

**Interconnection
Agreement**

Dated as of October 14, 1999

by and between

**AMERITECH INFORMATION INDUSTRY SERVICES,
a division of Ameritech Services, Inc.
on behalf of Ameritech Michigan**

and

THUMB CELLULAR

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Interconnection Agreement

This Agreement, dated _____, 1999 is by and between Ameritech Information Industry Services, a division of Ameritech Services, Inc., a Delaware Corporation with offices at 350 North Orleans, Third Floor, Chicago, Illinois 60654 on behalf of Ameritech Michigan ("Ameritech") and Thumb Cellular, on behalf of itself and its affiliates and markets operated by it, with offices at 82 South Main Street, Pigeon, MI 48755 ("Carrier").

WHEREAS, Ameritech is a Local Exchange Carrier in the state of Michigan;

WHEREAS, Carrier, is a Commercial Mobile Radio Service provider operating within the state of Michigan;

WHEREAS, Ameritech and Carrier exchange calls between each other's networks and wish to establish, reciprocal compensation arrangements for these calls;

NOW THEREFORE, in consideration of the covenants and undertakings set forth herein, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Ameritech and Carrier hereby agree as follows:

1.0 DEFINITIONS

Capitalized terms used in this Agreement shall have the meanings specified below in this Section 1.0 and as defined elsewhere within this Agreement.

"Access Tandem" or "Tandem" - An Ameritech switching system that provides a concentration and distribution function for originating or terminating traffic between end offices, and/or a customer's premises and is capable of providing Feature Group D service.

"Access Tariff" means any applicable Ameritech tariff which sets forth the rates, terms and conditions upon which Ameritech offers Exchange Access, As Defined in the Act.

"Access Traffic" means Telecommunications traffic between a LEC and an IXC or between a CMRS provider and an IXC which is carried on Feature Group D trunks.

"Act" means the Communications Act of 1934 (47 U.S.C. Section 151 et seq.), as amended by the Telecommunications Act of 1996, and as from time to time

interpreted in the duly authorized rules and regulations of the FCC or the Commission having authority to interpret the Act within its state of jurisdiction.

"Affiliate" is As Defined in the Act.

"Ameritech's System" - The communications network of Ameritech.

"As Defined in the Act" means as specifically defined by the Act and as from time to time interpreted in the duly authorized rules and regulations of the FCC or the Commission.

"Calling Party Number" (CPN) - A Common Channel Interoffice Signaling parameter which refers to the number transmitted through a network identifying the calling party.

"Calling Party Pays Traffic" means calls made in connection with a service where a caller to a CMRS subscriber agrees to pay the charges for the call. Typically, an announcement is played giving the caller the option to accept the charges or to end the call without incurring charges.

"Carrier's System" - The communications system of the Carrier used to furnish commercial mobile radio services.

"CCS" means one hundred (100) call seconds.

"Central Office Switch" - A switch used to provide Telecommunications Services, including, but not limited to:

- (a) End Office Switches; and
- (b) Tandems.

A Central Office Switch may also be employed as a combination End Office/Tandem Office Switch.

"Commercial Mobile Radio Service" or "CMRS" is As Defined in the Act.

"Commission" means the Michigan Public Service Commission.

"Common Channel Interoffice Signaling" or "CCIS" means the signaling system, developed for use between switching systems with stored-program control, in which all of the signaling information for one or more groups of trunks is transmitted over a dedicated high-speed data link rather than on a per-trunk

basis and, unless otherwise agreed by the Parties, the CCIS used by the Parties shall be SS7.

"End Office Switch" - An Ameritech switching system where telephone loops are terminated for purposes of interconnection to each other and to Ameritech's system. An End Office Switch includes any Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

"FCC" means the Federal Communications Commission.

"ILEC" - As Defined in the Act.

"Information Services Traffic" means traffic delivered to Information Service providers as that term is defined in FCC Docket No. 97-158, First Report and Order, para. 341.

"Intellectual Property" means copyrights, patents, trademarks, trade-secrets, mask works and all other intellectual property rights.

"Interexchange Carrier" or "IXC" means a carrier other than a CMRS provider or Ameritech that provides, directly or indirectly, interLATA and/or intraLATA Telephone Toll Services.

"IntraLATA Toll Traffic" means all intraLATA calls other than Local Telecommunications Traffic.

"Land-to-Mobile" - The use of CMRS interconnection service for the origination of calls of wire line customers to a wireless customer.

