pack will contain a minimum of one message record or a maximum of 99,999 message records plus a pack header record and a pack trailer record. One transmission can contain a maximum of 99 packs and a minimum of one pack.

6.3.2 The OCN, From RAO, and Invoice Number will control the invoice sequencing. The From RAO will be used to identify to Pathnet which BellSouth RAO that is sending the message. BellSouth and Pathnet will use the invoice sequencing to control data exchange. BellSouth will be notified of sequence failures identified by Pathnet and resend the data as appropriate.

THE DATA WILL BE PACKED USING ATIS EMI RECORDS.

6.4 Pack Rejection

6.4.1 Pathnet will notify BellSouth within one business day of rejected packs (via the mutually agreed medium). Packs could be rejected because of pack sequencing discrepancies or a critical edit failure on the Pack Header or Pack Trailer records (i.e. out-of-balance condition on grand totals, invalid data populated). Standard ATIS EMI Error Codes will be used. Pathnet will not be required to return the actual rejected data to BellSouth. Rejected packs will be corrected and retransmitted to Pathnet by BellSouth.

6.5 Control Data

Pathnet will send one confirmation record per pack that is received from BellSouth. This confirmation record will indicate Pathnet received the pack and the acceptance or rejection of the pack. Pack Status Code(s) will be populated using standard ATIS EMI error codes for packs that were rejected by Pathnet for reasons stated in the above section.

6.6 Testing

6.6.1 Upon request from Pathnet, BellSouth shall send test files to Pathnet for the Optional Daily Usage File. The parties agree to review and discuss the file's content and/or format. For testing of usage results, BellSouth shall request that Pathnet set up a production (LIVE) file. The live test may consist of Pathnet's employees making test calls for the types of services Pathnet requests on the Optional Daily Usage File. These test calls are logged by Pathnet, and the logs are provided to BellSouth. These logs will be used to verify the files. Testing will be completed within 30 calendar days from the date on which the initial test file was sent.

Enhanced Optional Daily Usage File

1. Upon written request from Pathnet, BellSouth will provide the Enhanced Optional Daily Usage File (EODUF) service to Pathnet pursuant to the terms and conditions set forth in this section. EODUF will only be sent to existing ODUF subscribers who request the EODUF option.
2. The Pathnet shall furnish all relevant information required by BellSouth for the provision of the Enhanced Optional Daily Usage File.
3. The Enhanced Optional Daily Usage File (EODUF) will provide usage data for local calls originating from resold Flat Rate Business and Residential Lines.
4. Charges for delivery of the Enhanced Optional Daily Usage File will appear on Pathnets' monthly bills. The charges are as set forth in Exhibit A to this Attachment.
5. All messages will be in the standard Alliance for Telecommunications Industry Solutions (ATIS) EMI record format.
6. Messages that error in the billing system of Pathnet will be the responsibility of Pathnet. If, however, Pathnet should encounter significant volumes of errored messages that prevent processing by Pathnet within its systems, BellSouth will work with Pathnet to determine the source of the errors and the appropriate resolution.
7. The following specifications shall apply to the Optional Daily Usage Feed.

7.1 **Usage To Be Transmitted**

- 7.1.1 The following messages recorded by BellSouth will be transmitted to Pathnet:

Customer usage data for flat rated local call originating from Pathnet's end user lines (1FB or 1FR). The EODUF record for flat rate messages will include:

Date of Call
From Number
To Number
Connect Time
Conversation Time
Method of Recording
From RAO
Rate Class
Message Type

Billing Indicators
Bill to Number

7.1.2 BellSouth will perform duplicate record checks on EODUF records processed to Optional Daily Usage File. Any duplicate messages detected will be deleted and not sent to Pathnet.

7.1.3 In the event that Pathnet detects a duplicate on Enhanced Optional Daily Usage File they receive from BellSouth, Pathnet will drop the duplicate message (Pathnet will not return the duplicate to BellSouth).

7.2 Physical File Characteristics

7.2.1 The Enhanced Optional Daily Usage Feed will be distributed to Pathnet over their existing Optional Daily Usage File (ODUF) feed. The EODUF messages will be intermingled among Pathnet's Optional Daily Usage File (ODUF) messages. The EODUF will be a variable block format (2476) with an LRECL of 2472. The data on the EODUF will be in a non-compacted EMI format (175 byte format plus modules). It will be created on a daily basis (Monday through Friday except holidays).

7.2.2 Data circuits (private line or dial-up) may be required between BellSouth and Pathnet for the purpose of data transmission. Where a dedicated line is required, Pathnet will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. Pathnet will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to Pathnet. Additionally, all message toll charges associated with the use of the dial circuit by Pathnet will be the responsibility of Pathnet. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the parties. All equipment, including modems and software, that is required on Pathnet's end for the purpose of data transmission will be the responsibility of Pathnet.

7.3 Packing Specifications

7.3.1 A pack will contain a minimum of one message record or a maximum of 99,999 message records plus a pack header record and a pack trailer record. One transmission can contain a maximum of 99 packs and a minimum of one pack.

- 7.3.2 The Operating Company Number (OCN), From Revenue Accounting Office (RAO), and Invoice Number will control the invoice sequencing. The From RAO will be used to identify to Pathnet which BellSouth RAO that is sending the message. BellSouth and Pathnet will use the invoice sequencing to control data exchange. BellSouth will be notified of sequence failures identified by Pathnet and resend the data as appropriate.

THE DATA WILL BE PACKED USING ATIS EMI RECORDS.

CALLING NAME DELIVERY (CNAM) DATABASE SERVICES

1. DEFINITIONS

For the purpose of this Attachment, the following terms shall be defined as:

CALLING NAME DELIVERY DATABASE SERVICE (CNAM) - 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 Pathnet the opportunity to load and store its subscriber names in the BellSouth CNAM SCPs.

CALLING PARTY NUMBER (CPN) - The number of the calling party that is delivered to the terminating switch using common channel signaling system 7 (CCS7) technology, and that is contained in the Initial Address Message (IAM) portion of the CCS7 call setup.

COMMON CHANNEL SIGNALING SYSTEM 7 (CCS7) - A network signaling technology in which all signaling information between two or more nodes is transmitted over high-speed data links, rather than over voice circuits.

SERVICE CONTROL POINTs (SCPs) - The real-time data base systems that contain the names to be provided in response to queries received from CNAM SSPs.

SERVICE MANAGEMENT SYSTEM (SMS) - The main operations support system of CNAM DATABASE SERVICE. CNAM records are loaded into the SMS, which in turn downloads into the CNAM SCP.

SERVICE SWITCHING POINTs (SSPs) - Features of computerized switches in the telephone network that determine that a terminating line has subscribed to CNAM service, and then communicate with CNAM SCPs in order to provide the name associated with the calling party number.

SUBSYSTEM NUMBER (SSN) - The address used in the Signaling Connection Control Part (SCCP) layer of the SS7 protocol to designate an application at an end signaling point. A SSN for CNAM at the end office designates the CNAM application within the end office. BellSouth uses the CNAM SSN of 232.

2. ATTACHMENT

- 2.1 This Attachment contains the terms and conditions where BellSouth will provide to Pathnet access to the BellSouth CNAM SCP for query or record storage purposes.

Pathnet shall submit to BellSouth a notice of its intent to access and utilize BellSouth CNAM Database Services pursuant to the terms and conditions of this Attachment. Said notice shall be in writing, no less than 60 days prior to Pathnet's access to BellSouth's CNAM Database Services and shall be addressed to Pathnet's Account Manager.

3. PHYSICAL CONNECTION AND COMPENSATION

- 3.1 BellSouth's provision of CNAM Database Services to Pathnet requires interconnection from Pathnet to BellSouth CNAM Service Control Points (SCPs). Such interconnections shall be established pursuant to Attachment 3 of this Agreement. The appropriate charge for access to and use of the BellSouth CNAM Database service shall be as set forth in this Attachment.
- 3.2 In order to formulate a CNAM query to be sent to the BellSouth CNAM SCP, Pathnet shall provide its own CNAM SSP. Pathnet's CNAM SSPs must be compliant with TR-NWT-001188, "CLASS Calling Name Delivery Generic Requirements".
- 3.3 If Pathnet elects to access the BellSouth CNAM SCP via a third party CCS7 transport provider, the third party CCS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Telcordia (formerly BellCore)'s CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish CCS7 interconnection at the BellSouth Local Signal Transfer Points (LSTPs) serving the BellSouth CNAM SCPs that Pathnet desires to query.
- 3.4 Out-Of-Region Customers. If the customer queries the BellSouth CNAM SCP via a third party national SS7 transport provider, the third party SS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Bellcore's CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish SS7 interconnection at one or more of the BellSouth Gateway Signal Transfer Points (STPs). The payment of all costs associated with the transport of SS7 signals via a third party will be established by mutual agreement of the parties and writing shall, by this reference become an integral part of this Agreement.

4. CNAM RECORD INITIAL LOAD AND UPDATES

- 4.1 The mechanism to be used by Pathnet for initial CNAM record load and/or updates shall be determined by mutual agreement. The initial load and all updates shall be provided by Pathnet in the BellSouth specified format and shall contain records for every working telephone number that can originate phone calls. It is the responsibility of Pathnet to provide accurate information to BellSouth on a current basis.

- 4.2 Updates to the SMS shall occur no less than once a week, reflect service order activity affecting either name or telephone number, and involve only record additions, deletions or changes.
- 4.3 Pathnet CNAM records provided for storage in the BellSouth CNAM SCP shall be available, on a SCP query basis only, to all parties querying the BellSouth CNAM SCP. Further, CNAM service shall be provided by each party consistent with state and/or federal regulation.

Attachment 2
Network Elements and Other Services

TABLE OF CONTENTS

1.	INTRODUCTION	3
2.	UNBUNDLED LOOPS, INTEGRATED DIGITAL LOOP CARRIERS, NETWORK INTERFACES DEVICE, UNBUNDLED LOOP CONCENTRATION (ULC) SYSTEM, SUB LOOPS AND DARK FIBER ...	5
3.	SWITCHING	1920
4.	ENHANCED EXTENDED LINK (EEL)	3132
5.	PORT/LOOP COMBINATIONS	3334
6.	TRANSPORT AND DARK FIBER.....	3536
7.	BELLSOUTH SWA 8XX TOLL FREE DIALING TEN DIGIT SCREENING SERVICE	4445
8.	LINE INFORMATION DATABASE (LIDB).....	4647
9.	SIGNALING	4950
10.	OPERATOR CALL PROCESSING, INWARD OPERATOR SERVICES AND DIRECTORY ASSISTANCE SERVICES.....	5859
11.	CALLING NAME (CNAM) DATABASE SERVICE	6567
12.	BASIC 911 AND E911	6769
13.	TRUE-UP	6870
	LIDB Storage Agreement.....	Exhibit A
	CNAM Database Services.....	Exhibit B
	Rates.....	Exhibit C

ACCESS TO NETWORK ELEMENTS AND OTHER SERVICES

1. Introduction

- 1.1. This Attachment sets forth the unbundled network elements and combinations of unbundled network elements that BellSouth agrees to offer to Pathnet in accordance with its obligations under Section 251(c)(3) of the Act. The specific terms and conditions that apply to the unbundled network elements are described below in this Attachment 2. The price for each unbundled network element and combination of unbundled Network Elements are set forth in Exhibit A of this Agreement. As an option, deaveraged rates, where available, are included in Exhibit A. Where deaveraged rates are available, Pathnet is required to choose either deaveraged rates, which are zone specific, or statewide rates.
- 1.2. For purposes of this Agreement, "Network Element" is defined to mean a facility or equipment provided by BellSouth on an unbundled basis as is used by the CLEC in the provision of a telecommunications service. These unbundled network elements will be consistent with the requirements of the FCC 319 rule. For purposes of this Agreement, combinations of Network Elements shall be referred to as "Combinations."
 - 1.2.1. Except as otherwise required by law, BellSouth shall not impose limitation restrictions or requirements or request for the use of the network elements or combinations that would impair the ability of Pathnet to offer telecommunications service in the manner Pathnet intends.
 - 1.2.2. Except upon request by Pathnet, BellSouth shall not separate requested network elements that BellSouth currently combines.
 - 1.2.2.1. Unless otherwise ordered by an appropriate state or federal regulatory agency, currently combined Network Elements are defined as elements that are already combined within BellSouth's network to a given location.
- 1.3. BellSouth shall, upon request of Pathnet, and to the extent technically feasible, provide to Pathnet access to its network elements for the provision of Pathnet's telecommunications service. If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the Parties upon request by either Party.
- 1.4. Pathnet may purchase network elements and other services from BellSouth for the purpose of combining such network elements in any manner Pathnet chooses to provide telecommunication services to its intended users, including recreating

- existing BellSouth services. With the exception of the sub-loop elements which are located outside of the central office, BellSouth shall deliver the network elements purchased by Pathnet for combining to the designated Pathnet collocation space. The network elements shall be provided as set forth in this Attachment.
- 1.5. Subject to applicable and effective FCC Rules and Orders as well as effective State Commission Orders, BellSouth will offer combinations of network elements pursuant to such orders. BellSouth will provide the following combined network elements for purchase by Pathnet. The rate of the following combined network elements is the sum of the individual element prices as set forth in this Attachment. Order Coordination as defined in Section 2 of Attachment 2 of this Agreement is available for each of these combinations:
- SL2 loop and cross connect
 - Port and cross connect
 - Port and cross connect and common (shared) transport
 - Port and vertical features
 - SL2 Loop with loop concentration
 - Port and common (shared) transport
 - SL2 Loop and LNP
- 1.6. BellSouth shall comply with the requirements as set forth in the technical references within Attachment 2 to the extent that they are consistent with the greater of BellSouth's actual performance or applicable industry standards.
- 1.7. In the event that any effective legislative, regulatory, judicial or other legal action modifies or redefines the "Network Elements" in a manner which materially affects the terms of this Attachment or the Network Elements and/or prices set forth herein, either Party may, on thirty (30) days written notice, require renegotiation of such terms, and the Parties shall renegotiate in good faith such new terms in accordance with such legislative, regulatory, judicial or other legal action. In the event such new terms are not renegotiated within ninety (90) days after the notice for renegotiation, either Party may petition the Commission for resolution of the dispute between the Parties. Each Party reserves the right to seek judicial review of any Commission ruling concerning this Attachment.
- 1.8. Pathnet will adopt and adhere to the standards contained in the applicable CLEC Work Center Operational Understanding Agreement regarding maintenance and installation of service.
- 1.9. Standards for Network Elements
- 1.9.1 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.
- 1.9.2 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 12 of the General Terms and Conditions of this Agreement, incorporated herein by this reference, shall apply.
- 2. Unbundled Loops, Integrated Digital Loop Carriers, Network Interfaces Device, Unbundled Loop Concentration (ULC) System, Sub loops and Dark Fiber**
- All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of unbundled loops.
- 2.1 Unbundled Loops**
- 2.1.1 Definition
- 2.1.2 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 customer premises, including inside wire owned by BellSouth. The local loop network element includes all features, functions, and capabilities of the 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. The loop shall include the use of all test access functionality, including without limitation, smart jacks, for both voice and data.
- 2.1.3 The provisioning of service to a CLEC 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 a separate element and are not considered a part of the loop.
- 2.1.4 BellSouth Order Coordination referenced in Attachment 2 includes two types: "Order Coordination" and "Order Coordination - Time Specific."
- 2.1.5 "Order Coordination" refers to standard BellSouth service order coordination involving SL2 voice loops and all digital loops. Order coordination for physical conversions will be scheduled at BellSouth's discretion during normal working hours on the committed due date and Pathnet advised.
- 2.1.6 "Order Coordination – Time Specific" refers to service order coordination in which Pathnet requests a specific time for a service order conversion to take place. Loops on a single service order of 14 or more loops will be provisioned on a project basis.

- This is a chargeable option for any coordinated order and is billed in addition to the OC charge. Pathnet may specify a time between 9:00 a.m. and 4:00 p.m. (location time) Monday through Friday (excluding holidays). If Pathnet specifies a time outside this window, or selects a time or quantity of loops that requires BellSouth technicians to work outside normal work hours, overtime charges will apply in addition to the OC and OC-TS charges. Overtime charges will be applied according to actual costs based on type of force group required to perform the work, overtime hours worked and any special circumstances.
- 2.1.7 Where facilities are available, BellSouth will install loops within a 5-7 business days interval. For orders of 14 or more loops, the installation will be handled on a project basis and the intervals will be set by the BellSouth project manager for that order. Some loops require a Service Inquiry (SI) to determine if facilities are available prior to issuing the order. The interval for the SI process is separate from the installation interval. For expedite requests by Pathnet, expedite charges will apply for intervals less than 5 days. The charges outlined in BellSouth's FCC # 1 Tariff, Section 5.1.1, will apply. If Pathnet cancels an order for network elements and other services, any costs incurred by BellSouth in conjunction with the provisioning of that order will be recovered in accordance with FCC #1 Tariff, Section 5.4.
- 2.1.8 If Pathnet modifies an order after being sent a Firm Order Confirmation (FOC) from BellSouth, any costs incurred by BellSouth to accommodate the modification will be reimbursed by Pathnet.
- 2.1.9 BellSouth will offer Unbundled Voice Loops (UVL) in two different service levels - Service Level One (SL1) and Service Level Two (SL2).
- SL1 loops will be non-designed, will not have test points, and will not come with any Order Coordination (OC) or engineering information/circuit make-up data. Upon issuance of an order in the service order system, SL1 loops will be activated on the due date in the same manner and time frames that BellSouth normally activates POTS-type loops for its customers. If Pathnet requests work to be done for SL1s that requires BellSouth technicians to work outside normal work hours, overtime charges will be applied according to actual costs based on type of force group required to perform the work, overtime hours worked and any special circumstances. If BellSouth has scheduled the loop to complete to Pathnet in either the a.m. or p.m. and the order is not completed due to a BellSouth error, then the non-recurring charges applicable to the scheduled conversion and the non-recurring charges applicable to any rescheduled conversion shall be waived. Should the conversion period fail to be met due to Pathnet's request that it be rescheduled there will be no additional charges levied. If BellSouth misses the date, then BellSouth shall complete the order the next day and no additional charges will be levied for the installation.
- 2.1.11 SL2 loops shall have test points, with or without conditioning, will be designed with a design layout record provided to Pathnet, and will be provided with OC. The OC feature will allow

- Pathnet to coordinate the installation of the loop with the disconnect of an existing customer'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 on the date of the order.
- 2.1.12 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 Design Layout Record (DLR).
- 2.1.13 As a chargeable option on all loops except UVL-SL1 and UCL, BellSouth will offer Order Coordination - Time Specific (OC-TS). This will allow Pathnet 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 Local Service Request (LSR) basis.
- 2.1.14 Pathnet will be responsible for testing and isolating troubles on the loops. Once Pathnet has isolated a trouble to the BellSouth provided loop, Pathnet will issue a trouble 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 customers.
- 2.1.15 If Pathnet reports a trouble on SL1 loops and no trouble actually exists, BellSouth will charge Pathnet for any dispatching and testing (both inside and outside the CO) required by BellSouth in order to confirm the loop's working status.
- 2.1.16 If Pathnet reports a trouble on SL2 loops and no trouble actually exists, BellSouth will charge Pathnet for any dispatching and testing, (outside the CO) required by BellSouth in order to confirm the loop's working status.
- 2.1.17 In addition to the UVLs and UDLs, BellSouth shall make available an Unbundled Copper Loop (UCL). The UCL will be a copper twisted pair loop that is unencumbered by any intervening equipment (e.g., filters, load coils, range extenders, digital loop carrier, or repeaters). The UCL will be offered in two versions - Short and Long. A short UCL (18 kft or less) will be provisioned according to Resistance Design parameters. The long UCL (beyond 18kft) will be used when a CLEC wants to condition copper loops longer than 18kft by removing load coils and other intervening equipment. BST will only ensure electrical continuity and balance relative to tip and ring on UCLs.
- 2.1.18 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. Order Coordination – Time Specific (OC-TS) will not be offered on UCLs.