"Local Access and Transport Area" or "LATA" is As Defined in the Act.

"Local Exchange Carrier" or "LEC" is As Defined in the Act.

"Local Telecommunications Traffic" means telecommunications traffic between a LEC and a CMRS provider that originates and terminates within the same Major Trading Area ("MTA"), as defined in 47 CFR Section 24.202(a).

"Loss" or "Losses" means any and all losses, costs (including court costs), claims, damages (including fines, penalties and criminal or civil judgments and settlements), injuries, liabilities and expenses (including attorney's fees).

"Mobile-to-Land" - The use of CMRS interconnection service for the termination of calls from a wireless customer to a wire line customer.

"Multi-Party Traffic" means telecommunications traffic which is carried by Ameritech but may be originated or terminated on the network of a facilities-based Telecommunications Carrier other than Carrier, including IXC's, LEC's, ILEC's or other CMRS providers.

"Mobile Switching Center" (MSC) - A CMRS provider's central switch office which links wireless phones to the public switched telephone network and handles switching of the traffic.

"900/976 Traffic" means Local Traffic which originates on a Party's network and which is addressed to an information service provided on an information services platform served by the other Party (e.g., 900/976).

"Non-CMRS Traffic" means traffic which is neither originated nor terminated on the wireless facilities of a CMRS provider.

"Party" means either Ameritech or Carrier, and "Parties" means Ameritech and Carrier.

"Point of Interconnection" (POI) - The physical demarcation point between Ameritech and Carrier. This point establishes the technical interface, the test point(s), and the point(s) for operational division of responsibility between Ameritech's network and Carrier's network.

"Reciprocal Compensation" is As Defined in the Act.

"Reverse billing" is an option that allows a CMRS provider to choose to pay Ameritech for the usage sensitive portion of land to mobile calls from Ameritech's End Office or an End Office that subtends an Ameritech tandem to the CMRS provider's MSC or designated location.

"Telecommunications" is As Defined in the Act.

"Telecommunications Carrier" is As Defined in the Act.

"Telephone Toll Services" is As Defined in the Act.

"Termination" means the switching of Local Telecommunications Traffic at the terminating carrier's end office switch, or equivalent facility, and delivery of such traffic to the called party.

"Transport" means the transmission and any necessary tandem switching of Local Telecommunications Traffic subject to Section 251 (b)(5) of the Act from

the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party, or equivalent facility provided by a carrier other than an incumbent LEC.

"Type 1 Service" - means service that provides a trunk side connection with line side treatment between a CMRS provider's MSC or designated location and an Ameritech end office. Attached as Attachment A are Ameritech's TSLRIC rates for Type 1 Service.

"Type 2A Service" or "Tandem Facility" - A Type 2A Facility is at the point of termination of a trunk between an MSC and an Access Tandem. Through this Connection, Carrier can establish connections to End Office Switches and to other carriers interconnected through the tandem. Attached as Attachment A are Ameritech's TSLRIC rates for Type 2A Service.

"Type 2B Service" or "End Office Facility" - A Type 2B Facility is at the point of termination of a trunk between an MSC and an End Office Switch. Through this Connection, Carrier establishes connections to Directory Numbers served by the End Office Switch to which it is interconnected. A Type 2B Facility may be used in conjunction with the Type 2A Facility on a high-usage alternate routing basis to serve high-volume traffic between the MSC and the End Office Switch. Attached as Attachment A are Ameritech's TSLRIC rates for Type 2B Service.

"UNE" - Unbundled Network Element

"UNE Rate Element" - On an interim basis, the rates for UNEs are those rates approved by the Commission in Case No. U-11280. The rates for UNEs as approved in Commission Case No. U-11831 shall be incorporated into this agreement at the time that the Commission issues an order in Case No. U-11831.

2.0 INTERPRETATION AND CONSTRUCTION

All references to Sections, Exhibits and Schedules shall be deemed to be references to Sections of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. The headings of the Sections are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement. Unless the context shall otherwise require, any reference to any agreement, other instrument (including Ameritech or other third party offerings, guides or practices), statute, regulation, rule or tariff is to such agreement, instrument, statute, regulation, rule or tariff as amended and supplemented from time to time (and, in the case of a statute, regulation,

rule or tariff, to any successor provision). In the event of a conflict between the provisions of this Agreement and the Act, the provisions of the Act shall govern.

3.0 INTERCONNECTION PURSUANT TO SECTION 251 (C) (2)

3.1 Scope. This Section 3 describes the physical architecture for interconnection of the Parties' facilities and equipment for the transmission and routing of Local Telecommunications Traffic and Access Traffic between the Parties' customers.

3.2 Interconnection Points and Methods.

3.2.1 Generally. Section 251 (c) (2) and (3) of the Act requires Ameritech to interconnect with Carrier at any technically feasible point within Carrier's network. In order to establish such interconnections, Carrier shall purchase from Ameritech Type 2 Service and Type 1 Service. As set forth in Section 4.0, such charges shall be adjusted to account for Ameritech's use of any two-way trunks for Land to Mobile traffic. All trunk facilities, including, without limitation, Type 1 facilities, Type 2A facilities and Type 2B facilities provided by Ameritech will be provided at Ameritech's unbundled network element rates as provided by the Commission in Case Nos. U-11280 and U-11831 as a proxy for TSLRIC until specific TSLRIC rates are available.

3.2.2 Type 2 Services. Ameritech will provide Type 2A and Type 2B Services, at Carrier's option, for the purpose of interchanging calls between Customers of Ameritech and Customers of Carrier.

3.2.3 Type 1 Services. Ameritech will provide Type 1 Services for the purpose of interchanging calls between Customers of Carrier and Customers of Ameritech. Charges for the trunking facilities utilizing Type 1 Services shall be reduced by twenty-five percent (25%) to reflect Ameritech's use of the trunks for traffic originating on Ameritech's network and terminating on Carrier's network. The percentage can be adjusted to reflect the actual amount of Ameritech originated traffic.

3.2.4 Ordering and Maintenance. The Parties agree to be responsible for the operation and maintenance of their respective equipment and facilities provided by it for interconnection.

3.2.5 Points of Interconnection.

- (a) Land to Mobile direction. The point of interconnection (POI) for Type 2 Service provided for herein in the Land to Mobile direction shall be the Carrier's MSC or designated location. The Point of Interconnection for Type 1 Service in the Land to Mobile direction shall be Ameritech's Type 1 End Office.
 - (b) Mobile to Land direction. The Point of Interconnection for telecommunications service provided hereunder in the Mobile to Land direction shall be Ameritech's Access Tandem or End Office switch, as appropriate.
- 3.3 Modifications. Where the authorized service territory of Carrier or Ameritech is modified after the Effective Date of this Agreement, the terms and conditions of this Agreement shall be modified by Ameritech to recognize the extent of such modified service territory.
- 3.4 Signaling.
 - 3.4.1 Type 1 Service is provided with multifrequency ("MF") trunk signaling protocols as described in GR-NPL-000 145.
 - 3.4.2 Carrier shall use reasonable efforts to use SS7/ CCIS signaling for Type 2 traffic.
 - 3.4.3 The following publications describe the practices, procedures and specifications generally utilized by Ameritech for signaling purposes and are listed herein to assist the Parties in meeting their respective Interconnection responsibilities related to signaling (but are not intended to exclude other pertinent publications):
 - (1) Bellcore Special Report SR-TSV-002275, 130C Notes on the LEC Networks - Signaling.
 - (2) Ameritech Supplement AM-TR-OAT-000069, Common Channel Signaling Network Interface Specifications.

Parties directly or, where applicable, through their third-party provider, will cooperate on the exchange of Transactional Capabilities Application Part (TCAP) messages to facilitate interoperability of CCIS-based features between their respective networks, including all CLASS Features and functions, to the extent each Party offers such features and functions to its Customers. All CCIS signaling parameters will be provided including, without

limitation, calling party number (CPN), originating line information (OLI), calling party category and charge number.

- 3.5 MF signaling shall be used by the Parties where SS7/CCIS signaling is not utilized. If Carrier purchases SS7/CCIS signaling from Ameritech, Carrier shall pay for such SS7/CCIS signaling in the mobile-to-land direction as set forth in Ameritech's UNE Rate Elements, and Ameritech shall pay Carrier for such SS7/CCIS signaling in the land-to-mobile direction at the same rates. This section regarding SS7/CCIS signaling shall be updated in accordance with the Commission's decision in Case No. U-11973. Regardless of the outcome of the SS7/CCIS signaling issue in Case No. U-11973, both parties specifically reserve the right to challenge or appeal the decision of the Commission on this SS7/CCIS signaling issue.