- 2.1.19 The UCL is a dry cooper loop and is not intended to support any particular telecommunications service. Pathnet may use the UCL loop for a variety of services, including xDSL (e.g., ADSL and HDSL) services, by attaching appropriate terminal equipment of Pathnet's choosing. Pathnet will determine the type of service that will be provided over the loop.
- 2.1.20 Because the UCL loop shall be an unbundled loop offering that is separate and distinct from BellSouth's ADSL and HDSL capable loop offerings, CLEC agrees that BellSouth's UCL loop will not be held to the service level and performance expectations that apply to its ADSL and HDSL unbundled loop offerings. BellSouth shall only be obligated to maintain copper continuity and provide balance relative to tip and ring on UCL loops.
- 2.1.21 The UCL loop shall be provided to CLEC in accordance with BellSouth's Technical Reference 73600.
- 2.1.21.1 No later than June 6, 2000, BellSouth shall provide Pathnet access to the high frequency spectrum portion of the loop in accordance with the FCC's decision in *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Third Report and Order, FCC 99-355 (rel. Dec. 9, 1999). The parties will negotiate appropriate terms and conditions for such access to the high frequency spectrum portion of the loop.
- 2.1.22 Technical Requirements
- 2.1.22.1 To the extent available within BellSouth's Network at a particular location, BellSouth will offer loops capable of supporting telecommunications services such as: POTS, Centrex, basic rate ISDN, analog PBX, voice grade private line, ADSL, HDSL, DS1 and digital data (up to 64 kb/s). If a requested loop type is not available, then the CLEC can use the Special Construction process to request that BellSouth place facilities or otherwise modify facilities in order to meet Pathnet's request.
- 2.1.22.2 Pathnet will be responsible for providing BellSouth with a Service Profile Identifier (SPID) associated with a particular ISDN-capable loop and end user. With the SPID, BellSouth will be able to adequately test the circuit and ensure that it properly supports ISDN service.
- 2.1.22.3 The loop will support the transmission, signaling, performance and interface requirements of the services described in 2.1.3 above. It is recognized that the requirements of different services are different, and that a number of types or grades of loops are required to support these services. Services provided over the loop by Pathnet will be consistent with industry standards and BellSouth's TR73600.
- 2.1.22.4 Pathnet may utilize the unbundled loops to provide any telecommunication service it wishes. However, BellSouth will only provision, maintain and repair the loops to the standards that are consistent with the type of loop ordered. For example, if Pathnet

- orders an ISDN-capable loop but wants to use the loop for a service other than ISDN, BellSouth will only support that the loop is capable of providing ISDN service. For non-service specific loops (e.g. UCL, loops modified by Pathnet using the Special Construction process), BellSouth will only support that the loop has copper continuity and balanced tip-and-ring.
- 2.1.22.5 In some instances, Pathnet will require access to a copper twisted pair loop unfettered by any intervening equipment (e.g., filters, load coils, range extenders, etc.), so that Pathnet can use the loop for a variety of services by attaching appropriate terminal equipment at the ends. Pathnet will determine the type of service that will be provided over the loop. In some cases, Pathnet may be required to pay additional charges for the removal of certain types of equipment. BellSouth's Special Construction process will be used to determine the costs and feasibility of these activities.
- 2.1.22.6 In cases in which Pathnet has requested that BellSouth remove equipment from the BellSouth loop, BellSouth will no longer be expected to maintain and repair the loop to the standards specified for that loop type in the TR73600 and other standards referenced in this Agreement. BellSouth will only support that these loops provide electrical continuity and balance relative to tip-and-ring.
- 2.1.22.7 Pathnet, in performance of its obligations pursuant to the preceding Section, shall maintain records that will reflect that pursuant to Pathnet's request BellSouth has removed certain equipment from BellSouth provided loops and as such the loop may not perform within the technical specifications associated with that loop type. Pathnet will not report to BellSouth troubles on said loops where the loops are not performing within the technical specifications of that loop type.
- 2.1.22.8 Loops modified by Pathnet in such a way that they no longer meet the technical specifications for a service specific loop type (e.g., ISDN, DS1, POTS, etc.) will be ordered as Unbundled Copper Loops (UCLs). This will allow BellSouth to inventory these loops in a way that will ensure they remain on copper pairs until disconnected by the CLEC.
- 2.1.22.9 The loop shall be provided to Pathnet in accordance with BellSouth's TR73600 Unbundled Local Loop Technical Specification and applicable industry standard technical references.

2.2 Loop Conditioning

- 2.2.1 Subject to applicable and effective FCC rules and orders, BellSouth shall condition loops, as requested by Pathnet, whether or not BellSouth offers advanced services to the End User on that loop.
- 2.2.2 Loop 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.
- 2.2.3 BellSouth shall recover the cost of line conditioning requested by Pathnet through a recurring charge and/or nonrecurring charge(s) in accordance with the FCC's forward-looking pricing principles promulgated pursuant to section 252 (d) (1) of the Act and in compliance with FCC Rule 52.507 (e).

2.3. Integrated Digital Loop Carriers

- 2.3.1 Where BellSouth uses Integrated Digital Loop Carrier (IDLC) systems to provide the local loop and BellSouth has a suitable alternate facility available, BellSouth will make arrangements to permit Pathnet to order a contiguous local loop. To the extent it is technically feasible, these arrangements will provide Pathnet with the capability to serve end users at a level that is at parity with the level of service BellSouth provides its customers. If no alternate facility is available, BellSouth will utilize its Special Construction (SC) process to determine the additional costs required to provision the loop facilities. Pathnet will then have the option of paying the one-time SC rates to place the loop facilities or Pathnet may chose some other method of providing service to the end-user (e.g., Resale, private facilities, etc.).

2.4 Network Interface Device

2.4.1 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 premises. The NID features two independent chambers or divisions that separate the service provider's network from the End User's 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.

- 2.4.2. BellSouth shall permit Pathnet to connect Pathnet's loop facilities to on-premises wiring through the BellSouth NID or at any other technically feasible point.

2.4.3 Access to Network Interface Device (NID)

- 2.4.3.1. Due to the wide variety of NIDs utilized by BellSouth (based on subscriber size and environmental considerations), Pathnet may access the on-premises wiring by any of the following means: BellSouth shall allow Pathnet 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. Pathnet agrees to install compatible protectors and test jacks and to maintain the protection system and equipment and to indemnify BellSouth pursuant to Section 8 of the General Terms and Conditions of this Agreement.
- 2.4.3.2. 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
- 2.4.3.3. 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
- 2.4.3.4. 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., Pathnet, its agent, the building owner or the subscriber). Such charges will be billed to the requesting Party.
- 2.4.3.5. In no case shall either Party remove or disconnect the other Party's loop facilities from either Party's NIDs, enclosures, or protectors, without state regulatory requirement, without providing prior notice to the other Party, and without appropriately capping off and guarding the other Party's loop. In such cases, it shall be the responsibility of the disconnecting party to properly ground the other party's loop, maintain the NID, and assume full liability for its action and any adverse consequences.
- 2.4.3.6. In no case shall either Party remove or disconnect ground wires from BellSouth's NIDs, enclosures, or protectors.
- 2.4.3.7. In no case shall either Party remove or disconnect NID modules, protectors, or terminals from BellSouth's NID enclosures.
- 2.4.3.8. Due to the wide variety of NID enclosures and outside plant environments BellSouth will work with Pathnet to develop specific procedures to establish the most effective means of implementing this Section, 2.4.3.

2.4.4 Technical Requirements

- 2.4.4.1 The NID shall provide an accessible point of interconnection and shall maintain a connection to ground.
- 2.4.4.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to Pathnet's NID, consistent with the NID's function at the Effective Date of this Agreement.
- 2.4.4.3 Where a BellSouth NID exists, it is provided in its "as is" condition. Pathnet may request BellSouth do additional work to the NID in accordance with Section 2.4.3.8.
- 2.4.4.4 When Pathnet deploys its own local loops with respect to multiple-line termination devices, Pathnet shall specify the quantity of NIDs connections that it requires within such device.
- 2.4.5 Interface Requirements
- 2.4.5.1 The NID shall be equal to or better than all of the requirements for NIDs set forth in the applicable industry standard technical references.

2.5 Unbundled Loop Concentration (ULC) System

- 2.5.1 BellSouth will provide to Pathnet Unbundled Loop Concentration (ULC). Loop concentration systems in the central office concentrate the signals transmitted over local loops onto a digital loop carrier system. The concentration device is placed inside a BellSouth central office. BellSouth will offer ULC with a TR008 interface or a TR303 interface.
- 2.5.2 ULC will be offered in two sizes. System A will allow up to 96 BellSouth loops to be concentrated onto multiple DS1s. The high-speed connection from the concentrator will be at the electrical DS1 level and may connect to Pathnet at Pathnet's collocation site. System B will allow up to 192 BellSouth loops to be concentrated onto multiple DS1s. System A may be upgraded to a System B. 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). All DS1 interfaces will terminate to the CLEC's collocation space. ULC service is offered with or without concentration and with or without protection. A Line Interface element will be required for each loop that is terminated onto the ULC system. Rates for ULC are as set forth in this Attachment.

2.6 Sub-loop Elements

- 2.6.1 Where facilities permit and subject to applicable and effective FCC rules and orders, BellSouth shall offer access to its Unbundled Sub Loop (USL), Unbundled Subloop

Concentration (USLC) System and Unbundled Network Terminating Wire (UNTW) elements. BellSouth shall provide non-discriminatory access, in accordance with 51.311 and section 251(c) (3) of the Act, to the subloop. On an unbundled basis and pursuant to the following terms and conditions and the rates approved by the Commission and set forth in this Attachment.

2.6.2 Subloop components include but are not limited to the following:

2.6.2.1 Unbundled Sub-Loop Distribution;

2.6.2.2 Unbundled Sub-Loop Concentration/Multiplexing Functionality; and

2.6.2.3 Unbundled Network Terminating Wire; and

2.6.2.4 Unbundled Sub-Loop Feeder.

2.6.3 Unbundled Sub-Loop (distribution facilities)

2.6.3.1 Definition

2.6.3.2 Subject to applicable and effective FCC rules and orders, the unbundled sub-loop distribution facility is dedicated transmission facility that BellSouth provides from a customer's point of demarcation to a BellSouth cross-connect device. The BellSouth cross-connect device may be located within a remote terminal (RT) or a stand-alone cross-box in the field or in the equipment room of a building. There are two offerings available for Unbundled Sub-Loops (USL):

2.6.3.3 Unbundled Sub-Loop Distribution (USL-D) will include the sub-loop facility from the cross-box in the field up to and including the point of demarcation.

2.6.3.4 BellSouth will also provide sub-loop interconnection to the intrabuilding network cable (INC) (riser cable). INC is the distribution facility inside a subscriber's building or between buildings on one customer's same premises (continuous property not separated by a public street or road). USL-INC (riser cable) will include the facility from the cross-connect device in the building equipment room up to and including the point of demarcation.

2.6.4. Requirements for Unbundled Sub-Loop Distribution Facilities

2.6.4.1 Unbundled Sub-Loop distribution facilities were originally built as part of the entire voice grade loop from the BellSouth central office to the customer network interface. Therefore, the Unbundled Sub-Loop may have load coils, which are necessary for

- transmission of voice grade services. The Unbundled Sub-Loops will be provided in accordance with technical reference TR73600.
- 2.6.4.2 Unbundled Sub-Loop distribution facilities shall support functions associated with provisioning, maintenance and testing of the Unbundled Sub-Loop. In a scenario that involves connection at a BellSouth cross-box located in the field, Pathnet would be required to deliver a cable to the BellSouth remote terminal or cross-box to provide continuity to Pathnet's feeder facilities. This cable would be connected, by a BellSouth technician, to a cross-connect panel within the BellSouth RT/cross-box. Pathnet's cable pairs can then be connected to BellSouth's USL within the BellSouth cross-box by the BellSouth technician. In a scenario that requires connection in a building equipment room, BellSouth will install a cross connect panel on which access to the requested sub-loops will be connected. The CLEC's cable pairs can then be connected to the Unbundled Sub-Loop pairs on this cross-connect panel by the BellSouth technician.
- 2.6.4.3 BellSouth will provide Unbundled Sub-Loops where possible. Through the firm order Service Inquiry (SI) process, BellSouth will determine if it is feasible to place the required facilities where Pathnet has requested access to Unbundled Sub-Loops. If existing capacity is sufficient to meet the CLEC demand, then BellSouth will perform the set-up work as described in the next section 2.6.4.4 . If any work must be done to modify existing BellSouth facilities or add new facilities (other than adding the cross-connect panel in a building equipment room as noted in 2.6.4.4) to accommodate Pathnet's request for Unbundled Sub-Loops, BellSouth will use its Special Construction (SC) process to determine the additional costs required to provision the Unbundled Sub-Loops. Pathnet will then have the option of paying the one-time SC charge to modify the facilities to meet Pathnet's request.
- 2.6.4.4 During the initial set-up in a BellSouth cross-connect box in the field, the BellSouth technician will perform the necessary work to splice the CLEC's cable into the cross-connect box. For the set-up inside a building equipment room, BellSouth will perform the necessary work to install the cross-connect panel that will be used to provide access to the requested USLs. Once the set-up is complete, the CLEC requested sub-loop pairs would be provisioned through the service order process based on the submission of a LSR to the LCSC.
- 2.6.5 Interface Requirements
- 2.6.5.1 Unbundled Sub-Loop shall be equal to or better than each of the applicable requirements set forth in the applicable industry standard technical references.
- 2.6.6 **Unbundled Sub-Loop Concentration System (USLC)**

- 2.6.6.1 Where facilities permit and where necessary to comply with an effective Commission order, BellSouth will provide to Pathnet with the ability to concentrate its sub-loops onto multiple DS1s back to the BellSouth Central Office. The DS1s will then be terminated into Pathnet's collocation space. TR-008 and TR303 interface standards are available.
- 2.6.6.2 USLC, using the Lucent Series 5 equipment, will be offered in two different systems. System A will allow up to 96 of Pathnet's sub-loops to be concentrated onto multiple DS1s. System B will allow an additional 96 of Pathnet's sub-loops 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 serving wire center is known as a Feeder Interface. All DS1 Feeder Interfaces will terminate to the CLEC's collocation space within the SWC that serves the RT where the CLEC's sub-loops are connected. USLC service is offered with or without concentration and with or without a protection DS1.
- 2.6.6.3 In these scenarios Pathnet would be required to place a cross-box, remote terminal (RT), 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 Pathnet's sub-loops to then be placed on the ULSC and transported to their collocation space at a DS1 level.

2.6.7 Unbundled Network Terminating Wire (UNTW)

- 2.6.7.1 BellSouth agrees to offer its Unbundled Network Terminating Wire (UNTW) to Pathnet pursuant to the following terms and conditions at rates as set forth in this Attachment.
- 2.6.7.2 Definition
- 2.6.7.2.1 Subject to applicable and effective FCC rules and orders, UNTW is a dedicated transmission facility that BellSouth provides from the Wiring Closet /Garden Terminal (or other type of cross-connect point) at the point of termination of BellSouth's loop distribution facilities to the end user's point of demarcation.
- 2.6.7.3 Requirements
- 2.6.7.3.1 BellSouth will offer spare pairs that are available to an end user's premises to Pathnet. Available spare pairs are defined as pairs that are not being utilized by BellSouth or by a third party to provide an end user with working service at the time of Pathnet's request for UNTW. If no spare pairs are available and the end user is no longer using

- BellSouth's local service, BellSouth will relinquish the first pair to Pathnet. If after BellSouth has relinquished the first pair to Pathnet and the end user decides to change local service providers to BellSouth, Pathnet will relinquish the first pair back to BellSouth.
- 2.6.7.3.2 Notwithstanding the foregoing, should BellSouth subsequently require the use of additional pair(s) to provide for the activation of additional lines in an end users premises in response to a request from such end user, Pathnet agrees to surrender their spare pair(s) upon request by BellSouth.
- 2.6.7.3.3 If an end user of Pathnet desires to receive local exchange service from a service provider who is not a Party to this Agreement, and such third party service provider needs access to the BellSouth UNTW to provide local exchange service to the end user, then Pathnet agrees to surrender the requisite number of its inactive spare pair(s) if no other spare pair is available and upon request by BellSouth.
- 2.6.7.3.4 If Pathnet has placed NTW at a location and an end user desires to receive local exchange service from BellSouth and BellSouth needs access to Pathnet's NTW to provide local exchange service to the end user, then Pathnet agrees to surrender the requisite number of its spare pair(s) upon request by BellSouth.
- 2.6.7.3.5 In new construction, where possible, both Parties may at their option and with the property owner's agreement install their own NTW. In existing construction, BellSouth shall not be required to install new or additional NTW beyond existing NTW to provision the services of the CLEC.
- 2.6.8 Technical Requirements
- 2.6.8.1 In these scenarios, BellSouth will connect the requested UNTW pairs to a single point of interconnection (SPOI) designed for CLEC access to BellSouth's NTW. The SPOI will be installed either near BellSouth's garden terminal or wiring closet. Pathnet will be required to place a cross-box, terminal or other similar device and deliver a cable to this SPOI. Pathnet will then connect their cable to the cross-connect panel to access the requested UNTW pairs.

2.7 Dark Fiber

2.7.1 Defintion

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.

2.7.2 Requirements

- 2.7.2.1 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 Pathnet.
- 2.7.2.2 If the requested dark fiber has any lightwave repeater equipment interspliced to it, BellSouth will remove such equipment at Pathnet's request subject to time and materials charges.
- 2.7.2.3 Pathnet may test the quality of the Dark Fiber to confirm its usability and performance specifications.
- 2.7.2.4 BellSouth shall use its best efforts to provide to Pathnet 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 Pathnet ("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 Pathnet's use and may not allow any other party to use such media, including BellSouth.
- 2.7.2.5 BellSouth shall use its best efforts to make Dark Fiber available to Pathnet within thirty (30) business days after it receives written confirmation from Pathnet that the Dark Fiber previously deemed available by BellSouth is wanted for use by Pathnet. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable Pathnet to connect or splice Pathnet provided transmission media (e.g., optical fiber) or equipment to the Dark Fiber.
- 2.7.2.6 Dark Fiber shall meet the manufacturer's design specifications.
- 2.7.2.7 Pathnet may splice and test Dark Fiber obtained from BellSouth using Pathnet or Pathnet 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.

2.8 **Rates**

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

2.9 **Operational Support Systems (OSS)**

BellSouth has developed and made available the following mechanized systems by which Pathnet may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interchange
TAG	Telecommunications Access Gateway

- 2.9.1 LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	AL, GA, LA, MS, SC	FL, KY, NC, TN
OSS LSR charge, per LSR received from the CLEC by one of the OSS interactive interfaces	\$3.50	\$3.50
	SOMEK	SOMEK
Incremental charge per LSR received from the CLEC by means other than one of the OSS interactive interfaces	See applicable rate element	\$19.99
		SOMAN

2.9.2 Denial/Restoral OSS Charge

In the event Pathnet provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

2.9.3 Cancellation OSS Charge

Pathnet will incur an OSS charge for an accepted LSR that is later canceled by Pathnet.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

2.9.4 Network Elements and Other Services Manual Additive

- 2.9.4.1 The Commissions in some states have ordered per-element manual additive non-recurring charges (NRC) for Network Elements and Other Services ordered by means other than one of the interactive interfaces. These ordered Network Elements and Other Services manual additive NRCs will apply in these states, rather than the charge per LSR. The per-element charges are listed on the Rate Tables in Exhibit A.

3. Switching

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of local and tandem switching.

3.1 Local Switching

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 3.1.3 to Pathnet for the provision of a telecommunications service. BellSouth shall provide non-discriminatory access to packet switching capability on an unbundled basis to Pathnet for the provision of a telecommunications service only in the limited circumstance described below in Section 3.5.

3.1.1. Except as otherwise provided herein, BellSouth shall not impose any restrictions on Pathnet 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 the BellSouth network by BellSouth or any other telecommunication carrier.

3.1.2. Local Circuit Switching Capability, including Tandem Switching Capability

3.1.2.1 Definition

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; and (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 customers, 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, customer local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch; (D) switching provided by remote switching modules.

3.1.2.2 When utilizing BellSouth's local circuit switching capability, local traffic shall be defined as set forth in Part B of the General Terms and Conditions.