4.0 TRUNKING

- 4.1 Generally. Except as otherwise agreed by the Parties, the Parties shall establish one-way trunks between their networks. These trunks shall separately carry Land-to-Mobile and Mobile-to-Land traffic. All trunks shall be provisioned and maintained at a P.01 grade of service.
- 4.1.1 Carrier shall be responsible for provisioning (and shall bear all costs of) two separate trunk groups between its MSCs and Ameritech's network for Mobile-to-Land traffic. The two trunk groups shall separately carry the following types of traffic:
- (a) a trunk group for traffic from Carrier to Ameritech for Local and intraLATA calls; and
 - (b) a trunk group for traffic from Carrier to Ameritech for calls routed to an Interexchange Carrier.
- 4.1.2 Ameritech shall be responsible for provisioning (and shall bear all costs of) a separate trunk group between its network and Carrier's MSCs for Local, Ameritech-originated Land-to-Mobile traffic.
- 4.1.3 Where Ameritech and Carrier mutually agree to maintain a two-way trunk group, the cost of such provision shall be mutually shared based on the percentage of traffic carried over that two-way trunk group by each of the parties.

- 4.1.4 Where Carrier has purchased high bandwidth facilities for multiple uses, Carrier will make available these facilities, for trunking and Interconnection, to Ameritech. Carrier will charge Ameritech at the rate Ameritech is charging Carrier for the Interconnection and trunking facilities portion of these high bandwidth facilities based upon each party's proportionate use.
- 4.1.5 Where Carrier has purchased high bandwidth facilities for multiple use, if Ameritech chooses to install duplicative facilities, Ameritech will assume the full cost of such duplicative facilities. Such facilities must not degrade the quality of the Carrier's high bandwidth facilities.

5.0 RECIPROCAL COMPENSATION

- 5.1 Subject to the limitations set forth below, Ameritech shall compensate Carrier for the Transport and Termination of Land to Mobile Local Telecommunications Traffic originated on Ameritech's network and Carrier shall compensate Ameritech for the Transport and Termination of Mobile to Land Local Telecommunications Traffic originated on Carrier's wireless network. The rates for symmetrical reciprocal compensation are set forth in Attachment A, Figure 1 and 2.
- 5.2 For purposes of defining Local Telecommunications Traffic under this Agreement, the origination point and the termination point on Ameritech's network shall be the end office serving the calling or called party. The origination point and the termination point on Carrier's network shall be the cell site or base station which services the calling or called party at the time the calls began on Carrier's network.
- 5.3 Ameritech and Carrier shall expeditiously file this Agreement with the Commission and shall diligently pursue its approval. The rates set forth in Attachments A and B shall become effective thirty days after this Agreement is approved by the Commission or the FCC under Section 252 of the Act (the "Effective Date").
- 5.4 Reciprocal Compensation shall not apply to:
- (a) Multi-party Traffic;
 - (b) Non-CMRS Traffic (except for incidental traffic when landline to landline connections may be established on an infrequent basis,

e.g. when a mobile phone forwards a landline call to a landline phone);

- (c) Traffic which does not qualify as Local Telecommunications Traffic;
- (d) Paging traffic, except where Carrier produces a cost study on reciprocal compensation.
- (e) Reverse Billing Traffic.

5.5 The calculation of minutes for purposes of Reciprocal Compensation shall be in actual conversation seconds for all Local Telecommunication Traffic. All other types of traffic will be measured in accordance with applicable tariffs.

6.0 SPECIALIZED TRAFFIC

6.1 Transit Service (Multi-Party Traffic).

6.1.1 Definition. Transit Service means the delivery of Local Telecommunications Traffic by Ameritech from Carrier to a third party LEC, ILEC, or CMRS provider or from a third party LEC, ILEC or CMRS provider to Carrier.

6.1.2 Terms and Conditions

- (a) Ameritech agrees that it shall provide transit service to Carrier.
- (b) For calls which originate on the network of an ICO, CLEC or other CMRS provider, and which are carried by Ameritech and are terminated on Carrier's network, Ameritech shall pass such calls to Carrier, and Carrier shall terminate such calls, without charge to one another. Reciprocal Compensation shall not apply. Notwithstanding the above, if Ameritech terminates traffic to Carrier pursuant to an arrangement in which it is the primary toll Carrier under a Commission approved plan, or if Ameritech is the customer's prescribed toll provider, then Ameritech shall pay Carrier access charges based upon Ameritech's access tariff.