3.1.3 Notwithstanding BellSouth's general duty to unbundle local circuit switching, BellSouth shall not be required to unbundle local circuit switching for Pathnet when

- Pathnet 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.
- 3.1.4 In the event that Pathnet 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 listed on Exhibit A, BellSouth's sole recourse shall be to charge Pathnet a rate to be negotiated for use of the local circuit switching functionality for the affected facilities, or in the alternative, to charge Pathnet the local services resale rate for use of all Combinations used to provide the affected facilities to Pathnet.
- 3.1.5 A featureless port is one that has a line port, switching facilities, and an interoffice port. A featured port is a port that includes all features then capable or a number of then capable features specifically requested by Pathnet. Any features that are not currently then capable but are technically feasible through the switch can be requested through the BFR process.
- 3.1.6 BellSouth will provide to Pathnet customized routing of calls: (i) to a requested directory assistance services platform; (ii) to an operator services platform pursuant to Section 10 of Attachment 2; (iii) for Pathnet's PIC'ed toll traffic in a two (2) PIC environment to an alternative OS/DA platform designated by Pathnet. Pathnet customers may use the same dialing arrangements as BellSouth customers.
- 3.1.7 Remote Switching Module functionality is included in Switching Capability. The switching capabilities used will be based on the line side features they support.
- 3.1.8 Switching Capability will also be capable of routing local, intraLATA, interLATA, and calls to international customer's preferred carrier; call features (e.g. call forwarding) and Centrex capabilities.
- 3.1.9 Where required to do so in order to comply with an effective Commission order, BellSouth will provide to Pathnet purchasing local BellSouth switching and reselling BellSouth local exchange service under Attachment 1, selective routing of calls to a requested directory assistance services platform or operator services platform. Pathnet customers may use the same dialing arrangements as BellSouth customers, but obtain a Pathnet branded service.
- 3.2 Technical Requirements

- 3.2.1 The requirements set forth in this Section apply to Local Switching, but not to the Data Switching function of Local Switching.
- 3.2.1.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in the applicable industry standard technical references.
- 3.2.1.2 When applicable, BellSouth shall route calls to the appropriate trunk or lines for call origination or termination.
- 3.2.1.3 Subject to this section, BellSouth shall route calls on a per line or per screening class basis to (1) BellSouth platforms providing Network Elements or additional requirements (2) Operator Services platforms, (3) Directory Assistance platforms, and (4) Repair Centers. Any other routing requests by Pathnet will be made pursuant to the Bona Fide Request/ New Business Request Process as set forth in General Terms and Conditions.
- 3.2.1.4 BellSouth shall provide unbranded recorded announcements and call progress tones to alert callers of call progress and disposition.
- 3.2.1.5 BellSouth shall activate service for an Pathnet customer or network interconnection on any of the Local Switching interfaces. This includes provisioning changes to change a customer from BellSouth's services to Pathnet's services without loss of switch feature functionality as defined in this Agreement.
- 3.2.1.6 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.
- 3.2.1.7 BellSouth shall repair and restore any equipment or any other maintainable component that may adversely impact Local Switching.
- 3.2.1.8 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.
- 3.2.1.9 BellSouth shall perform manual call trace and permit customer originated call trace.
- 3.2.1.10 Special Services provided by BellSouth will include the following:
 - 3.2.1.10.1 Telephone Service Prioritization;
 - 3.2.1.10.2 Related services for handicapped;
 - 3.2.1.10.3 Soft dial tone where required by law; and

- 3.2.1.10.4 Any other service required by law.
- 3.2.1.11 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.
- 3.2.1.12 BellSouth shall provide interfaces to adjuncts through Telcordia (formerly BellCore) standard interfaces. These adjuncts can include, but are not limited to, the Service Circuit Node and Automatic Call Distributors.
- 3.2.1.13 BellSouth shall provide performance data regarding a customer line, traffic characteristics or other measurable elements to Pathnet, upon a reasonable request from Pathnet. CLEC will pay BellSouth for all costs incurred to provide such performance data through the Business Opportunity Request process.
- 3.2.1.14 BellSouth shall offer Local Switching that provides feature offerings at parity to those provided by BellSouth to itself or any other Party. Such feature offerings shall include but are not limited to:
 - 3.2.1.14.1 Basic and primary rate ISDN;
 - 3.2.1.14.2 Residential features;
 - 3.2.1.14.3 Customer Local Area Signaling Services (CLASS/LASS);
 - 3.2.1.14.4 CENTREX (including equivalent administrative capabilities, such as customer accessible reconfiguration and detailed message recording); and
 - 3.2.1.14.5 Advanced intelligent network triggers supporting Pathnet and BellSouth service applications.
- 3.2.2 BellSouth shall offer to Pathnet all AIN triggers in connection with its SMS/SCE offering which are supported by BellSouth for offering AIN-based services. Triggers that are currently available are:
 - 3.2.2.1 Off-Hook Immediate
 - 3.2.2.2 Off-Hook Delay
 - 3.2.2.3 Termination Attempt
 - 3.2.2.4 6/10 Public Office Dialing Plan
 - 3.2.2.5 Feature Code Dialing

- 3.2.2.6 Customer Dialing Plan
- 3.2.3 When the following triggers are supported by BellSouth, BellSouth will make these triggers available to Pathnet:
 - 3.2.3.1 Private EAMF Trunk
 - 3.2.3.2 Shared Interoffice Trunk (EAMF, SS7)
 - 3.2.3.3 N11
 - 3.2.3.4 Automatic Route Selection
- 3.2.4 Where capacity exists, BellSouth shall assign each Pathnet customer line the class of service designated by Pathnet (e.g., using line class codes or other switch specific provisioning methods), and shall route directory assistance calls from Pathnet customers to Pathnet directory assistance operators at Pathnet's option.
- 3.2.5 Where capacity exists, BellSouth shall assign each Pathnet customer line the class of services designated by Pathnet (e.g., using line class codes or other switch specific provisioning methods) and shall route operator calls from Pathnet customers to Pathnet operators at Pathnet's option. For example, BellSouth may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to an Pathnet Operator Services Position System (OSPS). Calls from Local Switching must pass the ANI-II digits unchanged.
- 3.2.6 Local Switching shall be offered in accordance with the technical specifications set forth in the applicable industry standard references.
- 3.2.7 Interface Requirements
 - 3.2.7.1 BellSouth shall provide the following interfaces to loops:
 - 3.2.7.1.1 Standard Tip/Ring interface including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);
 - 3.2.7.1.2 Coin phone signaling;
 - 3.2.7.1.3 Basic Rate Interface ISDN adhering to appropriate Telcordia (formerly BellCore) Technical Requirements;
 - 3.2.7.1.4 Two-wire analog interface to PBX;
 - 3.2.7.1.5 Four-wire analog interface to PBX;

- 3.2.7.1.6 Four-wire DS1 interface to PBX or customer provided equipment (e.g. computers and voice response systems);
 - 3.2.7.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Telcordia (formerly BellCore) Technical Requirements;
 - 3.2.7.1.8 Switched Fractional DS1 with capabilities to configure Nx64 channels (where N = 1 to 24); and
 - 3.2.7.1.9 Loops adhering to Telcordia (formerly BellCore) TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 3.2.7.2 BellSouth shall provide access to the following but not limited to:
- 3.2.7.2.1 SMDI service for the provisioning of Pathnet's voice messaging service.
 - 3.2.7.2.2 SS7 Signaling Network or Multi-Frequency trunking if requested by Pathnet;
 - 3.2.7.2.3 Interface to Pathnet operator services systems or Operator Services through appropriate trunk interconnections for the system; and
 - 3.2.7.2.4 Interface to Pathnet Directory Assistance Services through the Pathnet switched network or to Directory Assistance Services through the appropriate trunk interconnections for the system; and 950 access or other Pathnet required access to interexchange carriers as requested through appropriate trunk interfaces.

3.3 Tandem Switching

3.3.1 Definition

Tandem Switching is the function that establishes a communications path between two switching offices through a third switching office (the Tandem switch).

3.3.2 Technical Requirements

- 3.3.2.1 Tandem Switching shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90. The requirements for Tandem Switching include, but are not limited to the following:
 - 3.3.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;
 - 3.3.2.1.2 Tandem Switching will provide screening as jointly agreed to by Pathnet and BellSouth;

- 3.3.2.1.3 Tandem Switching shall provide Advanced Intelligent Network triggers supporting AIN features where such routing is not available from the originating end office switch, to the extent such Tandem switch has such capability;
- 3.3.2.1.4 Tandem Switching shall provide access to Toll Free number portability database as designated by Pathnet;
- 3.3.2.1.5 Tandem Switching shall provide all trunk interconnections discussed under the “Network Interconnection” section (e.g., SS7, MF, DTMF, DialPulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));
 - 3.3.2.1.5.1 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and
 - 3.3.2.1.5.2 Where appropriate, Tandem Switching shall provide connectivity to transit traffic to and from other carriers.
- 3.3.2.1.6 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IXCs, ICOs, CAPs and CLEC switches.
- 3.3.2.1.7 Tandem Switching shall provide local tandeming functionality between two end offices including two offices belonging to different CLEC's (e.g., between a CLEC end office and the end office of another CLEC).
- 3.3.2.1.8 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed.
- 3.3.2.1.9 Tandem Switching shall record billable events and send them to the area billing centers designated by Pathnet. Tandem Switching will provide recording of all billable events as jointly agreed to by Pathnet and BellSouth.
- 3.3.2.1.10 Upon a reasonable request from Pathnet, BellSouth shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its interconnections. The results and reports of the testing shall be made immediately available to Pathnet.
- 3.3.2.1.11 BellSouth shall maintain Pathnet’s trunks and interconnections associated with Tandem Switching at least at parity to its own trunks and interconnections.
- 3.3.2.1.12 BellSouth shall control congestion points and network abnormalities. All traffic will be restricted in a non-discriminatory manner.
- 3.3.2.1.13 Selective Call Routing through the use of line class codes is not available through the use of tandem switching. Selective Call Routing through the use of line class codes is

- an end office capability only. Detailed primary and overflow routing plans for all interfaces available within BellSouth's switching network shall be mutually agreed to by Pathnet and BellSouth.
- 3.3.2.1.14 Tandem Switching shall process originating toll-free traffic received from Pathnet's local switch.
 - 3.3.2.1.15 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.
 - 3.3.2.2 Interface Requirements
 - 3.3.2.2.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.
 - 3.3.2.2.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which BellSouth interconnects.
 - 3.3.2.2.3 BellSouth shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
 - 3.3.2.2.4 Tandem Switching shall interconnect with Pathnet's switch, using two-way trunks, for traffic that is transiting via BellSouth's network to interLATA or intraLATA carriers. At Pathnet's request, Tandem Switching shall record and keep records of traffic for billing.
 - 3.3.2.2.5 Tandem Switching shall provide an alternate final routing pattern for Pathnet's traffic overflowing from direct end office high usage trunk groups.
 - 3.3.2.2.6 Tandem Switching shall be equal or better than the requirements for Tandem Switching set forth in the applicable technical references.
 - 3.4 **AIN Selective Carrier Routing for Operator Services, Directory Assistance and Repair Centers**
 - 3.4.1 BellSouth will provide AIN Selective Carrier Routing at the request of Pathnet. AIN Selective Carrier Routing will provide Pathnet 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.

- 3.4.2 Pathnet shall order AIN Selective Carrier Routing through its Account Team. AIN Selective Carrier Routing must first be established regionally and then on a per central office, per state basis.
- 3.4.3 AIN Selective Carrier Routing is not available in DMS 10 switches.
- 3.4.4 Where AIN Selective Carrier Routing is utilized by Pathnet, the routing of Pathnet's end user calls shall be pursuant to information provided by Pathnet and stored in BellSouth's AIN Selective Carrier Routing Service Control Point database. AIN Selective 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 Selective Carrier Routing is established.
- 3.4.5 Upon ordering of AIN Selective Carrier Routing Regional Service, Pathnet 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 Selective Carrier Routing will be utilized. Said non-recurring charge shall be as set forth in Exhibit A of this Attachment. For each Pathnet end user activated, there shall be a non-recurring End User Establishment charge as set forth in Exhibit A of this Attachment, payable to BellSouth pursuant to the terms of the General Terms and Conditions, incorporated herein by this reference. Pathnet shall pay the AIN Selective Carrier Routing Per Query Charge set forth in Exhibit A of this Attachment.
- 3.4.6 This Regional Service Order non-recurring charge will be non-refundable and will be paid with 1/2 coming up-front with the submission of all fully completed required forms, including: Regional Selective Carrier Routing (SCR) Order Request-Form A, Central Office AIN Selective Carrier Routing (SCR) Order Request - Form B, AIN_SCR Central Office Identification Form - Form C, AIN_SCR Routing Options Selection Form - Form D, and Routing Combinations Table - Form E. BellSouth has 30 days to respond to the client's fully completed firm order as a Regional Service Order. With the delivery of this firm order response to the client, BellSouth considers that the delivery schedule of this service commences. The remaining 1/2 of the Regional Service Order payment must be paid when at least 90% of the Central Offices listed on the original order have been turned up for the service.
- 3.4.7 The non-recurring End Office Establishment Charge will be billed to the client following our normal monthly billing cycle for this type of order.
- 3.4.8 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 the client following our normal monthly billing cycle for this type of order.

3.4.9 Additionally, the AIN Selective Carrier Routing Per Query Charge will be billed to the client following the normal billing cycle for per query charges.

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

3.5 Packet Switching Capability

3.5.1 Definition

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 Multiplexers, including but not limited to:

3.5.2 The ability to terminate copper customer loops (which includes both a low band voice channel and a high-band data channel, or solely a data channel);

3.5.3 The ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches;

3.5.4 The ability to extract data units from the data channels on the loops, and

3.5.5 The ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.

3.5.6 BellSouth shall be required to provide non-discriminatory access to unbundled packet switching capability only where each of the following conditions are satisfied:

3.5.6.1 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);

3.5.6.2 There are no spare copper loops capable of supporting the xDSL services Pathnet seeks to offer;

3.5.6.3 BellSouth has not permitted Pathnet to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has the Pathnet obtained a virtual collocation arrangement at these subloop interconnection points as defined by 47 C.F.R. § 51.319 (b); and

3.5.6.4 BellSouth has deployed packet switching capability for its own use.

3.5.7 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 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.

3.6 **Interoffice Transmission Facilities**

BellSouth shall provide nondiscriminatory access, in accordance with FCC Rule 51.311 and Section 251(c)(3) of the Act, to interoffice transmission facilities on an unbundled basis to Pathnet for the provision of a telecommunications service.

3.7 **Rates**

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

3.8 **Operational Support Systems (OSS)**

BellSouth has developed and made available the following mechanized systems by which Pathnet may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interchange
TAG	Telecommunications Access Gateway

3.8.1 LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	AL, GA, LA, MS, SC	FL, KY, NC, TN
OSS LSR charge, per LSR received from the CLEC by one of the OSS interactive interfaces	\$3.50	\$3.50
	SOMECH	SOMECH
Incremental charge per LSR received from the CLEC by means other than one of the OSS interactive interfaces	See applicable rate element	\$19.99
		SOMAN

3.8.2 Denial/Restoral OSS Charge

In the event Pathnet provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

3.8.3 Cancellation OSS Charge

Pathnet will incur an OSS charge for an accepted LSR that is later canceled by Pathnet.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

3.8.4 Network Elements and Other Services Manual Additive

- 3.8.4.1 The Commissions in some states have ordered per-element manual additive non-recurring charges (NRC) for Network Elements and Other Services ordered by means other than one of the interactive interfaces. These ordered Network Elements and Other Services manual additive NRCs will apply in these states, rather than the charge per LSR. The per-element charges are listed on the Rate Tables in Exhibit A.

4. Enhanced Extended Link (EEL)

4.1 Where facilities permit and where necessary to comply with an effective FCC and/or State Commission order, BellSouth shall offer access to the Enhanced Extended Link (“EEL”) as defined in Section 4.3 below.

4.2 Definition

4.2.1 For purposes of this Amendment, references to “Currently Combined” network elements shall mean that such network elements are in fact already combined by BellSouth in the BellSouth network to provide service to a particular end user at a particular location.

4.2.2 BellSouth will provide access to the Enhanced Extended Link (“EEL”) in the combinations set forth in 4.3 following. This offering is intended to provide connectivity from an end user’s location through that end user’s SWC and then connected to the Pathnet’s POP serving wire center. The circuit must be connected to the Pathnet’s circuit switch for the purpose of provisioning circuit switched telephone exchange service to the Pathnet’s end-user customers. This can be done either in the collocation space at the POP SWC, or by using BellSouth’s access facilities between the Pathnet’s POP and Pathnet’s collocation space at the POP SWC.

4.2.3 BellSouth shall provide combinations of loops and transport to Pathnet in Georgia regardless of whether or not such combinations of loops and transport are Currently Combined. Other combinations of network elements that are not Currently Combined but that BellSouth ordinarily combines in its network shall be made available to Pathnet in Georgia in accordance with Section 4.5.1.3 below. In all other states, BellSouth shall make available to Pathnet those EEL combinations and transport described in Section 4.3 below only to the extent such combinations of loop and transport network elements are Currently Combined. BellSouth will make available new combinations of loops and transport network elements in density Zone 1, as defined in 47 C.F.R. 69.123 as of January 1, 1999, of the Miami, Orlando, Fort Lauderdale, Charlotte, New Orleans, Greensboro and Nashville MSAs to Pathnet if Pathnet’s customer has four (4) or more DS0 equivalent lines. Except as stated above, other combinations of network elements will be provided to Pathnet only to the extent such network elements are Currently Combined.

4.2.4 Additionally, there may be instances wherein Pathnet will require multiplexing functionality. BellSouth will provide access to multiplexing within the central office pursuant to the terms, conditions and rates set forth in its Access Services Tariffs when the customer utilizes special access interoffice facilities. Multiplexing will be

provided pursuant to the interconnection agreement when unbundled network elements are used for interoffice transport.

4.3 EEL Combinations

- 4.3.1 - 2-wire voice grade extended loop with DS1 Dedicated Interoffice Transport;
- 4.3.2 - 4-wire voice grade extended loop with DS1 Dedicated Interoffice Transport;
- 4.3.3 - 4-wire 56 or 64 kbps extended digital loop with Dedicated DS1 Interoffice Transport;
- 4.3.4 - Extended 2-wire VG Dedicated Local Channel with Dedicated DS1 Interoffice Transport;
- 4.3.5 - Extended 4-wire VG Dedicated Local Channel with Dedicated DS1 Interoffice Transport;
- 4.3.6 - Extended 4-wire DS1 Digital Loop with Dedicated DS1 Interoffice Transport;
- 4.3.7 - Extended 4-wire DS1 Digital Loop with Dedicated DS3 Interoffice Transport; and
- 4.3.8 - Extended DS1 Dedicated Local Channel with Dedicated DS3 Interoffice Transport.

4.4 Special Access Service Conversions

- 4.4.1 Pathnet may not convert special access services to combinations of loop and transport network elements, whether or not Pathnet self-provides its entrance facilities (or obtains entrance facilities from a third party), unless Pathnet 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 Pathnet converts its special access services to combinations of loop and transport network elements at UNE prices, Pathnet, hereby, certifies that it is providing a significant amount of local exchange service over such combinations. BellSouth may at its sole discretion audit Pathnet records in order to verify the type of traffic being transmitted over combinations of loop and transport network elements. If, based on its audits, BellSouth concludes that Pathnet 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 Pathnet.
- 4.4.2 EEL combinations for DS1 level and above will be available only when Pathnet provides and handles at least one third of the end user's local traffic over the facility provided. In addition, on the DS1 loop portion of the combination, at least fifty (50)

- percent of the activated channels must have at least five (5) percent local voice traffic individually and, for the entire DS1 facility, at least ten (10) percent of the traffic must be local voice traffic.
- 4.4.3 When combinations of loop and transport network elements include multiplexing, each of the individual DS1 circuits must meet the above criteria.
- 4.5 Rates
- 4.5.1 Georgia
- 4.5.1.1 The non-recurring and recurring rates for the EEL Combinations of network elements set forth in 4.3, whether Currently Combined or new, are as set forth in Exhibit A of this Amendment.
- 4.5.1.2 On an interim basis, for combinations of loop and transport network facilities not set forth in Section 4.3, where the elements are not Currently Combined but are ordinarily combined in BellSouth's network, the non-recurring and recurring charges for such UNE combinations shall be the sum of the stand-alone non-recurring and recurring charges of the network elements which make up the combination. These interim rates shall be subject to true-up based on the Commission's review of BellSouth's cost studies.
- 4.5.1.3 To the extent that Pathnet seeks to obtain other combinations of loop and transport network elements that BellSouth ordinarily combines in its network which have not been specifically priced by the Commission when purchased in combined form, Pathnet, at its option, can request that such rates be determined pursuant to the Bona Fide Request/New Business Request (NBR) process set forth in the Agreement.
- 4.5.2 All Other States
- 4.5.2.1 Subject to Section 4.2.3 preceding, for all other states, the non-recurring and recurring rates for the Currently Combined EEL combinations set forth in Section 1.3 and other Currently Combined loop and transport network elements will be the sum of the non-recurring and recurring rates for the individual network elements unless otherwise negotiated by the parties.
- 5. Port/Loop Combinations**
- 5.1 At Pathnet's request, BellSouth shall provide access to combinations of port and loop network elements, as set forth in Section 1.4 below, that are currently combined in BellSouth's network except as specified in Sections 5.1.1 and 5.1.2 below.
- 5.1.1 BellSouth is not required to provide access to combinations of port and loop network elements in locations where BellSouth is not required to provide circuit switching.

5.1.2 BellSouth is not required to provide circuit switching in density Zone 1, as defined in 47 C.F.R. 69.123 as of January 1, 1999, of the Atlanta, Miami, Orlando, Fort Lauderdale, Charlotte, New Orleans, Greensboro and Nashville MSAs to Pathnet if Pathnet's customer has 4 or more DS0 equivalent lines.

5.2 Definition

5.2.1 For purposes of this Amendment, references to Currently Combined network elements shall mean that such network elements are in fact already combined in the BellSouth network to provide service to a particular end user at a particular location.

5.2.2 Combinations of port and loop network elements provide local exchange service for the origination or termination of calls. Section 5.4 following provides the combinations of port and loop network elements that may be ordered by Pathnet when currently combined except in those locations where BellSouth is not required to provide circuit switching, as set forth in Section 5.1.2 above.

5.2.3 In Georgia, BellSouth shall provide combinations of port and loop network elements to Pathnet regardless of whether or not such combinations are Currently Combined except in those locations where BellSouth is not required to provide circuit switching, as set forth in Section 5.1.2 above.

5.3 Rates for Combinations of Loop and Port Network Elements

5.3.1 Rates for combinations of loop and port network elements, as set forth in Section 5.4, are provided in Exhibit A of this Attachment

5.3.2 Rates for Circuit Switching

5.3.2.1 Rates for circuit switching, where BellSouth is not required, pursuant to Section 5.1, to provide circuit switching are as set forth in Exhibit A of this Attachment.

5.4 Combination Offerings

5.4.1 2-wire voice grade port, voice grade loop, virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.4.2 2-wire voice grade DID port, voice grade loop, virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

- 5.4.3 2-wire CENTREX port, voice grade loop virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 5.4.4. 2-wire ISDN Basic Rate Interface, voice grade loop virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 5.4.5 2-wire ISDN Primary Rate Interface, DS1 loop virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.
- 5.4.6 4-wire DS1 Trunk port, DS1 Loop virtual cross connect, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

6. Transport and Dark Fiber

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of unbundled transport and dark fiber.

6.1. Transport

6.1.1 Definition of Common (Shared) Transport

Common (Shared) Transport is an interoffice transmission path between two BellSouth end-offices, BellSouth end-office and a local or access tandem, or between two local or access tandems. Where BellSouth Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common (Shared) Transport. Common (Shared) Transport consists of BellSouth inter-office transport facilities and is unbundled from local switching.

6.1.2 Technical Requirements of Common (Shared) Transport

- 6.1.2.1 Common (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 (“CO to CO”) connections in the appropriate industry standards.
- 6.1.2.2 Common (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 CO to CO connections in the appropriate industry standards.

- 6.1.2.3 BellSouth shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Common (Shared) Transport.
- 6.1.2.4 At a minimum, Common (Shared) Transport shall meet all of the requirements set forth in the applicable industry standard technical references.
- 6.2 Interoffice transmission facility network elements include:
- 6.2.1 Dedicated transport, defined as BellSouth's 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 or switches owned by BellSouth, or between wire centers and switches owned by BellSouth and Pathnet.
- 6.2.2 Dark Fiber transport, defined as BellSouth's optical transmission facilities without attached multiplexing, aggregation or other electronics;
- 6.2.3 Shared transport, defined as transmission facilities shared by more than one carrier, including BellSouth, between end office switches, between end office switches and tandem switches, and between tandem switches, in BellSouth's network.
- 6.2.4 BellSouth shall:
- 6.2.4.1 Provide Pathnet exclusive use of interoffice transmission facilities dedicated to a particular customer or carrier, or shared use of the features, functions, and capabilities of interoffice transmission facilities shared by more than one customer or carrier;
- 6.2.4.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that Pathnet could use to provide telecommunications services;
- 6.2.4.3 Permit, to the extent technically feasible, Pathnet to connect such interoffice facilities to equipment designated by Pathnet, including but not limited to, Pathnet's collocated facilities; and
- 6.2.4.4 Permit, to the extent technically feasible, Pathnet to obtain the functionality provided by BellSouth's digital cross-connect systems in the same manner that BellSouth provides such functionality to interexchange carriers.
- 6.2.5 Provided that the facility is used to transport a significant amount of local exchange services Pathnet shall be entitled to convert existing interoffice transmission facilities (i.e., special access) to the corresponding interoffice transport network element option.

6.3 Dedicated Transport

6.3.1 Definitions

6.3.2 Dedicated Transport is defined as BellSouth transmission facilities 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.

6.3.3 Unbundled Local Channel

6.3.4 Unbundled Local Channel is the dedicated transmission path between Pathnet's Point of Presence and the BellSouth Serving Wire Center's collocation.

6.3.5 Unbundled Interoffice Channel.

6.3.6 Unbundled Interoffice Channel is the dedicated transmission path that provides telecommunication between BellSouth's Serving Wire Centers' collocations.

6.3.7 BellSouth shall offer Dedicated Transport in each of the following ways:

6.3.7.1 As capacity on a shared UNE facility.

6.3.7.2 As a circuit (e.g., DS0, DS1, DS3) dedicated to Pathnet. This circuit shall consist of an Unbundled Local Channel or an Unbundled Interoffice Channel or both.

6.3.8 When Dedicated Transport is provided it shall include:

6.3.8.1 Transmission equipment such as, line terminating equipment, amplifiers, and regenerators;

6.3.8.2 Inter-office transmission facilities such as optical fiber, copper twisted pair, and coaxial cable.

6.3.9 Rates for Dedicated Transport are listed in this Attachment. For those states that do not contain rates in this Attachment the rates in the applicable State Access Tariff will apply as interim rates. When final rates are developed, these interim rates will be subject to true up, and the Parties will amend the Agreement to reflect the new rates.

6.3.10 Technical Requirements

6.3.10.1 This Section sets forth technical requirements for all Dedicated Transport.

6.3.10.2 When BellSouth provides Dedicated Transport, the entire designated transmission service (e.g., DS0, DS1, DS3) shall be dedicated to Pathnet designated traffic.

- 6.3.10.3 BellSouth shall offer Dedicated Transport in all technologies that become available including, but not limited to, (1) DS0, DS1 and DS3 transport services, and (2) SONET at available transmission bit rates.
- 6.3.10.4 For DS1 or VT1.5 circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office (“CI to CO”) connections in the appropriate industry standards.
- 6.3.10.5 Where applicable, for DS3, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for CI to CO connections in the appropriate industry standards.
- 6.3.10.6 BellSouth shall offer the following interface transmission rates for Dedicated Transport:
 - 6.3.10.6.1 DS0 Equivalent;
 - 6.3.10.6.2 DS1 (Extended SuperFrame - ESF);
 - 6.3.10.6.3 DS3 (signal must be framed);
 - 6.3.10.6.4 SDH (Synchronous Digital Hierarchy) Standard interface rates in accordance with International Telecommunications Union (ITU) Recommendation G.707 and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.
 - 6.3.10.6.5 When Dedicated Transport is provided, BellSouth shall design it according to BellSouth’s network infrastructure to allow for the termination points specified by Pathnet.
- 6.3.11 At a minimum, Dedicated Transport shall meet each of the requirements set forth in the applicable industry technical references.
 - 6.3.11.1 BellSouth Technical References:
 - 6.3.11.2 TR-TSY-000191 Alarm Indication Signals Requirements and Objectives, Issue 1, May 1986.
 - 6.3.11.3 TR 73501 LightGate[®] Service Interface and Performance Specifications, Issue D, June 1995.
 - 6.3.11.4 TR 73525 MegaLink[®] Service, MegaLink Channel Service & MegaLink Plus Service Interface and Performance Specifications, Issue C, May 1996.

6.4 Unbundled Channelization

6.4.1 BellSouth agrees to offer access to Unbundled Channelization when available pursuant to following terms and conditions and at the rates set forth in the Attachment.

6.4.2 Definition

~~6.4.1.1~~6.4.2.1 Unbundled Channelization (UC) provides the multiplexing capability that will allow a DS1 (1.544 Mbps) or DS3 (44.736 Mbps) or STS-1 Unbundled Network Element (UNE) or collocation cross-connect to be multiplexed or channelized at a BellSouth central office. This can be accomplished through the use of a stand-alone multiplexer or a digital cross-connect system at the discretion of BellSouth. Once UC has been installed, Pathnet can have channels activated on an as-needed basis by having BellSouth connect lower level UNEs via Central Office Channel Interfaces (COCI).

6.4.3 Channelization capabilities will be as follows:

~~6.4.1.1~~6.4.3.1 DS3 Channelization System: An element that channelizes a DS3 signal into 28 DS1s/STS-1s.

~~6.4.1.2~~6.4.3.2 DS1 Channelization System: An element that channelizes a DS1 signal into 24 DS0s.

6.4.3.3 Central Office Channel Interfaces (COCI): Elements that can be activated on a channelization system.

6.4.4 DS1 Central Office Channel Interface elements can be activated on a DS3 Channelization System.

6.4.5 Voice Grade and Digital Data Central Office Channel Interfaces can be activated on a DS1 Channelization System.

6.4.6 AMI and B8ZS line coding with either Super Frame (SF) and Extended Super Frame (ESF) framing formats will be supported as options.

6.4.7 COCI will be billed on the lower level UNE order that is interfacing with the UC arrangement and will have to be compatible with those UNEs.

6.4.8 Channelization may be incorporated within dedicated transport or ordered as a stand-alone capability, which requires either the high or low speed side to be connected to collocation.

6.4.9 Technical Requirements

6.4.9.1 In order to assure proper operation with BST provided central office multiplexing functionality, the customer's channelization equipment must adhere strictly to form and protocol standards. Separate standards exist for the multiplex channel bank, for voice frequency encoding, for various signaling schemes, and for subrate digital access.

~~6.4.1.2~~6.4.9.2 DS0 to DS1 Channelization

~~6.4.1.1.1~~6.4.9.2.1 The DS1 signal must be framed utilizing the framing structure defined in ANSI T1.107, *Digital Hierarchy Formats Specifications* and ANSI T1.403.02, *DS1 Robbed-bit Signaling State Definitions*. DS0 to DS1 Channelization requirements are essentially the same as defined in BellSouth Technical Reference 73525, *MegaLink[®] Service, MegaLink[®] Channel Service, MegaLink[®] Plus Service, and MegaLink[®] Light Service Interface and Performance Specification*.

~~6.4.1.3~~6.4.9.3 DS1 to DS3 Channelization

~~6.4.1.1.1~~6.4.9.3.1 The DS3 signal must be framed utilizing the framing structure define in ANSI T1.107, *Digital Hierarchy Formats Specifications*. DS1 to DS3 Channelization requirements are essentially the same as defined in BellSouth Technical Reference 73501, *LightGate[®] Service Interface and Performance Specifications*. The asynchronous M13 multiplex format (combination of M12 and M23 formats) is specified for terminal equipment that multiplexes 28 DS1s into a DS3.

~~6.4.1.4~~6.4.9.4 DS1 to STS Channelization

6.4.9.4.1 The STS-1 signal must be framed utilizing the framing structure define in ANSI T1.105, *Synchronous Optical Network (SONET) – Basic Description Including Multiplex Structure, Rates and Formats* and T1.105.02, *Synchronous Optical Network (SONET) – Payload Mappings*. DS1 to STS Channelization requirements are essentially the same as defined in BellSouth Technical Reference TR 73501, *LightGate[®] Service Interface and Performance Specifications*

6.5 Dark Fiber

6.5.1 Definition

6.5.2 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.6.4.2 Dark Fiber is unused strands of optical fiber. It may be strands of optical fiber existing in aerial or underground structure. No line terminating elements terminated to such strands to operationalize its transmission capabilities will be available. No regeneration or optical amplification will be included with this element.

6.5.3 Requirements

- 6.5.3.1 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 period, there is no requirement to provide said fiber to Pathnet.
- 6.5.3.2 If the requested dark fiber has any lightwave repeater equipment interspliced to it, BellSouth will remove such equipment at Pathnet's request subject to time and materials charges.
- 6.5.3.3 Pathnet may test the quality of the Dark Fiber to confirm its usability and performance specifications.
- 6.5.3.4 BellSouth shall use its best efforts to provide to Pathnet 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 Pathnet ("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 Pathnet's use and may not allow any other party to use such media, including BellSouth.
- 6.5.3.5 BellSouth shall use its best efforts to make Dark Fiber available to Pathnet within thirty (30) business days after it receives written confirmation from Pathnet that the Dark Fiber previously deemed available by BellSouth is wanted for use by Pathnet. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable Pathnet to connect or splice Pathnet provided transmission media (e.g., optical fiber) or equipment to the Dark Fiber.
- 6.5.3.6 Dark Fiber shall meet the manufacturer's design specifications.
- 6.5.3.7 Pathnet may splice and test Dark Fiber obtained from BellSouth using Pathnet or Pathnet 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.

6.6 Rates

6.6.1 The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

6.7 Operational Support Systems (OSS)

6.7.1 BellSouth has developed and made available the following mechanized systems by which Pathnet may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interchange
TAG	Telecommunications Access Gateway

6.7.2 LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	AL, GA, LA, MS, SC	FL, KY, NC, TN
OSS LSR charge, per LSR received from the CLEC by one of the OSS interactive interfaces	\$3.50	\$3.50
	SOMECH	SOMECH
Incremental charge per LSR received from the CLEC by means other than one of the OSS interactive interfaces	See applicable rate element	\$19.99
		SOMAN

6.7.3 Denial/Restoral OSS Charge

6.7.3.1 In the event Pathnet provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

6.7.4 Cancellation OSS Charge

6.7.4.1 Pathnet will incur an OSS charge for an accepted LSR that is later canceled by Pathnet.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

6.7.5 Network Elements and Other Services Manual Additive

- 6.7.5.1 The Commissions in some states have ordered per-element manual additive non-recurring charges (NRC) for Network Elements and Other Services ordered by means other than one of the interactive interfaces. These ordered Network Elements and Other Services manual additive NRCs will apply in these states, rather than the charge per LSR. The per-element charges are listed on the Rate Tables in Exhibit A.

7. BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of 8XX Access Ten Digit Screening Services.

7.1 BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service database

7.1.1 The BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service database (herein known as 8XX SCP) is a SCP that contains customer record information and functionality to provide call-handling instructions for 8XX calls. The 8XX SCP IN software stores data downloaded from the national SMS and provides the routing instructions in response to queries from the SSP or tandem. The BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service (herein know as 8XX TFD), utilizes the 8XX SCP to provide identification and routing of the 8XX calls, based on the ten digits dialed. 8XX TFD is provided with or without POTS number delivery, dialing number delivery, and other optional complex features as selected by Pathnet. BellSouth shall provide 8XX TFD in accordance with the following:

7.1.2 Technical Requirements

7.1.2.1 BellSouth shall provide Pathnet with access to the 8XX record information located in the 8XX SCP. The 8XX SCP contains current records as received from the national SMS and will provide for routing 8XX originating calls based on the dialed ten digit 8XX number.

7.1.2.2 The 8XX SCP is designated to receive and respond to queries using the American National Standard Specification of Signaling System Seven (SS7) protocol. The 8XX SCP shall determine the carrier identification based on all ten digits of the dialed number and route calls to the carrier, POTS number, dialing number and/or other optional feature selected by Pathnet.

7.1.2.3 The SCP shall also provide, at Pathnet's option, such additional feature as described in SR-TSV-002275 (BOC Notes on BellSouth Networks, SR-TSV-002275, Issue 2, (Telcordia (formerly BellCore), April 1994)) as are available to BellSouth. These may include but are not limited to:

7.1.2.3.1 Network Management;

7.1.2.3.2 Customer Sample Collection; and

7.1.2.3.3 Service Maintenance.

7.2 Automatic Location Identification/Data Management System (ALI/DMS)

7.2.1 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 Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. BellSouth shall provide the Emergency Services Database in accordance with the following:

7.3 Rates

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

8 Line Information Database (LIDB)

8.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of LIDB.

8.2 BellSouth will store in its LIDB only records relating to service in the BellSouth region. The LIDB Storage Agreement is included in this Attachment.

8.2.1 Definition

8.2.2 The Line Information Database (LIDB) is a transaction-oriented database accessible through Common Channel Signaling (CCS) networks. It contains records associated with end user Line Numbers and Special Billing Numbers. LIDB accepts queries from other Network Elements and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers that provides the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between BellSouth's CCS network and other CCS networks. LIDB also interfaces to administrative systems.

8.2.3 Technical Requirements

8.2.4 BellSouth will offer to Pathnet any additional capabilities that are developed for LIDB during the life of this Agreement.

8.2.4.1 BellSouth shall process Pathnet's Customer records in LIDB at least at parity with BellSouth customer records, with respect to other LIDB functions. BellSouth shall indicate to Pathnet what additional functions (if any) are performed by LIDB in the BellSouth network.

8.2.4.2 Within two (2) weeks after a request by Pathnet, BellSouth shall provide Pathnet with a list of the customer data items, which Pathnet would have to provide in order to support each required LIDB function. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.

8.2.4.3 BellSouth shall provide LIDB systems for which operating deficiencies that would result in calls being blocked shall not exceed 30 minutes per year.

8.2.4.4 BellSouth shall provide LIDB systems for which operating deficiencies that would not result in calls being blocked shall not exceed 12 hours per year.

- 8.2.4.5 BellSouth shall provide LIDB systems for which the LIDB function shall be in overload no more than 12 hours per year.
- 8.2.4.6 All additions, updates and deletions of Pathnet data to the LIDB shall be solely at the direction of Pathnet. Such direction from Pathnet will not be required where the addition, update or deletion is necessary to perform standard fraud control measures (e.g., calling card auto-deactivation).
- 8.2.4.7 BellSouth shall provide priority updates to LIDB for Pathnet data upon Pathnet's request (e.g., to support fraud detection), via password-protected telephone card, facsimile, or electronic mail within one hour of notice from the established BellSouth contact.
- 8.2.4.8 BellSouth shall provide LIDB systems such that no more than 0.01% of Pathnet customer records will be missing from LIDB, as measured by Pathnet audits. BellSouth will audit Pathnet records in LIDB against DBAS to identify record mismatches and provide this data to a designated Pathnet contact person to resolve the status of the records and BellSouth will update system appropriately. BellSouth will refer record of mis-matches to Pathnet within one business day of audit. Once reconciled records are received back from Pathnet, BellSouth will update LIDB the same business day if less than 500 records are received before 1:00PM Central Time. If more than 500 records are received, BellSouth will contact Pathnet to negotiate a time frame for the updates, not to exceed three business days.
- 8.2.4.9 BellSouth shall perform backup and recovery of all of Pathnet's data in LIDB including sending to LIDB all changes made since the date of the most recent backup copy, in at least the same time frame BellSouth performs backup and recovery of BellSouth data in LIDB for itself. Currently, BellSouth performs backups of the LIDB for itself on a weekly basis and when a new software release is scheduled, a backup is performed prior to loading the new release.
- 8.2.4.10 BellSouth shall provide Pathnet with LIDB reports of data, which are missing or contain errors, as well as any misrouted errors, within a reasonable time period as negotiated between Pathnet and BellSouth.
- 8.2.4.11 BellSouth shall prevent any access to or use of Pathnet data in LIDB by BellSouth personnel that are outside of established administrative and fraud control personnel, or by any other Party that is not authorized by Pathnet in writing.
- 8.2.4.12 BellSouth shall provide Pathnet performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners, for Customer Data that is part of an NPA-NXX or RAO-0/1XX wholly or partially owned by Pathnet at least at parity with BellSouth Customer Data. BellSouth shall obtain from Pathnet the screening

information associated with LIDB Data Screening of Pathnet data in accordance with this requirement. BellSouth currently does not have LIDB Data Screening capabilities. When such capability is available, BellSouth shall offer it to Pathnet under the Bona Fide Request/New Business Process as set forth in General Terms and Conditions.

- 8.2.4.13 BellSouth shall accept queries to LIDB associated with Pathnet customer records, and shall return responses in accordance with industry standards.
- 8.2.4.14 BellSouth shall provide mean processing time at the LIDB within 0.50 seconds under normal conditions as defined in industry standards.
- 8.2.4.15 BellSouth shall provide processing time at the LIDB within 1 second for 99% of all messages under normal conditions as defined in industry standards.

8.2.5 Interface Requirements

8.2.6 BellSouth shall offer LIDB in accordance with the requirements of this subsection.

8.2.6.1 The interface to LIDB shall be in accordance with the technical references contained within.

8.2.6.2 The CCS interface to LIDB shall be the standard interface described herein.

8.2.6.3 The LIDB Data Base interpretation of the ANSI-TCAP messages shall comply with the technical reference herein. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

8.3 Rates

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

9 Signaling

- 9.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of Signaling Transport Services.
- 9.2 BellSouth agrees to offer access to signaling and access to BellSouth's signaling databases subject to compatibility testing and at the rates set forth in this Attachment. BellSouth may provide mediated access to BellSouth signaling systems and databases. Available signaling elements include signaling links, signal transfer points and service control points. Signaling functionality will be available with both A-link and B-link connectivity.

9.3 Signaling Link Transport

- 9.3.1 Definition Signaling Link Transport is a set of two or four dedicated 56 Kbps. transmission paths between CLEC-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.
- 9.3.2 Technical Requirements
- 9.3.2.1 Signaling Link Transport shall consist of full duplex mode 56 kbps transmission paths.
- 9.3.3 Of the various options available, Signaling Link Transport shall perform in the following two ways:
- 9.3.3.1 As an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch (STP) pair; and
- 9.3.3.2 As a "B-link" which is a connection between two STP pairs in different company networks (e.g., between two STP pairs for two Competitive Local Exchange Carriers (CLECs)).
- 9.3.4 Signaling Link Transport shall consist of two or more signaling link layers as follows:
- 9.3.4.1 An A-link layer shall consist of two links.
- 9.3.4.2 A B-link layer shall consist of four links.
- 9.3.5 A signaling link layer shall satisfy a performance objective such that:
- 9.3.5.1 There shall be no more than two minutes down time per year for an A-link layer; and

- 9.3.5.2 There shall be negligible (less than 2 seconds) down time per year for a B-link layer.
- 9.3.5.3 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
 - 9.3.5.3.1 No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two separate physical paths end-to-end); and
 - 9.3.5.3.2 No two concurrent failures of facilities or equipment shall cause the failure of all four links in a B-link layer (i.e., the links should be provided on a minimum of three separate physical paths end-to-end).
- 9.3.5.4 Interface Requirements
 - 9.3.5.4.1 There shall be a DS1 (1.544 Mbps) interface at the Pathnet designated SPOIs. Each 56 kbps transmission path shall appear as a DS0 channel within the DS1 interface.

9.4 Signaling Transfer Points (STPs)

- 9.4.1 Definition - Signaling Transfer Points is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.
- 9.4.2 Technical Requirements
 - 9.4.2.1 STPs shall provide access to Network Elements connected to BellSouth SS7 network. These include:
 - 9.4.2.1.1 BellSouth Local Switching or Tandem Switching;
 - 9.4.2.1.2 BellSouth Service Control Points/DataBases;
 - 9.4.2.1.3 Third-party local or tandem switching;
 - 9.4.2.1.4 Third-party-provided STPs.
 - 9.4.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the BellSouth SS7 network. This explicitly includes the use of the BellSouth SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the BellSouth SS7 network (i.e., transient messages). When the 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.
- 9.4.2.3 If a BellSouth tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an Pathnet local switch and third party local switch, the 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 Pathnet local STPs and the STPs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to BellSouth STPs.
- 9.4.2.4 STPs shall provide all functions of the MTP as defined in the applicable industry standard technical references.
- 9.4.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as defined in Telcordia (formerly BellCore) ANSI Interconnection Requirements. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is a Pathnet or third party local or tandem switching system directly connected to BellSouth SS7 network, BellSouth shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, BellSouth shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with BellSouth SS7 network, and shall not perform SCCP Subsystem Management of the destination. If BellSouth performs final GTT to a Pathnet database, then Pathnet agrees to provide BellSouth with the Destination Point Code for the Pathnet database.
- 9.4.2.6 STPs shall provide on a non-discriminatory basis all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 12.4.5 of this Attachment. All OMAP functions will be on a "where available" basis and can include:
- 9.4.2.6.1 MTP Routing Verification Test (MRVT); and
- 9.4.2.6.2 SCCP Routing Verification Test (SRVT).
- 9.4.2.7 In cases where the destination signaling point is a BellSouth local or tandem switching system or database, or is a Pathnet 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 STPs 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 STPs, and if mutually agreed upon by Pathnet and BellSouth.