- (c) For calls which originate on Carrier's network and which are carried by Ameritech for termination by an ICO, CLEC or other CMRS provider, Carrier shall pay Ameritech at the rates set forth in Attachment B. Reciprocal Compensation shall not apply.
- (d) Carrier will use its best efforts to document an interconnection arrangement with each third party LEC, but Carrier is under no obligation to provide any documentation whatsoever to Ameritech.
- (e) Carrier acknowledges that when Ameritech is not the primary toll carrier, Ameritech has no responsibility to pay any third party LEC, ILEC, or CMRS provider charges for termination or origination of any Transit Service to and from Carrier. Ameritech reserves the right to not pay such charges on behalf of Carrier.
- (f) Carrier acknowledges that when Ameritech is not the primary toll carrier, Ameritech has no responsibility to pay Carrier for traffic which originates from a third party LEC, ILEC or CMRS provider and which Ameritech transits to Carrier.

6.1.4 Direct Trunking of Carrier to Third Party Traffic. Carrier may order direct trunking to end offices at its option. Such trunks shall be one-way mobile-to-land trunks only.

6.2 Toll Carrier Arrangements.

Where Ameritech carries the toll traffic pursuant to a Commission's Originating Responsibility Plan/Secondary Carrier Option (ORP/SCO), Primary Toll Carrier Plan or similar plan on a toll call originated from an Ameritech exchange, Ameritech shall pay to Carrier reciprocal compensation rates.

6.3 900/976 Traffic.

Each Party shall be responsible for the charges for 900/976 which originates on its own network. Nothing in this Agreement shall restrict either Party from offering to its Customers the ability to block the completion of such traffic. Ameritech will provide Carrier rated billing information for such calls pursuant to a separately negotiated agreement.

6.4 Calling Party Pays Traffic.

Carrier will be responsible for the charges for Calling Party Pays Traffic originated by its Customers and directed to other CMRS customers. However, Carrier will have no obligation to offer such CMRS-originated Calling Party Pays service. Upon request, Ameritech will provide Carrier rated billing information for such calls.

6.5 Direct Trunking of Mobile to Land Traffic. Carrier may order direct trunking to end offices at its option. Such trunks shall be one-way mobile-to-land trunks only.

6.6 Reports.

6.6.1 Carrier shall use reasonable efforts to install actual measurement capability to record traffic which terminates to it. Such actual measurement capability shall provide a level of detail at least as specific as that provided by the reports referenced in Section 6.6.2, Section 6.6.3 and Section 6.6.4. Carrier may also purchase at Carrier's option from Ameritech at the rates set forth in Attachment C the following reports and may use such reports for billing purposes.

6.6.2 Type 2 Ameritech Originating Traffic Report. A report showing traffic originating on Ameritech landline facilities and terminating on Carrier's facilities and showing traffic originating on LECs, ILECs or other CMRS providers and transiting through Ameritech for termination by Carrier's network.

6.6.3 Type 2 Transit Traffic Distribution Report-Mobile to Land. A report showing traffic originating on the networks of LECs, CLECs or other CMRS providers and transiting through Ameritech for termination by Carrier.

Sample copies of both reports are set forth in Attachment D and Attachment E, respectively. If Carrier purchases any reports, Carrier shall notify Ameritech of any errors in the information contained in such reports within one hundred eighty (180) days of receipt of such reports. Carrier shall not disclose information in such reports to a non-affiliated third party without Ameritech's written consent.

6.7 Reverse Billing Interconnection. Carrier hereby elects to continue in effect Reverse Billing Interconnection for the NXX codes currently active and

utilizing Reverse Billing Interconnection and for such additional NXX codes as may be designated by Carrier in the future. Carrier may select, at its option, one or more Ameritech end offices with which to implement Reverse Billing Interconnection. Carrier agrees to pay Ameritech the Commission approved TSLRIC rate for originating the Reverse Billing call. Until such time as the Commission approves the TSLRIC rate, Carrier agrees to pay the rates in Attachment A.