9.4.2.8 STPs shall be on parity with BellSouth.

9.4.2.9 SS7 Advanced Intelligent Network (AIN) Access

9.4.2.9.1 When technically feasible and upon request by Pathnet, SS7 Access shall be made available in association with switching. SS7 AIN Access is the provisioning of AIN 0.1, or later generation set of triggers as they become available, triggers in an equipped BellSouth local switch and interconnection of the BellSouth SS7 network with the Pathnet SS7 network to exchange TCAP queries and responses with an Pathnet SCP.

9.4.2.9.2 SS7 AIN Access shall provide Pathnet SCP access to BellSouth local switch in association with switching via interconnection of BellSouth SS7 and Pathnet SS7 Networks. BellSouth shall offer SS7 access through its STPs. If BellSouth requires a mediation device on any part of its network specific to this form of access, BellSouth must route its messages in the same manner. The interconnection arrangement shall result in the BellSouth local switch recognizing the Pathnet SCP as at least at parity with BellSouth's SCP's in terms of interfaces, performance and capabilities.

9.4.3 Interface Requirements

9.4.3.1 BellSouth shall provide the following STPs options to connect Pathnet or Pathnet-designated local switching systems or STPs to the BellSouth SS7 network:

9.4.3.1.1 An A-link interface from Pathnet local switching systems; and,

9.4.3.1.2 A B-link interface from Pathnet local STPs.

9.4.3.2 Each type of interface shall be provided by one or more sets (layers) of signaling links.

9.4.3.3 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where BellSouth STP 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 Pathnet local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs. BellSouth and Pathnet will work jointly to establish mutually acceptable SPOIs.

9.4.3.4 BellSouth CO shall provide intraoffice diversity between the SPOIs and BellSouth STPs, so that no single failure of intraoffice facilities or equipment shall cause the

- failure of both B-links in a layer connecting to a BellSouth STP. BellSouth and Pathnet will work jointly to establish mutually acceptable SPOIs.
- 9.4.3.5 STPs shall provide all functions of the MTP as defined in the applicable industry standard technical references.
- 9.4.3.6 Message Screening
- 9.4.3.6.1 BellSouth shall set message screening parameters so as to accept valid messages from Pathnet local or tandem switching systems destined to any signaling point within BellSouth's SS7 network where the Pathnet switching system has a legitimate signaling relation.
- 9.4.3.6.2 BellSouth shall set message screening parameters so as to pass valid messages from Pathnet local or tandem switching systems destined to any signaling point or network accessed through BellSouth's SS7 network where the Pathnet switching system has a legitimate signaling relation.
- 9.4.3.6.3 BellSouth shall set message screening parameters so as to accept and pass/send valid messages destined to and from Pathnet from any signaling point or network interconnected through BellSouth's SS7 network where the Pathnet SCP has a legitimate signaling relation.
- 9.4.4 STPs shall be equal to or better than all of the requirements for STPs set forth in the applicable industry standard technical references.

9.5 Service Control Points/Databases

9.5.1 Definition

- 9.5.1.1 Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Local Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System, Calling Name Database, access to Service Creation Environment and Service Management System (SCE/SMS) application databases and Directory Assistance.
- 9.5.2 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. Service Management Systems provide operational interfaces to allow for

provisioning, administration and maintenance of subscriber data and service application data stored in SCPs.

9.5.3 Technical Requirements for SCPs/Databases

9.5.3.1 Requirements for SCPs/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 SCPs/Databases shall be provided to Pathnet in accordance with the following requirements.

9.5.3.2 BellSouth shall provide physical access to SCPs through the SS7 network and protocols with TCAP as the application layer protocol.

9.5.3.3 BellSouth shall provide physical interconnection to databases via industry standard interfaces and protocols (e.g. SS7, ISDN and X.25).

9.5.3.4 The reliability of interconnection options shall be consistent with requirements for diversity and survivability.

9.5.4 Database Availability

9.5.4.1 Call processing databases shall have a maximum unscheduled availability 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 processing related databases will impact all service providers, including BellSouth, equally.

9.5.4.2 The operational interface provided by BellSouth shall complete Database transactions (i.e., add, modify, delete) for Pathnet customer records stored in BellSouth databases within 3 days, or sooner where BellSouth provisions its own customer records within a shorter interval.

9.6 Local Number Portability Database

9.6.1 Definition

9.6.2 The Permanent Number Portability (PNP) database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. PNP is currently being worked in industry forums. The results of these forums will dictate the industry direction of PNP. BellSouth agrees to provide access to the PNP database at rates, terms and conditions as set forth by BellSouth and in accordance with an effective FCC or Commission directive.

9.7 SS7 Network Interconnection

- 9.7.1 Definition.
- 9.7.2 SS7 Network Interconnection is the interconnection of Pathnet local Signaling Transfer Point Switches (STP) and Pathnet local or tandem switching systems with BellSouth STPs. This interconnection provides connectivity that enables the exchange of SS7 messages among BellSouth switching systems and databases (DBs), Pathnet local or tandem switching systems, and other third-party switching systems directly connected to the BellSouth SS7 network.
- 9.7.3 Technical Requirements
- 9.7.3.1 SS7 Network Interconnection shall provide connectivity to all components of the BellSouth SS7 network. These include:
- 9.7.3.1.1 BellSouth local or tandem switching systems;
- 9.7.3.1.2 BellSouth DBs; and
- 9.7.3.1.3 Other third-party local or tandem switching systems.
- 9.7.4 The connectivity provided by SS7 Network Interconnection shall fully support the functions of BellSouth switching systems and DBs and Pathnet or other third-party switching systems with A-link access to the BellSouth SS7 network.
- 9.7.5 If traffic is routed based on dialed or translated digits between a Pathnet local switching system and a BellSouth or other third-party local switching system, either directly or via a BellSouth tandem switching system, then it is a requirement that the BellSouth SS7 network convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the Pathnet local STPs and BellSouth or other third-party local switch.
- 9.7.6 When the capability to route messages based on Intermediate Signaling Network Identifier (ISNI) is generally available on BellSouth STPs, the BellSouth SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the BellSouth switch routes traffic based on a Carrier Identification Code (CIC).
- 9.7.7 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1.111. This includes:
- 9.7.7.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
- 9.7.7.2 Signaling Link functions, as specified in ANSI T1.111.3; and
- 9.7.7.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

- 9.7.8 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. Where the destination signaling point is a BellSouth switching system or DB, or is another third-party local or tandem switching system directly connected to the BellSouth SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination. Where the destination signaling point is an Pathnet local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of Pathnet local STPs, and shall not include SCCP Subsystem Management of the destination.
- 9.7.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.
- 9.7.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.
- 9.7.11 If and when Internetwork MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of BellSouth STPs, SS7 Network Interconnection shall provide these functions of the OMAP.
- 9.7.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:
- 9.7.12.1 MTP Performance, as specified in ANSI T1.111.6;
- 9.7.12.2 SCCP Performance, as specified in ANSI T1.112.5; and
- 9.7.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.
- 9.7.13 Interface Requirements
- 9.7.13.1 BellSouth shall offer the following SS7 Network Interconnection options to connect Pathnet or Pathnet-designated local or tandem switching systems or STPs to the BellSouth SS7 network:
- 9.7.13.1.1 A-link interface from Pathnet local or tandem switching systems; and
- 9.7.13.1.2 B-link interface from Pathnet STPs.
- 9.7.13.2 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 (CO) where the BellSouth STP 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 links for interconnecting Pathnet local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs. BellSouth and Pathnet will work jointly to establish mutually acceptable SPOI.
- 9.7.13.3 BellSouth CO shall provide intraoffice diversity between the SPOIs and the BellSouth STP, so that no single failure of intraoffice facilities or equipment shall cause the failure of both B-links in a layer connecting to a BellSouth STP. BellSouth and Pathnet will work jointly to establish mutually acceptable SPOI.
- 9.7.13.4 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP, and TCAP. These protocol interfaces shall conform to the applicable industry standard technical references.
- 9.7.13.5 BellSouth shall set message screening parameters to accept messages from Pathnet local or tandem switching systems destined to any signaling point in the BellSouth SS7 network with which the Pathnet switching system has a legitimate signaling relation.
- 9.7.13.6 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the applicable industry standard technical references.

9.8 Rates

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

10. Operator Call Processing, Inward Operator Services and Directory Assistance Services

10.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of Operator Call Processing, Inward Operator Services and Directory Assistance Services.

10.2 Operator Systems

10.2.1 Definition. 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.

10.3 Operator Service

10.3.1 Definition. 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.

10.3.2 Requirements

10.3.2.1 When Pathnet requests BellSouth to provide Operator Services, the following requirements apply:

10.3.2.1.1 BellSouth shall complete 0+ and 0- dialed local calls.

10.3.2.1.2 BellSouth shall complete 0+ intraLATA toll calls.

10.3.2.1.3 BellSouth shall process calls that are billed to Pathnet end user's calling card that can be validated by BellSouth.

10.3.2.1.4 BellSouth shall complete person-to-person calls.

10.3.2.1.5 BellSouth shall complete collect calls.

10.3.2.1.6 BellSouth shall provide the capability for callers to bill to a third party and complete such calls.

10.3.2.1.7 BellSouth shall complete station-to-station calls.

- 10.3.2.1.8 BellSouth shall process emergency calls.
- 10.3.2.1.9 BellSouth shall process Busy Line Verify and Emergency Line Interrupt requests.
- 10.3.2.1.10 BellSouth shall process emergency call trace, as they do for their End users prior to the Effective Date. Call must originate from a 911 provider.
- 10.3.2.1.11 BellSouth shall process operator-assisted directory assistance calls.
- 10.3.2.1.12 BellSouth shall adhere to equal access requirements, providing Pathnet local end users the same IXC access as provided to BellSouth end users.
- 10.3.2.1.13 BellSouth shall exercise at least the same level of fraud control in providing Operator Service to Pathnet that BellSouth provides for its own operator service.
- 10.3.2.1.14 BellSouth shall perform Billed Number Screening when handling Collect, Person-to-Person, and Billed-to-Third-Party calls.
- 10.3.2.1.15 BellSouth shall direct customer account and other similar inquiries to the customer service center designated by Pathnet.
- 10.3.2.1.16 BellSouth shall provide a feed of customer call records in “EMI” format to Pathnet in accordance with CLEC ODUF standards specified in Attachment 7.

10.3.3 Interface Requirements

- 10.3.3.1 With respect to Operator Services for calls that originate on local switching capability provided by or on behalf of Pathnet, 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 industry standards.

10.4 **Directory Assistance Service**

- 10.4.1 Definition. Directory Assistance Service provides local end user telephone number listings with the option to complete the call at the callers direction separate and distinct from local switching.
- 10.4.2 Requirements
- 10.4.3 Directory Assistance Service shall provide up to two listing requests per call. If available and if requested by Pathnet’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, Pathnet may request such requirement pursuant to the Bona Fide Request/New Business Process as set forth in General Terms and Conditions.

10.4.4 Directory Assistance Service Updates

10.4.4.1 BellSouth shall update end user listings changes daily. These changes include:

10.4.4.1.1 New end user connections: BellSouth will provide service to Pathnet that is equal to the service it provides to itself and its end users;

10.4.4.1.2 End user disconnections: BellSouth will provide service to Pathnet that is equal to the service it provides to itself and its end users; and

10.4.4.1.3 End user address changes: BellSouth will provide service to Pathnet that is equal to the service it provides to itself and its end users;

10.4.4.1.4 These updates shall also be provided for non-listed and non-published numbers for use in emergencies.

10.4.5 Branding for Operator Call Processing and Directory Assistance

10.4.5.1 The BellSouth Operator Systems Branding Feature provides a definable announcement to Pathnet 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 Pathnet to have its calls custom branded with Pathnet'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.

10.4.5.2 BellSouth offers four service levels of branding to Pathnet when ordering Directory Assistance and/or Operator Call Processing.

10.4.5.2.1 Service Level 1 - BellSouth Branding

10.4.5.2.2 Service Level 2 - Unbranded

10.4.5.2.3 Service Level 3 - Custom Branding

10.4.5.2.4 Service Level 4 - Self Branding (applicable only to Pathnet for Resale or use with an Unbundled Port when routing to an operator service provider other than BellSouth).

10.4.6 For Resellers and Use with an Unbundled Port

10.4.6.1 BellSouth Branding is the Default Service Level.

10.4.6.2 Unbranding, Custom Branding, and Self Branding require Pathnet to order selective routing for each originating BellSouth end office identified by Pathnet. Rates for Selective Routing are set forth in this Attachment.

- 10.4.6.3 Customer Branding and Self Branding require Pathnet to order dedicated trunking from each BellSouth end office identified by Pathnet, to either the BellSouth Traffic Operator Position System (TOPS) or Pathnet Operator Service Provider. Rates for trunks are set forth in applicable BellSouth tariffs.
- 10.4.6.4 Unbranding - Unbranded Directory Assistance and/or Operator Call Processing calls ride common trunk groups provisioned by BellSouth from those end offices identified by Pathnet to the BellSouth TOPS. These calls are routed to "No Announcement."
- 10.4.7 For Facilities Based Carriers
 - 10.4.7.1 All Service Levels require Pathnet to order dedicated trunking from their end office(s) point of interface to the BellSouth TOPS Switches. Rates for trunks are set forth in applicable BellSouth tariffs.
 - 10.4.7.2 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 Pathnet requires service.
- 10.4.8 Directory Assistance customized branding uses:
 - 10.4.8.1 the recording of the name;
 - 10.4.8.2 the front-end loading of the Digital Recorded Announcement Machine (DRAM) in each TOPS switch.
- 10.4.9 Operator Call Processing customized branding uses:
 - 10.4.9.1 the recording of the name;
 - 10.4.9.2 the front-end loading of the DRAM in the TOPS Switch;
 - 10.4.9.3 the back-end loading in the audio units in the Automated Alternate Billing System (AABS) in the Interactive Voice Subsystem (IVS);
 - 10.4.9.4 the 0- automation loading for the audio units in the Enhanced Billing and Access Service (EBAS) in the Network Applications Vehicle (NAV).
 - 10.4.9.5 BellSouth will provide to Pathnet 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. Pathnet end users may use the same dialing arrangements as BellSouth end users, but obtain a Pathnet branded service.

10.5 Directory Assistance Database Service (DADS)

- 10.5.1 BellSouth shall make its Directory Assistance Database Service (DADS) available solely for the expressed purpose of providing Directory Assistance type services to Pathnet end users. The term “end user” denotes any entity which obtains Directory Assistance type services for its own use from a DADS customer. Directory Assistance type service is defined as Voice Directory Assistance (DA Operator assisted and Electronic Directory Assistance (Data System assisted)). Pathnet 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 users, Pathnet agrees not to disclose DADS to others and shall provide due care in providing for the security and confidentiality of DADS. Further, Pathnet authorizes the inclusion of Pathnet Directory Assistance listings in the BellSouth Directory Assistance products.
- 10.5.2 BellSouth shall provide Pathnet initially with a base file of subscriber listings which reflect all listing change activity occurring since Pathnet’s most recent update via magnetic tape, and subsequently using electronic connectivity such as Network Data Mover to be developed mutually by Pathnet and BellSouth. Pathnet agrees to assume the costs associated with CONNECT: Direct™ connectivity, which will vary depending upon volume and mileage.
- 10.5.3 BellSouth will require approximately one month after receiving an order to prepare the Base File. BellSouth will provide daily updates which will reflect all listing change activity occurring since CLEC’s most recent update. BellSouth shall provide updates to Pathnet on a Business, Residence, or combined Business and Residence basis. Pathnet agrees that the updates shall be used solely to keep the information current. Delivery of Daily Updates will commence the day after Pathnet receives the Base File.
- 10.5.4 BellSouth is authorized to include Pathnet Directory Assistance Listing Information in its Directory Assistance Database Service (DADS). Any other use by BellSouth of Pathnet 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 Pathnet.
- 10.5.5 Rates for DADS are as set forth in this Attachment.

10.6 Direct Access to Directory Assistance Service

- 10.6.1 Direct Access to Directory Assistance Service (DADAS) will provide Pathnet’s directory assistance operators with the ability to search all available BellSouth’s subscriber listings using the Directory Assistance search format. Subscription to

- DADAS will allow Pathnet to utilize its own switch, operator workstations and optional audio subsystems.
- 10.6.2 BellSouth will provide DADAS from its DA location. Pathnet will access the DADAS system via a telephone company provided point of availability. Pathnet has the responsibility of providing the physical links required to connect to the point of availability. These facilities may be purchased from the telephone company as rates and charges billed separately from the charges associated with this offering.
- 10.6.3 A specified interface to each Pathnet subsystem will be provided by BellSouth. Interconnection between Pathnet's system and a specified BellSouth location will be pursuant to the use of Pathnet owned or Pathnet leased facilities and shall be appropriate sized based upon the volume of queries being generated by Pathnet.
- 10.6.4 The specifications for the three interfaces necessary for interconnection are available in the following documents:
- 10.6.4.1 DADAS to Subscriber Operator Position System—Northern Telecom Document CSI-2300-07; Universal Gateway/ Position Message Interface Format Specification;
- 10.6.4.2 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;
- 10.6.4.3 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.
- 10.6.5 Rates for DADAS are as set forth in this Attachment.
- 10.7 **Automatic Location Identification/Data Management System (ALI/DMS)**
- 10.7.1 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 Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. BellSouth shall provide the Emergency Services Database in accordance with the following:
- 10.7.2 Technical Requirements
- 10.7.2.1 BellSouth shall offer Pathnet a data link to the ALI/DMS database or permit Pathnet to provide its own data link to the ALI/DMS database. BellSouth shall provide error

reports from the ALI/DMS database to Pathnet immediately after Pathnet inputs information into the ALI/DMS database. Alternately, Pathnet may utilize BellSouth, to enter end user information into the data base on a demand basis, and validate end user information on a demand basis.

10.7.2.2 The ALI/DMS database shall contain the following end user information:

10.7.2.2.1 Name;

10.7.2.2.2 Address;

10.7.2.2.3 Telephone number; and

10.7.2.2.4 Other information as appropriate (e.g., whether a end user is blind or deaf or has another disability).

10.7.2.3 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 Pathnet requests otherwise and shall be updated if Pathnet requests, provided Pathnet supplies BellSouth with the updates.

10.7.2.4 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 customer record.

10.7.2.5 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.

10.7.3 Interface Requirements

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

10.8 Rates

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

11. Calling Name (CNAM) Database Service

- 11.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of CNAM.
- 11.2 The Agreement for Calling Name (CNAM) with standard pricing is included as Exhibit B to this Attachment. Pathnet must provide to its account manager a written request with a requested activation date to activate this service. If Pathnet is interested in requesting CNAM with volume and term pricing, Pathnet must contact its account manager to request a separate CNAM volume and term Agreement.
- 11.3 SCPs/Databases shall be equal to or better than all of the requirements for SCPs/Databases set forth in the applicable industry standard technical references.

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

- 11.4.1 BellSouth's Service Creation Environment and Service Management System (SCE/SMS) Advanced Intelligent Network (AIN) Access shall provide Pathnet the capability that will allow Pathnet and other third parties to create service applications in a BellSouth Service Creation Environment and deploy those applications in a BellSouth SMS to a BellSouth SCP. The third party service applications interact with AIN triggers provisioned on a BellSouth SSP.
- 11.4.2 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 Pathnet. Scheduling procedures shall provide Pathnet equivalent priority to these resources.
- 11.4.2 BellSouth SCP shall partition and protect Pathnet service logic and data from unauthorized access, execution or other types of compromise.
- 11.4.3 When Pathnet selects SCE/SMS AIN Access, BellSouth shall provide training, documentation, and technical support to enable Pathnet 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.
- 11.4.4 When Pathnet selects SCE/SMS AIN Access, BellSouth shall provide for a secure, controlled access environment in association with its internal use of AIN components. Pathnet access will be provided via remote data connection (e.g., dial-in, ISDN).

11.4.5 When Pathnet selects SCE/SMS AIN Access, BellSouth shall allow Pathnet to download data forms and/or tables to BellSouth SCP via BellSouth SMS without intervention from BellSouth (e.g., service customization and end user subscription).

11.5 Rates

The prices that Pathnet shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

12. Basic 911 and E911

12.1 All of the negotiated terms and conditions set forth in this Section pertain to the provision of Basic 911 and E911.

12.2 If Pathnet orders network elements used to provide voice service that impact 911 services and other services, then Pathnet 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 Definition

12.4 Basic 911 and E911 is an additional requirement that provides a caller access to the applicable emergency service bureau by dialing a 3-digit universal telephone number (911).

12.5 Requirements

12.5.1 Basic 911 Service Provisioning. For Basic 911 service, BellSouth will provide to Pathnet a list consisting of each municipality that subscribes to Basic 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. Pathnet will be required to arrange to accept 911 calls from its end users that can originate calls in municipalities that subscribe to Basic 911 service and translate the 911 call to the appropriate 10-digit directory number as stated on the list provided by BellSouth. Pathnet will be required to route that call to BellSouth at the appropriate tandem or end office. When a municipality converts to E911 service, Pathnet will be required to discontinue the Basic 911 procedures and being using E911 procedures.

12.5.2 E911 Service Provisioning. For E911 service, Pathnet will be required to install a minimum of two dedicated trunks originating from the Pathnet 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. Pathnet will be required to provide BellSouth daily updates to the E911 database. Pathnet 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, Pathnet will be required to route the call to a designated 7-digit local number residing

in the appropriate Public Service Answering Point (“PSAP”). This call will be transported over BellSouth’s interoffice network and will not carry the ANI of the calling party. Pathnet 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.

- 12.5.3 Rates. Charges for 911/E911 service are borne by the municipality purchasing the service. BellSouth will impose no charge on Pathnet beyond applicable charges for BellSouth trunking arrangements.
- 12.5.4 Basic 911 and E911 functions provided to Pathnet shall be at least at parity with the support and services that BellSouth provides to its end users for such similar functionality.
- 12.5.5 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 Pathnet to follow in providing 911/E911 services.

13. True-Up

This section applies only to North Carolina and Tennessee and other rates that are interim or expressly subject to true-up under this attachment.

- 13.1 The interim prices for Network Elements and Other Services and Local Interconnection shall be subject to true-up according to the following procedures:
- 13.2 The interim prices shall be trued-up, either up or down, based on final prices determined either by further agreement between the Parties, or by a final order (including any appeals) of the Commission which final order meets the criteria of (3) below. The Parties shall implement the true-up by comparing the actual volumes and demand for each item, together with interim prices for each item, with the final prices determined for each item. Each Party shall keep its own records upon which the true-up can be based, and any final payment from one Party to the other shall be in an amount agreed upon by the Parties based on such records. In the event of any disagreement as between the records or the Parties regarding the amount of such true-up, the Parties agree that the body having jurisdiction over the matter shall be called upon to resolve such differences, or the Parties may mutually agree to submit the matter to the Dispute Resolution process in accordance with the provisions of Section 16 of the General Terms and Conditions and Attachment 1 of the Agreement.

- 13.3 The Parties may continue to negotiate toward final prices, but in the event that no such Agreement is reached within nine (9) months, either Party may petition the Commission to resolve such disputes and to determine final prices for each item. Alternatively, upon mutual agreement, the Parties may submit the matter to the Dispute Resolution Process set forth in Section 16 of the General Terms and Conditions and Attachment 1 of the Agreement, so long as they file the resulting Agreement with the Commission as a “negotiated Agreement” under Section 252(e) of the Act.
- 13.4 A final order of this Commission that forms the basis of a true-up shall be the final order as to prices based on appropriate cost studies, or potentially may be a final order in any other Commission proceeding which meets the following criteria:
- (a) BellSouth and Pathnet are entitled to be a full Party to the proceeding;
 - (b) It shall apply the provisions of the federal Telecommunications Act of 1996, including but not limited to Section 252(d)(1) (which contains pricing standards) and all then-effective implementing rules and regulations; and,
 - (c) It shall include as an issue the geographic deaveraging of network element and other services prices, which deaveraged prices, if any are required by said final order, shall form the basis of any true-up.

EXHIBIT A

**LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

I. SCOPE

- A. This Agreement sets forth the terms and conditions pursuant to which BellSouth agrees to store in its LIDB certain information at the request of Pathnet and pursuant to which BellSouth, its LIDB customers and Pathnet shall have access to such information. Pathnet understands that BellSouth provides access to information in its LIDB to various telecommunications service providers pursuant to applicable tariffs and agrees that information stored at the request of Pathnet, pursuant to this Agreement, shall be available to those telecommunications service providers. The terms and conditions contained in the attached Addendum(s) are hereby made a part of this Agreement as if fully incorporated herein.
- B. LIDB is accessed for the following purposes:
1. Billed Number Screening
 2. Calling Card Validation
 3. Fraud Control
- C. BellSouth will provide seven days per week, 24-hours per day, fraud monitoring on Calling Cards, bill-to-third and collect calls made to numbers in BellSouth's LIDB, provided that such information is included in the LIDB query. BellSouth will establish fraud alert thresholds and will notify Pathnet of fraud alerts so that Pathnet may take action it deems appropriate. Pathnet understands and agrees BellSouth will administer all data stored in the LIDB, including the data provided by Pathnet pursuant to this Agreement, in the same manner as BellSouth's data for BellSouth's end user customers. BellSouth shall not be responsible to Pathnet for any lost revenue which may result from BellSouth's administration of the LIDB pursuant to its established practices and procedures as they exist and as they may be changed by BellSouth in its sole discretion from time to time.

Pathnet understands that BellSouth currently has in effect numerous billing and collection agreements with various interexchange carriers and billing clearing houses. Pathnet further understands that these billing and collection customers of BellSouth query BellSouth's LIDB to determine whether to accept various billing options from end users. Additionally, Pathnet understands that presently BellSouth has no method to differentiate between BellSouth's own billing and line data in the LIDB and such data which it includes in the LIDB on Pathnet's behalf pursuant to this Agreement. Therefore, until such time as BellSouth can and does implement in its LIDB and its supporting systems the means to differentiate Pathnet's data from BellSouth's data

and the Parties to this Agreement execute appropriate amendments hereto, the following terms and conditions shall apply:

- (a) Pathnet agrees that it will accept responsibility for telecommunications services billed by BellSouth for its billing and collection customers for Pathnet's end user accounts which are resident in LIDB pursuant to this Agreement. Pathnet authorizes BellSouth to place such charges on Pathnet's bill from BellSouth and agrees that it shall pay all such charges. Charges for which Pathnet hereby takes responsibility include, but are not limited to, collect and third number calls.
- (b) Charges for such services shall appear on a separate BellSouth bill page identified with the name of the entity for which BellSouth is billing the charge.
- (c) Pathnet shall have the responsibility to render a billing statement to its end users for these charges, but Pathnet's obligation to pay BellSouth for the charges billed shall be independent of whether Pathnet is able or not to collect from Pathnet's end users.
- (d) BellSouth shall not become involved in any disputes between Pathnet and the entities for which BellSouth performs billing and collection. BellSouth will not issue adjustments for charges billed on behalf of an entity to Pathnet. It shall be the responsibility of Pathnet and the other entity to negotiate and arrange for any appropriate adjustments.

III. FEES FOR SERVICE AND TAXES

- A. Pathnet will not be charged a fee for storage services provided by BellSouth to Pathnet, as described in Section I of this Agreement.
- B. Sales, use and all other taxes (excluding taxes on BellSouth's income) determined by BellSouth or any taxing authority to be due to any federal, state or local taxing jurisdiction with respect to the provision of the service set forth herein will be paid by Pathnet. Pathnet shall have the right to have BellSouth contest with the imposing jurisdiction, at Pathnet's expense, any such taxes that Pathnet deems are improperly levied.

IV. INDEMNIFICATION

To the extent not prohibited by law, each Party will indemnify the other and hold the other harmless against any loss, cost, claim, injury, or liability relating to or arising out of negligence or willful misconduct by the indemnifying Party or its agents or contractors in connection with the indemnifying Party's provision of services, provided, however, that any indemnity for any loss, cost, claim, injury or liability arising out of or relating to errors or omissions in the provision of services under this Agreement shall be limited as otherwise specified in this Agreement. The indemnifying Party under this Section agrees to defend any suit brought against the other Party for any such loss, cost, claim, injury or liability. The indemnified Party agrees to notify the other Party promptly, in writing, of any written claims, lawsuits, or demands for which the other Party is responsible under this Section and to cooperate in every reasonable way to facilitate defense or settlement of claims. The indemnifying Party shall not be liable under this Section for settlement by the indemnified Party of any claim, lawsuit, or demand unless the defense of the claim, lawsuit, or demand has been tendered to it in writing and the indemnifying Party has unreasonably failed to assume such defense.

V. LIMITATION OF LIABILITY

Neither Party shall be liable to the other Party for any lost profits or revenues or for any indirect, incidental or consequential damages incurred by the other Party arising from this Agreement or the services performed or not performed hereunder, regardless of the cause of such loss or damage.

VI. MISCELLANEOUS

- A. It is understood and agreed to by the Parties that BellSouth may provide similar services to other companies.
- B. All terms, conditions and operations under this Agreement shall be performed in accordance with, and subject to, all applicable local, state or federal legal and regulatory tariffs, rulings, and other requirements of the federal courts, the U. S. Department of Justice and state and federal regulatory agencies. Nothing in this Agreement shall be construed to cause either Party to violate any such legal or regulatory requirement and either Party's obligation to perform shall be subject to all such requirements.
- C. Pathnet agrees to submit to BellSouth all advertising, sales promotion, press releases, and other publicity matters relating to this Agreement wherein BellSouth's corporate or trade names, logos, trademarks or service marks or those of BellSouth's affiliated companies are mentioned or language from which the connection of said names or trademarks therewith may be inferred or implied; and Pathnet further agrees not to

- publish or use advertising, sales promotions, press releases, or publicity matters without BellSouth's prior written approval.
- D. This Agreement constitutes the entire Agreement between Pathnet and BellSouth which supersedes all prior Agreements or contracts, oral or written representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.
- E. Except as expressly provided in this Agreement, if any part of this Agreement is held or construed to be invalid or unenforceable, the validity of any other Section of this Agreement shall remain in full force and effect to the extent permissible or appropriate in furtherance of the intent of this Agreement.
- F. Neither Party shall be held liable for any delay or failure in performance of any part of this Agreement for any cause beyond its control and without its fault or negligence, such as acts of God, acts of civil or military authority, government regulations, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, strikes, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities, or acts or omissions of transportation common carriers.
- G. This Agreement shall be deemed to be a contract made under the laws of the State of Georgia, and the construction, interpretation and performance of this Agreement and all transactions hereunder shall be governed by the domestic law of such State.

**FACILITIES BASED ADDENDUM
TO LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

This is a Facilities Based Addendum to the Line Information Data Base Storage Agreement dated _____, between BellSouth Telecommunications, Inc. (“BellSouth”), and _____ (“Pathnet”), effective the ____ day of _____, _____.

I. GENERAL

This Addendum sets forth the terms and conditions for Pathnet’s provision of billing number information to BellSouth for inclusion in BellSouth’s LIDB. BellSouth will store in its LIDB the billing number information provided by Pathnet, and BellSouth will provide responses to on-line, call-by-call queries to this information for purposes specified in Section I.B. of the Agreement.

II. DEFINITIONS

- A. Billing number - a number that Pathnet creates for the purpose of identifying an account liable for charges. This number may be a line or a special billing number.
- B. Line number - a ten digit number that identifies a telephone line administered by Pathnet.
- C. Special billing number - a ten digit number that identifies a billing account established by Pathnet.
- D. Calling Card number - a billing number plus PIN number.
- E. PIN number - a four digit security code assigned by Pathnet which is added to a billing number to compose a fourteen digit calling card number.
- F. Toll billing exception indicator - associated with a billing number to indicate that it is considered invalid for billing of collect calls or third number calls or both, by Pathnet.
- G. Billed Number Screening - refers to the activity of determining whether a toll billing exception indicator is present for a particular billing number.

- H. Calling Card Validation - refers to the activity of determining whether a particular calling card number exists as stated or otherwise provided by a caller.
- I. Billing number information - information about billing number, Calling Card number and toll billing exception indicator provided to BellSouth by Pathnet.

III. RESPONSIBILITIES OF PARTIES

- A. Pathnet will provide its billing number information to BellSouth's LIDB each business day, in which there has been a change, by a method that has been mutually agreed upon by both Parties.
- B. BellSouth will store in its LIDB the billing number information provided by Pathnet. Under normal operating conditions, BellSouth shall include Pathnet's billing number information in its LIDB no later than two business days following BellSouth's receipt of such billing number information, provided that BellSouth shall not be held responsible for any delay or failure in performance to the extent such delay or failure is caused by circumstances or conditions beyond BellSouth's reasonable control. BellSouth will store in its LIDB an unlimited volume of Pathnet's working telephone numbers.
- C. BellSouth will provide responses to on-line, call-by-call queries to the stored information for the specific purposes listed in the next paragraph.
- D. BellSouth is authorized to use the billing number information provided by Pathnet to perform the following functions for authorized users on an on-line basis:
 - 1. Validate a 14 digit Calling Card number where the first 10 digits are a line number or special billing number assigned by Pathnet, and where the last four digits (PIN) are a security code assigned by Pathnet.
 - 2. Determine whether Pathnet or the subscriber has identified the billing number as one which should not be billed for collect or third number calls, or both.
- E. Pathnet will provide its own billing number information to BellSouth for storage and to be used for Billed Number Screening and Calling Card Validation. Pathnet will arrange and pay for transport of updates to BellSouth.

IV. COMPLIANCE

Unless expressly authorized in writing by Pathnet, all billing number information provided pursuant to this Addendum shall be used for no purposes other than those set forth in this Addendum.

EXHIBIT B**CALLING NAME DELIVERY (CNAM) DATABASE SERVICES****1. Definitions**

For the purpose of this Attachment, the following terms shall be defined as:

CALLING NAME DELIVERY DATABASE SERVICE (CNAM) - 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 Pathnet the opportunity to load and store its subscriber names in the BellSouth CNAM SCPs.

CALLING PARTY NUMBER (CPN) - The number of the calling party that is delivered to the terminating switch using common channel signaling system 7 (CCS7) technology, and that is contained in the Initial Address Message (IAM) portion of the CCS7 call setup.

COMMON CHANNEL SIGNALING SYSTEM 7 (CCS7) - A network signaling technology in which all signaling information between two or more nodes is transmitted over high-speed data links, rather than over voice circuits.

SERVICE CONTROL POINTs (SCPs) - The real-time data base systems that contain the names to be provided in response to queries received from CNAM SSPs.

SERVICE MANAGEMENT SYSTEM (SMS) - The main operations support system of CNAM DATABASE SERVICE. CNAM records are loaded into the SMS, which in turn downloads into the CNAM SCP.

SERVICE SWITCHING POINTs (SSPs) - Features of computerized switches in the telephone network that determine that a terminating line has subscribed to CNAM service, and then communicate with CNAM SCPs in order to provide the name associated with the calling party number.

SUBSYSTEM NUMBER (SSN) - The address used in the Signaling Connection Control Part (SCCP) layer of the SS7 protocol to designate an application at an end signaling point. A SSN for CNAM at the end office designates the CNAM application within the end office. BellSouth uses the CNAM SSN of 232.

2. Attachment

- 2.1 This Attachment contains the terms and conditions where BellSouth will provide to the Pathnet access to the BellSouth CNAM SCP for query or record storage purposes.

2.2 Pathnet shall submit to BellSouth a notice of its intent to access and utilize BellSouth CNAM Database Services pursuant to the terms and conditions of this Attachment. Said notice shall be in writing, no less than 60 days prior to Pathnet's access to BellSouth's CNAM Database Services and shall be addressed to Pathnet's Account Manager.

3. Physical Connection and Compensation

3.1 BellSouth's provision of CNAM Database Services to Pathnet requires interconnection from Pathnet to BellSouth CNAM Service Control Points (SCPs). Such interconnections shall be established pursuant to Attachment 3 of this Agreement. The appropriate charge for access to and use of the BellSouth CNAM Database service shall be as set forth in this Attachment.

3.2 In order to formulate a CNAM query to be sent to the BellSouth CNAM SCP, Pathnet shall provide its own CNAM SSP. Pathnet's CNAM SSPs must be compliant with TR-NWT-001188, "CLASS Calling Name Delivery Generic Requirements".

3.3 If Pathnet elects to access the BellSouth CNAM SCP via a third party CCS7 transport provider, the third party CCS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Telcordia (formerly BellCore)'s CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish CCS7 interconnection at the BellSouth Local Signal Transfer Points (LSTPs) serving the BellSouth CNAM SCPs that Pathnet desires to query.

3.4 **Out-Of-Region Customers**
If the customer queries the BellSouth CNAM SCP via a third party national SS7 transport provider, the third party SS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Telcordia's (formerly BellCore's) CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish SS7 interconnection at one or more of the BellSouth Gateway Signal Transfer Points (STPs). The payment of all costs associated with the transport of SS7 signals via a third party will be established by mutual agreement of the Parties in writing and shall, by this reference become an integral part of this Agreement.

4. CNAM Record Initial Load and Updates

4.1 The mechanism to be used by Pathnet for initial CNAM record load and/or updates shall be determined by mutual agreement. The initial load and all updates shall be provided by Pathnet in the BellSouth specified format and shall contain records for

every working telephone number that can originate phone calls. It is the responsibility of Pathnet to provide accurate information to BellSouth on a current basis.

- 4.2 Updates to the SMS shall occur no less than once a week, reflect service order activity affecting either name or telephone number, and involve only record additions, deletions or changes.
- 4.3 Pathnet CNAM records provided for storage in the BellSouth CNAM SCP shall be available, on a SCP query basis only, to all Parties querying the BellSouth CNAM SCP. Further, CNAM service shall be provided by each Party consistent with state and/or federal regulation.

Attachment 3
Network Interconnection

TABLE OF CONTENTS

1. Network Interconnection.....	3
2. Interconnection Trunking And Routing.....	8
3. Network Design And Management For Interconnection.....	9
4. Parity In Ordering And Provisioning.....	12
5. Local Dialing Parity.....	12
6. Interconnection Compensation.....	12
7. Frame Relay Service.....	<u>1819</u>
8. Operational Support Systems (OSS) Rates.....	<u>2122</u>
Rates.....	Exhibit A

Network Interconnection: Call Transport and Termination

The Parties shall provide interconnection with each other's networks for the transmission and routing of telephone exchange service (local) and exchange access (intraLATA toll and switched access) on the following terms:

1. Network Interconnection

All negotiated rates, terms and conditions set forth in this Attachment pertain to the provision of network interconnection.

- 1.1 Interconnection is available to both Parties through: (1) delivery of a Party's facilities to a collocation arrangement or Fiber Meet arrangement as defined in this Agreement; or (2) interconnection via purchase of facilities from the other Party. Interconnection may be provided by the Parties at any other technically feasible point. Requests to BellSouth for interconnection at other points may be made through the Bona Fide Request/New Business Request process set out in General Terms and Conditions.
- 1.2 Pathnet must establish, at a minimum, a single Point of Presence, Interface, and Interconnection with BellSouth within the LATA for the delivery of Pathnet's originated local, intraLATA toll and transit traffic. If Pathnet chooses to interconnect at a single Point of Interconnection within a LATA, the interconnection must be at a BellSouth Access Tandem. Furthermore, Pathnet must establish Points of Interconnection at all BellSouth access and local tandems where Pathnet NXXs are "homed." A "Homing" arrangement is defined by a "Final" Trunk Group between the BellSouth Tandem and Pathnet End Office switch. A "Final" Trunk Group is the last choice telecommunications path between the Tandem and End Office switch or between two end office switches. It is Pathnet's responsibility to enter its own NPA/NXX access and/or local tandem "homing" arrangements into the national Local Exchange Routing Guide (LERG).
- 1.1.1.2.1 In order for Pathnet to home its NPA/NXX(s) on a BellSouth Tandem, Pathnet's NPA/NXX(s) must be assigned to an Exchange Rate Center Area served by that BellSouth Tandem and as specified by BellSouth. The specified association between BellSouth Tandems and Exchange Rate Center Areas is defined in the *BellSouth Call Transport & Termination Service For Facility Based CLECs section of the Facility Based CLEC Activation Requirements Customer Guide* as it is revised from time to time.
- 1.3 A **Point of Presence (POP)** is the physical location (a structure where the environmental, power, air conditioning, etc. specifications for a Party's terminating equipment can be met) at which a Party establishes itself for obtaining

access to the other Party's network. The POP is the physical location within which the Point of Interfaces occur.

1.4 A **Point of Interface** is the physical telecommunications interface between BellSouth and Pathnet's interconnection functions. It establishes the technical interface and point of operational responsibility. The primary function of the Point of Interface is to serve as the terminus for the interconnection service. The Point of Interface has the following main characteristics:

1. It is a cross-connect point to allow connection, disconnection, transfer or restoration of service.
2. It is a point where BellSouth and Pathnet can verify and maintain specific performance objectives.
3. It is specified according to the interface offered in the tariff or local interconnection agreement (for example: for DS1 service the FCC # 1 tariff specifies that the interface meets the technical specifications detailed in Generic Requirements GR-342-CORE, Issue 1, December 1995.)
4. The Parties provide their own equipment (CPE) to interface with the DS0, DS1, DS3, STS1 and/or OCn circuits on the customer premises.

1.5 The **Point of Interconnection** is the point at which the originating Party delivers its originated traffic to the terminating Party's first point of switching on the terminating Party's common (shared) network for call transport and termination. Points of Interconnection are available at either Access Tandems, Local Tandems, or End Offices as described in this Agreement. Pathnet's requested Point of Interconnection will also be used for the receipt and delivery of transit traffic at BellSouth Access and Local Tandems. Points of Interconnection established at the BellSouth Local Tandem apply only to Pathnet-originated local and local originating and terminating transit traffic.

1.6 Pathnet, at its option, shall establish Points of Presence and Points of Interface for the delivery of its originated local and intraLATA toll traffic to BellSouth. The Point of Interface may not necessarily be established at the Point of Interconnection.

1.7 BellSouth, at its option, shall designate the Points of Presence and Points of Interface for the delivery of its originated local and intraLATA toll traffic to Pathnet for call transport and termination by Pathnet. The Point of Interface may not necessarily be established at the Point of Interconnection. BellSouth may designate a Point of Interface in each BellSouth flat rated local calling area.

1.8 Interconnection via Purchase of Facilities

~~1.1.1~~1.8.1 The originating Party may purchase Local Channel facilities from the terminating Party from the originating Party's specified Point of Interface to its

serving wire center. The Parties agree that charges for such Local Channel facilities are as set forth in Exhibit A to this Attachment. If a nonrecurring or recurring rate is not identified in Exhibit A for a Local Channel, the rate shall be as set forth in the appropriate BellSouth intrastate or interstate tariff for switched access services.

- 1.8.2 Additionally, either Party may purchase Dedicated Transport facilities from its designated serving wire center to the other Party's first point of switching. The Parties agree that charges for such Dedicated Transport facilities are as set forth in Exhibit A to this Attachment. If a nonrecurring or recurring rate is not identified in Exhibit A for Dedicated Transport, the rate shall be as set forth in the appropriate BellSouth intrastate or interstate tariff for switched access services.
- 1.8.3 For the purposes of this Attachment, Local Channel is defined as a switch transport facility between a Party's Point of Presence and its designated serving wire center.
- 1.8.4 For the purposes of this Attachment, Serving Wire Center is defined as the wire center owned by one Party from which the other Party would normally obtain dial tone for its Point of Presence.
- 1.8.5 For the purposes of this Attachment, Dedicated Transport is defined as a switch transport facility between a Party's designated serving wire center and the first point of switching on the other Party's common (shared) network.
- 1.9 BellSouth **Multiple Tandem Access (MTA)** provides for LATA wide BellSouth transport and termination of Pathnet-originated intraLATA toll and local traffic, that is transported by BellSouth, by establishing a Point of Interconnection at a BellSouth access tandem with routing through multiple BellSouth access tandems as required. However, Pathnet must still establish Points of Interconnection at all BellSouth access tandems where Pathnet NXXs are "homed". If Pathnet does not have NXXs homed at a BellSouth access tandem within a LATA and elects not to establish Points of Interconnection at such BellSouth access tandem, Pathnet can order MTA in each BellSouth access tandem within the LATA where it does have a Point of Interconnection and BellSouth will terminate traffic to end-users served through those BellSouth access tandems where Pathnet does not have a Point of Interconnection. MTA shall be provisioned in accordance with BellSouth's Ordering Guidelines.
- 1.9.1 MTA does not include switched access traffic that transits the BellSouth network to an Interexchange Carrier (IXC). Switched Access traffic will be delivered to and by IXCs based on Pathnet's NXX Access Tandem homing arrangement as specified by Pathnet in the national Local Exchange Routing Guide (LERG).
- 1.9.2 For Pathnet-originated local and intraLATA toll traffic that BellSouth transports but is destined for termination by a third Party network (transit traffic), BellSouth

MTA is required if multiple BellSouth access tandems are necessary to deliver the call to the third Party network.

- 1.9.3 The Parties agree that compensation for the BellSouth transport and/or termination of Pathnet's local and intraLATA toll traffic will be billed on a statewide basis at the applicable rates specified in Exhibit A to this Attachment for local traffic and at the BellSouth intrastate switched access tariff rates for intraLATA toll traffic.
- 1.9.4 To the extent Pathnet does not purchase MTA in a calling area that has multiple access tandems serving the calling area as defined by BellSouth, Pathnet must establish Points of Interconnection to every access tandem in the calling area in order to serve the entire calling area. To the extent Pathnet does not purchase MTA and provides intraLATA toll service to its customers, it may be necessary for it to establish a Point of Interconnection to additional BellSouth access tandems that serve end offices outside the local calling area. To the extent Pathnet routes its traffic in such a way that utilizes BellSouth's MTA service without properly ordering MTA service, Pathnet agrees to pay BellSouth the associated transport and termination charges.
- 1.10 Local Tandem Interconnection.
- 1.10.1 This interconnection arrangement allows Pathnet to establish a Point of Interconnection at BellSouth local tandems for: (1) the delivery of Pathnet-originated local traffic transported and terminated by BellSouth to BellSouth end offices within the local calling area as defined in BellSouth's GSST, section A3 served by those BellSouth local tandems, and (2) for local transit traffic transported by BellSouth for third party network providers who have also established Points of Interconnection at those BellSouth local tandems.
- 1.10.2 When a specified local calling area is served by more than one BellSouth local tandem, Pathnet must designate a "home" local tandem for each of its assigned NPA/NXXs and establish trunk connections to such local tandems. Additionally, Pathnet may choose to establish a Point of Interconnection at the BellSouth local tandems where it has no codes homing but is not required to do so. Pathnet may deliver local traffic to a "home" BellSouth local tandem that is destined for other BellSouth or third party network provider end offices subtending other BellSouth local tandems in the same local calling area where Pathnet does not choose to establish a Point of Interconnection. It is Pathnet's responsibility to enter its own NPA/NXX local tandem homing arrangements into the Local Exchange Routing Guide (LERG) either directly or via a vendor in order for other third party network providers to determine appropriate traffic routing to Pathnet's codes. Likewise, Pathnet shall obtain its routing information from the LERG.
- 1.10.3 Notwithstanding establishing Points of Interconnection to BellSouth's local tandems, Pathnet must also establish Points of Interconnection to BellSouth

access tandems within the LATA on which Pathnet has NPA/NXX's homed for the delivery of Interexchange Carrier Switched Access (SWA) and toll traffic, and traffic to Type 2A CMRS connections located at the access tandems. BellSouth cannot switch SWA traffic through more than one BellSouth access tandem. SWA, Type 2A CMRS or toll traffic routed to the local tandem in error will not be backhauled to the BellSouth access tandem for completion. (Type 2A CMRS interconnection is defined in BellSouth's A35 General Subscriber Services Tariff.)

1.10.4 BellSouth's provisioning of local tandem interconnection assumes that Pathnet has executed the necessary local interconnection agreements with the other third party network providers subtending those local tandems as required by the Act.

1.11 Fiber Meet

~~1.10.11.11.1~~ "Fiber-Meet" is an interconnection arrangement whereby the Parties physically interconnect their networks via an optical fiber interface (as opposed to an electrical interface) at which one Party's facilities, provisioning, and maintenance responsibility begins and the other Party's responsibility ends (i.e. Point Of Interface).

~~1.10.21.11.2~~ If Pathnet elects to interconnect with BellSouth pursuant to a Fiber Meet, Pathnet and BellSouth shall jointly engineer and operate a Synchronous Optical Network ("SONET") transmission system by which they shall interconnect their transmission and routing of local traffic via a Local Channel facility at either the DS0, DS1, or DS3 level. The Parties shall work jointly to determine the specific transmission system. However, Pathnet's SONET transmission must be compatible with BellSouth's equipment in the BellSouth Interconnection Wire Center. The same vendor's equipment and software version must be used, and the Data Communications Channel (DCC) must be turned off.

~~1.10.31.11.3~~ BellSouth shall, wholly at its own expense, procure, install and maintain the agreed upon SONET equipment in the BellSouth Interconnection Wire Center ("BIWC").

~~1.10.41.11.4~~ Pathnet shall, wholly at its own expense, procure, install and maintain the agreed upon SONET equipment in the Pathnet Interconnection Wire Center ("Pathnet Wire Center").

~~1.10.51.11.5~~ BellSouth shall designate a Point of Interface outside the BIWC as a Fiber Meet point, and shall make all necessary preparations to receive, and to allow and enable Pathnet to deliver, fiber optic facilities into the Point of Interface with sufficient spare length to reach the fusion splice point at the Point of Interface. BellSouth shall, wholly at its own expense, procure, install, and maintain the fusion splicing point in the Point of Interface. A Common Language Location Identification ("CLLI") code will be established for each Point of Interface. The

code established must be a building type code. All orders shall originate from the Point of Interface (i.e., Point of Interface to Pathnet, Point of Interface to BellSouth).

~~1.10.61.11.6~~ Pathnet shall deliver and maintain such strands wholly at its own expense. Upon verbal request by Pathnet, BellSouth shall allow Pathnet access to the Fiber Meet entry point for maintenance purposes as promptly as possible.

~~1.10.71.11.7~~ The Parties shall jointly coordinate and undertake maintenance of the SONET transmission system. Each Party shall be responsible for maintaining the components of their own SONET transmission system.

~~1.10.81.11.8~~ Each Party will be responsible for (i) providing its own transport facilities to the Fiber Meet, and (ii) the cost to build-out its facilities to such Fiber Meet.

~~1.10.91.11.9~~ Neither Party shall charge the other for its portion of the Fiber Meet facility used exclusively for non-transit local traffic (i.e. the Local Channel). Charges incurred for other services including dedicated transport facilities to the Point of Interconnection if applicable will apply. Charges for Switched and Special Access Services shall be billed in accordance with the applicable Access Service tariff (i.e. the BellSouth Interstate or Intrastate Access Services Tariff).

2. **Interconnection Trunking And Routing**

2.1 BellSouth and Pathnet shall establish interconnecting trunk groups and trunking configurations between networks including the establishment of one-way or two-way trunks in accordance with the *BellSouth Call Transport & Termination Service For Facility Based CLECs section of the Facility Based CLEC Activation Requirements Customer Guide* as it is revised from time to time.

2.2 Any Pathnet interconnection request that deviates from the standard trunking configurations as described in the *BellSouth Call Transport & Termination Service For Facility Based CLECs section of the Facility Based CLEC Activation Requirements Customer Guide* that affects traffic delivered to Pathnet from a BellSouth switch that requires special BellSouth switch translations and other network modifications will require Pathnet to submit a Bona Fide Request/New Business Request via the Bona Fide Request/New Business Request Process set forth in General Terms and Conditions.

2.3 All terms and conditions, as well as charges, both non-recurring and recurring, associated with interconnecting trunk groups between BellSouth and Pathnet not addressed in Exhibit A shall be as set forth in the appropriate BellSouth intrastate or interstate tariff for switched access services. For two-way trunking that carries the Parties' local and intraLATA toll traffic, excluding transit traffic, the Parties shall be compensated for the nonrecurring and recurring charges for trunks and DS1 facilities at 50% of the applicable contractual or tariff rates for the services

provided by each Party. Pathnet shall be responsible for ordering and paying for any two-way trunks carrying transit traffic.

2.4 The Parties shall utilize direct end office trunking under the following conditions:

(1) Tandem Exhaust - If a tandem through which the Parties are interconnected is unable to, or is forecasted to be unable to support additional traffic loads for any period of time, the Parties will mutually agree on an end office trunking plan that will alleviate the tandem capacity shortage and ensure completion of traffic between Pathnet and BellSouth's subscribers.

(2) Traffic Volume –To the extent either Party has the capability to measure the amount of traffic between a Pathnet switching center and a BellSouth end office, either Party shall install and retain direct end office trunking sufficient to handle actual or reasonably forecasted traffic volumes, whichever is greater, between a Pathnet switching center and a BellSouth end office where the traffic exceeds or is forecasted to exceed a single DS1 of local traffic per month. Either Party will install additional capacity between such points when overflow traffic between Pathnet's switching center and BellSouth's end office exceeds or is forecasted to exceed a single DS1 of local traffic per month. In the case of one way trunking, additional trunking shall only be required by the Party whose trunking has achieved the preceding usage threshold.

2.4.1 Mutual Agreement - The Parties may install direct end office trunking upon mutual agreement in the absence of the conditions (1) or (2) above and agreement will not unreasonably be withheld.

2.5 Switched Access traffic will be delivered to and by IXCs based on Pathnet's NXX Access Tandem homing arrangement as specified by Pathnet in the national Local Exchange Routing Guide (LERG).

2.6 All trunk groups will be provisioned as Signaling System 7 (SS7) capable where technically feasible.

3. Network Design And Management For Interconnection

3.1 Network Management and Changes. Both Parties will work cooperatively with each other to install and maintain the most effective and reliable interconnected telecommunications networks, including but not limited to, the exchange of toll-free maintenance contact numbers and escalation procedures. Both Parties agree to provide public notice of changes in the information necessary for the transmission and routing of services using its local exchange facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

- 3.2 Interconnection Technical Standards. The interconnection of all networks will be based upon accepted industry/national guidelines for transmission standards and traffic blocking criteria. Interconnecting facilities shall conform, at a minimum, to the telecommunications industry standard of DS-1 pursuant to Bellcore Standard No. TR-NWT-00499. Signal transfer point, Signaling System 7 (“SS7”) connectivity is required at each interconnection point. BellSouth will provide out-of-band signaling using Common Channel Signaling Access Capability where technically and economically feasible, in accordance with the technical specifications set forth in the BellSouth Guidelines to Technical Publication, TR-TSV-000905. Facilities of each Party shall provide the necessary on-hook, off-hook answer and disconnect supervision and shall hand off calling number ID (Calling Party Number) when technically feasible.
- 3.3 Quality of Interconnection. The local interconnection for the transmission and routing of telephone exchange service and exchange access that each Party provides to each other will be at least equal in quality to what it provides to itself and any subsidiary or affiliate, where technically feasible, or to any other Party to which each Party provides local interconnection.
- 3.4 Network Management Controls. Both Parties will work cooperatively with each other to apply sound network management principles by invoking appropriate network management controls (e.g., call gapping) to alleviate or prevent network congestion.
- 3.5 Common Channel Signaling. Both Parties will provide LEC-to-LEC Common Channel Signaling (“CCS”) to each other, where available, in conjunction with all traffic in order to enable full interoperability of CLASS features and functions except for call return. All CCS signaling parameters will be provided, including automatic number identification (“ANI”), originating line information (“OLI”) calling company category, charge number, etc. All privacy indicators will be honored, and each Party will cooperate with each other on the exchange of Transactional Capabilities Application Part (“TCAP”) messages to facilitate full interoperability of CCS-based features between the respective networks.
- 3.6 Forecasting Requirements. The Parties shall exchange technical descriptions and forecasts of their interconnection and traffic requirements in sufficient detail necessary to establish the interconnections required to assure traffic completion to and from all customers in their respective designated service areas. In order for BellSouth to provide as accurate reciprocal trunking forecasts as possible to Pathnet, Pathnet must timely inform BellSouth of any known or anticipated events that may affect BellSouth reciprocal trunking requirements. If Pathnet refuses to provide such information, BellSouth shall provide reciprocal trunking forecasts based only on existing trunk group growth and BellSouth’s annual estimated percentage of BellSouth subscriber line growth.

- 3.6.1 The Parties shall exchange technical descriptions and forecasts of their interconnection and traffic requirements in sufficient detail necessary to establish the interconnections required to assure traffic completion to and from all customers in their respective designated service areas. In order for BellSouth to provide as accurate reciprocal trunking forecasts as possible to Pathnet, Pathnet must timely inform BellSouth of any known or anticipated events that may affect BellSouth reciprocal trunking requirements. If Pathnet refuses to provide such information, BellSouth shall provide reciprocal trunking forecasts based only on existing trunk group growth and BellSouth's annual estimated percentage of BellSouth subscriber line growth.
- 3.6.2 Both Parties shall meet every six months or at otherwise mutually agreeable intervals for the purpose of exchanging non-binding forecast of its traffic and volume requirements for the interconnection and network elements provided under this Agreement, in the form and in such detail as agreed by the Parties. The Parties agree that each forecast provided under this Section shall be deemed "Confidential Information" in the General Terms and Conditions – Part A of this Agreement.
- 3.6.3 The trunk forecast should include trunk requirements for all of the interconnecting trunk groups for the current year plus the next two future years. The forecast meeting between the two companies may be a face-to-face meeting, video conference or audio conference. It may be held regionally or geographically. Ideally, these forecast meetings should be held at least semi-annually, or more often if the forecast is no longer usable. Updates to a forecast or portions thereof should be made whenever the Party providing the forecast deems that the latest trunk requirements exceed the original quantities by 24 trunks or 10%, whichever is greater. Either Party should notify the other Party if they have measurements indicating that a trunk group is exceeding its designed call carrying capacity and is impacting other trunk groups in the network. Also, either Party should notify the other Party if they know of situations in which the traffic load is expected to increase significantly and thus affect the interconnecting trunk requirements as well as the trunk requirements within the other Party's network. The Parties agree that the forecast information provided under this Section shall be deemed "Confidential Information" as set forth in the General Terms and Conditions of this Agreement.
- 3.6.4 For a non-binding trunk forecast, agreement between the two Parties on the trunk quantities and the timeframe of those trunks does not imply any liability for failure to perform if the trunks are not available for use at the required time.
- 3.6.5 Signaling Call Information. BellSouth and Pathnet will send and receive 10 digits for local traffic. Additionally, BellSouth and Pathnet will exchange the proper call information, i.e. originated call company number and destination call company number, CIC, and OZZ, including all proper translations for routing between networks and any information necessary for billing.

4. Parity In Ordering And Provisioning

Each Party shall provide interconnection ordering and provisioning services to the other Party that are equal to the ordering and provisioning services the Parties provide themselves. Detailed procedures for ordering and provisioning BellSouth interconnection services are set forth in the *BellSouth Call Transport & Termination Service For Facility Based CLECs section of the Facility Based CLEC Activation Requirements Customer Guide*.

5. Local Dialing Parity

Each Party shall provide local dialing parity, meaning that each Party's customers will not have to dial any greater number of digits than the other Party's customers to complete the same call. In addition, under equivalent interconnection arrangements, Pathnet local service customers will experience at least the same quality as BellSouth local service customers regarding post-dial delay, call completion rate and transmission quality.

6. Interconnection Compensation

6.1 Compensation for Call Transportation and Termination for Local Traffic

6.1.1 Local Traffic is defined as any telephone call that originates in one exchange and terminates in either the same exchange, or other local calling area associated with the originating exchange as defined and specified in Section A3 of BellSouth's General Subscriber Service Tariff. As clarification of this definition and for reciprocal transport and termination compensation, Local Traffic does not include traffic that originates from or is directed to or through an enhanced service provider or information service provider. Enhanced Service Provider ("ESP") or Information Service Provider ("ISP") traffic shall be handled in accordance with Section 6.10 of this Attachment. As further clarification, Local Traffic does not include calls that do not transmit information of the user's choosing. In any event, neither Party will pay reciprocal compensation to the other if the "traffic" to which such reciprocal compensation would otherwise apply was generated, in whole or in part, for the purpose of creating an obligation on the part of the originating carrier to pay reciprocal compensation for such traffic.

6.1.2 The Parties shall provide for the mutual and reciprocal recovery of the costs for the elemental functions performed in transporting and terminating local traffic on each other's network. The Parties agree that charges for transport and termination of calls on its respective networks are as set forth in Exhibit A to this Attachment.

- 6.1.3 For the purposes of this Attachment, Common (Shared) Transport is defined as the transport of one Party's traffic by the other Party over the other Party's common (shared) facilities between the other Party's tandem switch and end office switch and/or between the other Party's tandem switches.
- 6.1.4 For the purposes of this Attachment, Tandem Switching is defined as the function that establishes a communications path between two switching offices through a third switching office (the Tandem switch).
- 6.1.5 For the purposes of this Attachment, End Office Switching is defined as the function that establishes a communications path between the trunk side and line side of the End Office switch.
- 6.1.6 If Pathnet utilizes a switch outside the LATA and BellSouth chooses to purchase dedicated or common (shared) transport from Pathnet for transport and termination of BellSouth originated traffic, BellSouth will pay Pathnet no more than the airline miles between the V & H coordinates of the Point of Interface within the LATA where Pathnet receives the BellSouth-originated traffic and the V & H coordinates of the BellSouth Exchange Rate Center Area that the Pathnet terminating NPA/NXX is associated in the same LATA. For these situations, BellSouth will compensate Pathnet at either dedicated or common (shared) transport rates specified in Exhibit A and based upon the functions provided by Pathnet as defined in this Attachment.
- 6.1.7 Neither Party shall represent access services traffic (e.g. Internet Protocol (IP) Telephony, FGA, FGB, etc.) as Local Traffic for purposes of payment of reciprocal compensation.
- 6.2 Unidentifiable traffic. Pathnet shall utilize its NPA/NXXs in such a way and will provide the necessary information so that BellSouth shall be able to distinguish Local from IntraLATA Toll traffic for BellSouth originated traffic. Pathnet end users' assigned NPA/NXX line numbers shall be physically located in the BellSouth rate center with which the NPA/NXX has been associated. Whenever BellSouth delivers traffic to Pathnet for termination on the Pathnet's network, if BellSouth cannot determine, because of the manner in which Pathnet has utilized its NXX codes whether the traffic is local or toll, BellSouth will charge the applicable rates for originating intrastate network access service as reflected in BellSouth's Intrastate Access Service Tariff. BellSouth will make appropriate billing adjustments if Pathnet can provide sufficient information for BellSouth to determine whether said traffic is local or toll.
- 6.3 Percent Local Use. Each Party will report to the other a Percentage Local Usage ("PLU"). The application of the PLU will determine the amount of local minutes to be billed to the other Party. For purposes of developing the PLU, each Party shall consider every local call and every long distance call, excluding intermediary traffic. By the first of January, April, July and October of each year, BellSouth

and Pathnet shall provide a positive report updating the PLU. Detailed requirements associated with PLU reporting shall be as set forth in BellSouth's Standard Percent Local Use Reporting Platform for Interconnection Purchasers, as it is amended from time to time during this Agreement. Notwithstanding the foregoing, where the terminating Party has message recording technology that identifies the jurisdiction of traffic terminated as defined in this Agreement, such information, in lieu of the PLU factor, shall at the terminating Party's option be utilized to determine the appropriate local usage compensation to be paid.

6.4 Percentage Interstate Usage. For combined interstate and intrastate Pathnet traffic terminated by BellSouth over the same facilities, Pathnet will be required to provide a projected Percentage Interstate Usage ("PIU") to BellSouth. All jurisdictional report requirements, rules and regulations for Interexchange Carriers specified in BellSouth's Intrastate Access Services Tariff will apply to Pathnet. After interstate and intrastate traffic percentages have been determined by use of PIU procedures, the PLU factor will be used for application and billing of local interconnection. Notwithstanding the foregoing, where the terminating Party has message recording technology that identifies the jurisdiction of traffic terminated as defined in this Agreement, such information, in lieu of the PIU and PLU factor, shall at the terminating Party's option be utilized to determine the appropriate local usage compensation to be paid.

6.5 Audits. On thirty (30) days written notice, each Party must provide the other the ability and opportunity to conduct an annual audit to ensure the proper billing of traffic. BellSouth and Pathnet shall retain records of call detail for a minimum of nine months from which a PLU and/or PIU can be ascertained. The audit shall be accomplished during normal business hours at an office designated by the Party being audited. Audit requests shall not be submitted more frequently than one (1) time per calendar year. Audits shall be performed by a mutually acceptable independent audatory paid for by the Party requesting the audit. The PLU and/or PIU shall be adjusted based upon the audit results and shall apply to the usage for the quarter the audit was completed, to the usage for the quarter prior to the completion of the audit, and to the usage for the two quarters following the completion of the audit. If, as a result of an audit, either Party is found to have overstated the PLU and/or PIU by twenty percentage points (20%) or more, that Party shall reimburse the auditing Party for the cost of the audit.

6.6 Rate True-up

This section applies only to North Carolina and Tennessee.

~~6.1.16.6.1~~ 6.1.16.6.1 The interim prices for Unbundled Network Elements and Other Services and Local Interconnection shall be subject to true-up according to the following procedures:

6.1.26.6.2 The interim prices shall be true-up, either up or down, based on final prices determined either by further agreement between the Parties, or by a final order (including any appeals) of the Commission which final order meets the criteria of (3) below. The Parties shall implement the true-up by comparing the actual volumes and demand for each item, together with interim prices for each item, with the final prices determined for each item. Each Party shall keep its own records upon which the true-up can be based, and any final payment from one Party to the other shall be in an amount agreed upon by the Parties based on such records. In the event of any disagreement as between the records or the Parties regarding the amount of such true-up, the Parties agree that the body having jurisdiction over the matter shall be called upon to resolve such differences, or the Parties may mutually agree to submit the matter to the Dispute Resolution process in accordance with the provisions of Section 12 of the General Terms and Conditions and Attachment 1 of the Agreement.

6.1.36.6.3 The Parties may continue to negotiate toward final prices, but in the event that no such agreement is reached within nine (9) months, either Party may petition the Commission to resolve such disputes and to determine final prices for each item. Alternatively, upon mutual agreement, the Parties may submit the matter to the Dispute Resolution Process set forth in the General Terms and Conditions of the Agreement, so long as they file the resulting Agreement with the Commission as a “negotiated agreement” under Section 252(e) of the Act.

6.1.46.6.4 A final order of this Commission that forms the basis of a true-up shall be the final order as to prices based on appropriate cost studies, or potentially may be a final order in any other Commission proceeding which meets the following criteria:

- (a) BellSouth and Pathnet is entitled to be a full Party to the proceeding;
- (b) It shall apply the provisions of the federal Telecommunications Act of 1996, including but not limited to Section 252(d)(1) (which contains pricing standards) and all then-effective implementing rules and regulations; and,
- (c) It shall include as an issue the geographic deaveraging of unbundled element prices, which deaveraged prices, if any are required by said final order, shall form the basis of any true-up.

6.7 Compensation for IntraLATA Toll Traffic

6.1.16.7.1 IntraLATA Toll Traffic. IntraLATA Toll Traffic is defined as any telephone call that is not local or switched access per this Agreement.

6.1.26.7.2 Compensation for intraLATA toll traffic. For terminating its intraLATA toll traffic on the other company’s network, the originating Party will pay the terminating Party BellSouth’s current intrastate or interstate, whichever is

appropriate, terminating switched access tariff rates as set forth in BellSouth's Intrastate or Interstate Access Services Tariff. The appropriate charges will be determined by the routing of the call. If Pathnet is the BellSouth end user's presubscribed interexchange carrier or if the BellSouth end user uses Pathnet as an interexchange carrier on a 101XXXX basis, BellSouth will charge Pathnet the appropriate BellSouth tariff charges for originating switched access services.

6.1.36.7.3 Compensation for 8XX Traffic. Each Party shall compensate the other pursuant to the appropriate switched access charges, including the database query charge as set forth in the BellSouth intrastate or interstate switched access tariffs.

6.1.46.7.4 Records for 8XX Billing. Each Party will provide to the other the appropriate records necessary for billing intraLATA 8XX customers. The records provided will be in a standard EMI format for a fee of \$0.013 per record.

6.1.56.7.5 8XX Access Screening. BellSouth's provision of 8XX TFD to Pathnet requires interconnection from Pathnet to BellSouth 8XX SCP. Such interconnections shall be established pursuant to BellSouth's Common Channel Signaling Interconnection Guidelines and Bellcore's CCS Network Interface Specification document, TR-TSV-000905. Pathnet shall establish CCS7 interconnection at the BellSouth Local Signal Transfer Points serving the BellSouth 8XX SCPs that Pathnet desires to query. The terms and conditions for 8XX TFD are set out in BellSouth's Intrastate Access Services Tariff as amended.

6.8 Mutual Provision of Switched Access Service

Switched Access Traffic. Switched Access Traffic is as defined in the BellSouth Access Tariff. Additionally, interLATA or intraLATA toll traffic routed over the public switched network that is in part completed using internet protocol technology, where the traffic is originated from or terminated to a telephone, is considered switched access telephony traffic.

6.1.16.8.1

6.8.2 When BellSouth and Pathnet provide an access service connection between an interexchange carrier ("IXC") and each other, each Party will provide its own access services to the IXC on a multi-bill, multi-tariff meet-point basis. Each Party will bill its own access services rates to the IXC with the exception of the interconnection charge. The interconnection charge will be billed by the Party providing the end office function. Each party will use the Multiple Exchange Carrier Access Billing (MECAB) system to establish meet point billing for all applicable traffic. Thirty (30)-day billing periods will be employed for these arrangements. The recording Party agrees to provide to the initial billing Party, at no charge, the switched access detailed usage data within no more than sixty (60) days after the recording date. The initial billing Party will provide the switched access summary usage data to all subsequent billing Parties within 10 days of rendering the initial bill to the IXC. Each Party will notify the other when it is not feasible to meet these requirements so that the customers may be notified for

any necessary revenue accrual associated with the significantly delayed recording or billing. As business requirements change data reporting requirements may be modified as necessary.

6.1.36.8.3 Where either Party has been notified that the other Party has a Billing Guarantee Practice, each Party so notified (the Initial Billing Party or the recording Party) will be held liable for any access revenues which it has caused to be determined unbillable under the guidelines of such Billing Guarantee Practice of the other Party. Each Party will provide complete documentation to the other to substantiate any claim of unbillable access revenues. A negotiated settlement will be agreed upon between the Parties.

6.1.46.8.4 Each Party will retain for a minimum period of sixty (60) days, access message detail sufficient to recreate any data which is lost or damaged by their company or any third party involved in processing or transporting data.

6.1.56.8.5 Each Party agrees to recreate the lost or damaged data within forty-eight (48) hours of notification by the other or by an authorized third party handling the data.

6.1.66.8.6 Each Party also agrees to process the recreated data within forty-eight (48) hours of receipt at its data processing center.

6.1.76.8.7 All claims should be filed with the other Party within 120 days of the receipt of the date of the unbillable usage.

6.1.86.8.8 The Initial Billing Party shall keep records of its billing activities relating to jointly-provided Intrastate and Interstate access services in sufficient detail to permit the Subsequent Billing Party to, by formal or informal review or audit, to verify the accuracy and reasonableness of the jointly-provided access billing data provided by the Initial billing Party. Each Party agrees to cooperate in such formal or informal reviews or audits and further agrees to jointly review the findings of such reviews or audits in order to resolve any differences concerning the findings thereof.

6.9 Transit Traffic Service. Each Party shall provide tandem switching and transport services for the other's transit traffic. Transit traffic is traffic originating on one Party's network that is switched and transported by the other Party and delivered to a third party's network. Rates for local transit traffic shall be the applicable call transport and termination charges as set forth in Exhibit A to this Attachment. Rates for intraLATA toll and Switched Access transit traffic shall be the applicable call transport and termination charges as set forth in BellSouth Interstate or Intrastate Switched Access tariffs. Billing associated with all transit traffic shall be pursuant to MECAB procedures. Wireless Type 1 traffic shall not be treated as transit traffic from a routing or billing perspective. Wireless Type 2A traffic shall not be treated as transit traffic from a routing or billing perspective

until BellSouth and the Wireless carrier have the capability to properly meet-point-bill in accordance with MECAB guidelines.

~~6.1.16.9.1~~ 6.1.16.9.1 The delivery of traffic which transits the BellSouth network and is transported to another carrier's network is excluded from nay BellSouth billing guarantees and will be delivered at the rates stipulated in this Agreement to a terminating carrier. BellSouth agrees to deliver this traffic to the terminating carrier; provided, however, that Pathnet is solely responsible for negotiating and executing any appropriate contractual agreements with the terminating carrier for the receipt of this traffic through the BellSouth network. BellSouth will not be liable for any compensation to the terminating carrier or to Pathnet. Pathnet agrees to compensate BellSouth for any charges or costs for the delivery of transit traffic to a connecting carrier on behalf of Pathnet. Additionally, the Parties agree that any billing to a third party or other telecommunications carrier under this section shall be pursuant to MECAB procedures.

6.10 ESP/ISP Traffic

6.10.1 The Parties agree to act in accordance with Section 6.10.2 if either of the following occurs: (i) the FCC's issuance of an order subsequent to its Notice of Proposed Rulemaking in CC Docket 96-98 adopted February 25, 1999, governing compensation for traffic directed to an ESP or ISP on a prospective basis ("Order"), or (ii) a state Commission's issuance of a ruling ("State Order") in a generic proceeding governing compensation for ISP and ESP traffic unrelated to any specific contract(s) or contractual interpretation and made applicable to all carriers or to the Parties specifically, including any ruling based upon the FCC's issuance of rules establishing a process for negotiation and arbitration of issues related to compensation for traffic directed to ESPs and ISPs.

6.10.2 If either of the events described in 6.10.1 occurs, then upon such FCC Order or State Order becoming effective, the Parties will pay such ordered compensation, if any, retroactively from the effective date of this Agreement to the date of expiration of this Agreement, regardless of the length of any appeals thereof, and regardless of whether this Agreement has expired as of the time that the Order or State Order is issued or becomes effective. The Parties acknowledge that the terms of any State Order shall apply solely to the state for which the same is issued unless the Parties expressly agree otherwise in writing.

6.10.3 The Parties shall use best efforts to segregate for billing purposes ESP and ISP traffic from Local Traffic as otherwise defined herein. Throughout the term of this Agreement, the Parties will maintain billing records identifying all ESP and ISP traffic as stated in the General Terms and Conditions of this Agreement, and will act in good faith, utilizing their best efforts to track ISP or ESP traffic accurately. Any information exchanged by the Parties will be treated by the Parties as proprietary and confidential pursuant to section 10 of the General Terms and Conditions of this Agreement.

7. Frame Relay Service

- 7.1 In addition to the Local Interconnection services set forth above, BellSouth will offer a network to network Interconnection arrangement between BellSouth's and Pathnet's frame relay switches as set forth below. The following provisions will apply only to Frame Relay Service and Exchange Access Frame Relay Service in those states in which Pathnet is certified and providing Frame Relay Service as a Local Exchange Carrier and where traffic is being exchanged between Pathnet and BellSouth Frame Relay Switches in the same LATA.
- 7.2 The Parties agree to establish two-way Frame Relay facilities between their respective Frame Relay Switches to the mutually agreed upon Frame Relay Service point(s) of interconnection ("POI(s)") within the LATA. All POIs shall be within the same Frame Relay Network Serving Areas as defined in Section A40 of BellSouth's General Subscriber Service Tariff except as set forth in this Attachment.
- 7.3 Upon the request of either Party, such interconnection will be established where BellSouth and Pathnet have Frame Relay Switches in the same LATA. Where there are multiple Frame Relay switches in one central office, an interconnection with any one of the switches will be considered an interconnection with all of the switches at that central office for purposes of routing packet traffic.
- 7.4 The Parties agree to provision local and IntraLATA Frame Relay Service and Exchange Access Frame Relay Service (both intrastate and interstate) over Frame Relay interconnection facilities between the respective Frame Relay switches and the POIs.
- 7.5 The Parties agree to assess each other reciprocal charges for the facilities that each provides to the other according to the Percent Local Circuit Use Factor (PLCU), determined as follows:
- ~~7.1-7.5.1~~ 7.1-7.5.1 If the data packets originate and terminate in locations in the same LATA, and consistent with the local definitions of the Agreement, the traffic is considered local. Frame Relay framed packet data is transported within Virtual Circuits (VC). For the purposes of this Agreement, if all the data packets transported within a VC remain within the LATA, then consistent with the local definitions in this Agreement, the traffic on that VC is local ("Local VC").
- ~~7.1-7.5.2~~ 7.1-7.5.2 If the originating and terminating locations of the two way packet data traffic are not in the same LATA, the traffic on that VC is interLATA ("InterLATA VC").
- ~~7.1-7.5.3~~ 7.1-7.5.3 The PLCU is determined by dividing the total number of Local VCs, by the total number of VCs on each Frame Relay facility. To facilitate implementation, Pathnet may determine its PLCU in aggregate, by dividing the total number of Local VCs in a given LATA by the total number VCs in that LATA. The Parties

agree to renegotiate the method for determining PLCU, at either party's request, and within 90 days, if the requesting party notifies the other party that it has found that this method does not adequately represent the PLCU.

7.1.47.5.4 If there are no VCs on a facility when it is billed, the PLCU will be zero.

7.1.57.5.5 BellSouth will provide the circuit between the Parties' respective Frame Relay Switches. The Parties will be compensated as follows: BellSouth will invoice, and Pathnet will pay, the total non-recurring and recurring charges for the circuit based upon the rates set forth in BellSouth's Interstate Access Tariff, FCC No. 1. Pathnet will then invoice, and BellSouth will pay, an amount calculated by multiplying the BellSouth billed charges for the circuit by one-half of Pathnet's PLCU.

7.6 The Parties agree to compensate each other for Frame Relay network-to-network interface (NNI) ports based upon the NNI rates set forth in BellSouth's Interstate Access Tariff, FCC No. 1. Compensation for each pair of NNI ports will be calculated as follows: BellSouth will invoice, and Pathnet will pay, the total non-recurring and recurring charges for the NNI port. Pathnet will then invoice, and BellSouth will pay, an amount calculated by multiplying the BellSouth billed non-recurring and recurring charges for the NNI port by Pathnet's PLCU.

7.7 Each Party agrees that there will be no charges to the other Party for its own subscriber's Permanent Virtual Circuit (PVC) rate elements for the local PVC segment from its Frame Relay switch to its own subscriber's premises. PVC rate elements include the Data Link Connection Identifier (DLCI) and Committed Information Rate (CIR).

7.8 For the PVC segment between the Pathnet and BellSouth Frame Relay switches, compensation for the PVC charges is based upon the rates in BellSouth's Interstate Access Tariff, FCC No. 1.

7.9 Compensation for PVC rate elements will be calculated as follows:

7.1.47.9.1 If Pathnet orders a VC connection between a BellSouth subscriber's PVC segment and a PVC segment from the BellSouth Frame Relay switch to the Pathnet Frame Relay switch, BellSouth will invoice, and Pathnet will pay, the total non-recurring and recurring PVC charges for the PVC segment between the BellSouth and Pathnet Frame Relay switches. If the VC is a Local VC, Pathnet will then invoice and BellSouth will pay, the total nonrecurring and recurring PVC charges billed for that segment. If the VC is not local, no compensation will be paid to Pathnet for the PVC segment.

7.1.27.9.2 If BellSouth orders a Local VC connection between a Pathnet subscriber's PVC segment and a PVC segment from the Pathnet Frame Relay switch to the BellSouth Frame Relay switch, BellSouth will invoice, and Pathnet will pay, the

total non-recurring and recurring PVC and CIR charges for the PVC segment between the BellSouth and Pathnet Frame Relay switches. If the VC is a Local VC, Pathnet will then invoice and BellSouth will pay the total non-recurring and recurring PVC and CIR charges billed for that segment. If the VC is not local, no compensation will be paid to Pathnet for the PVC segment.

7.1.37.9.3 The Parties agree to compensate each other for requests to change a PVC segment or PVC service order record, according to the Feature Change charge as set forth in the BellSouth access tariff BellSouth Tariff FCC No, 1.

7.1.47.9.4 If Pathnet requests a change, BellSouth will invoice and Pathnet will pay a Feature Change charge for each affected PVC segment.

7.1.1.17.9.4.1 If BellSouth requests a change to a Local VC, Pathnet will invoice and BellSouth will pay a Feature Change charge for each affected PVC segment.

7.1.57.9.5 The Parties agree to limit the sum of the CIR for the VCs on a DS1 NNI port to not more than three times the port speed, or not more than six times the port speed on a DS3 NNI port.

7.1.67.9.6 Except as expressly provided herein, this Agreement does not address or alter in any way either Party's provision of Exchange Access Frame Relay Service or interLATA Frame Relay Service. All charges by each Party to the other for carriage of Exchange Access Frame Relay Service or interLATA Frame Relay Service are included in the BellSouth access tariff BellSouth Tariff FCC No, 1.

7.10 Pathnet will identify and report quarterly to BellSouth the PLCU of the Frame Relay facilities it uses, per section 8.5.3 above.

7.11 Either Party may request a review or audit of the various service components, consistent with the provisions of section E2 of the BellSouth State Access Services tariffs or Section 2 of the BellSouth FCC No.1 Tariff.

7.12 If during the term of this Agreement, BellSouth obtains authority to provide interLATA Frame Relay in any State, the Parties agree to renegotiate this arrangement for the exchange of Frame Relay Service Traffic within one hundred eighty (180) days of the date BellSouth receives interLATA authority. In the event the Parties fail to renegotiate this Section 8 within the one hundred eighty day period, they will submit this matter to the appropriate State commission(s) for resolution.

7. Operational Support Systems (OSS) Rates

BellSouth has developed and made available the following mechanized systems by which Pathnet may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interface
EDI-PC	Electronic Data Interface – Personal Computer
TAG	Telecommunications Access Gateway

LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	AL, GA, LA, MS, SC	FL, KY, NC, TN
OSS LSR charge, per LSR received from the CLEC by one of the OSS interactive interfaces	\$3.50	\$3.50
	SOMECH	SOMECH
Incremental charge per LSR received from the CLEC by means other than one of the OSS interactive interfaces	See applicable rate element	\$19.99
		SOMAN

Note: In addition to the OSS charges, applicable discounted service order and related discounted charges apply per the tariff.

8.1 Denial/Restoral OSS Charge

In the event Pathnet provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

8.2 Cancellation OSS Charge

Pathnet will incur an OSS charge for an accepted LSR that is later canceled by Pathnet.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

8.3 Network Elements and Other Services Manual Additive

The Commissions in Alabama, Georgia, Louisiana, Mississippi and South Carolina have ordered incremental manual non-recurring charges (NRC) for Network Elements and Other Services ordered by means other than one of the interactive interfaces. These ordered Network Elements and Other Services manual additive NRCs will apply in these states, rather than the charge per LSR.

8.4 Threshold Billing Plan

The Parties agree that Pathnet will incur the mechanized rate for all LSRs, both mechanized and manual, if the percentage of mechanized LSRs to total LSRs **meets or** exceeds the threshold percentages shown below:

Year	Ratio: Mechanized/Total LSRs
1999	70%
2000	80%
2001	90%

The threshold plan will be discontinued in 2002.

BellSouth will track the total LSR volume for each CLEC for each quarter. At the end of that time period, a Percent Electronic LSR calculation will be made for that quarter based on the LSR data tracked in the LCSC. If this percentage exceeds the threshold volume, all of that CLECs' future manual LSRs will be billed at the mechanized LSR rate. To allow time for obtaining and analyzing the data and updating the billing system, this billing change will take place on the first day of the second month following the end of the quarter (e.g. May 1 for 1Q, Aug 1 for 2Q, etc.). There will be no adjustments to the amount billed for previously billed LSRs.