7.0 GENERAL RESPONSIBILITIES OF THE PARTIES

- 7.1 Cooperation. The Parties shall exchange technical descriptions and forecasts of their Interconnection and traffic requirements in sufficient detail necessary to establish the Interconnection required to assure traffic completion to and from all Customers in their respective designated service areas.
- 7.2 Non-Binding Forecasts. Thirty (30) days after the Effective Date and each quarter during the term of this Agreement, each Party shall provide the other Party with a rolling, six (6) calendar month, non-binding forecast of its traffic and volume requirements for the Services provided under this Agreement in the form and in such detail as agreed by the Parties.
- 7.3 Binding Forecasts. In addition to and not in lieu of the non-binding forecasts required by Section 7.2, a Party that is required pursuant to this Agreement to provide a forecast (the "Forecast Provider" or a Party that is entitled pursuant to this Agreement to receive a forecast (the "Forecast Recipient") with respect to traffic and volume requirements for the Services provided under this Agreement may request that the other Party enter into negotiations to establish a forecast (a "Binding Forecast") that commits such Forecast Provider to purchase, and such Forecast Recipient to provide, a specified volume to be utilized as set forth in such Binding Forecast. The Forecast Provider and Forecast Recipient shall negotiate the terms of such Binding Forecast in good faith and shall include in such Binding Forecast provisions regarding price, quantity, liability for failure to perform under a Binding Forecast and any other terms desired by such Forecast Provider and Forecast Recipient.
- 7.4 Facilities. Each Party is individually responsible to provide facilities within its network for routing, transporting and billing traffic from the other Party's network and for delivering such traffic to the other Party's network in the standard format compatible with Ameritech's network and to terminate the traffic it receives in that standard format to the proper address in its network. The Parties are each solely responsible for participation in and

compliance with national network plans, including The National Network Security Plan and The Emergency Preparedness Plan. Each Party is individually responsible for monitoring traffic each month in order to maintain a P. 01 grade of service. The Parties agree to immediately notify each other and mutually agree on what additional facilities will be required, the costs of which facilities shall be borne by the appropriate party as specified.

7.5 Network Management

7.5.1 Each Party shall work cooperatively to apply sound network management principles by working network management controls to prevent congestion.

7.5.2 Notwithstanding Section 7.5.1, each Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps on traffic toward the other Party's network, when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload. Each Party shall immediately notify the other Party of any protective control action planned or executed.

7.5.3 Neither Party shall use any Service related to or use any of the Services provided in this Agreement in any manner that interferes with third parties in the use of their service, prevents third parties from using their service, impairs the quality of service to other carriers or to either Party's Customers, causes electrical hazards to either Party's personnel, damage to either Party's equipment or malfunction of either Party's billing equipment (individually and collectively, a "Network Harm"). If a Network Harm shall occur or if a Party reasonably determines that a Network Harm is imminent, such Party shall, where practicable, notify the other Party that temporary discontinuance or refusal of service may be required, provided, however, wherever prior notice is not practicable, such Party may temporarily discontinue or refuse service forthwith, if such action is reasonable under the circumstances. In case of such temporary discontinuance or refusal, such Party shall:

- (a) Promptly notify the other Party of such temporary discontinuance or refusal;

- (b) Afford the other Party the opportunity to correct the situation which gave rise to such temporary discontinuance or refusal; and
- (c) Inform the other Party of its right to bring a complaint to the Commission or FCC.

7.5.4 Carrier and Ameritech shall work cooperatively to install and maintain a reliable network. Carrier and Ameritech shall exchange appropriate information (e.g., maintenance contact numbers, network information, information required to comply with law enforcement and other security agencies of the government and such other information as the Parties shall mutually agree) to achieve this desired reliability.

7.5.5 Carrier shall acknowledge calls in accordance with the following protocols:

- (a) Carrier will provide a voice intercept announcement or distinctive tone signals to the calling party when a call is directed to a number that is not assigned by Carrier;
- (b) Carrier will provide a voice announcement or distinctive tone signals to the calling party when a call has been received and accepted by Carrier's terminal; and
- (c) Carrier will provide supervisory tones or voice announcements to the calling party on all calls, consistent with standard telephone industry practices.

7.6 Sole Responsibility. Each Party is solely responsible for the Services it provides to its Customers and to other Telecommunications Carriers.

7.7 Fraud. The Parties shall work cooperatively to minimize fraud associated with third-number billed calls, calling card calls, and any other services related to this Agreement.

7.8 NXX Codes. Each Party is responsible for administering NXX codes assigned to it.

7.9 LERG Listings. Each Party is responsible for obtaining Local Exchange Routing Guide ("LERG" listings of Common Language Location Identification ("CLLI") codes assigned to its switches. Each Party shall use

the LERG published by Bellcore or its successor for obtaining routing information and shall provide all required information to Bellcore for maintaining the LERG in a timely manner.

- 7.10 Systems Update. Each Party shall program and update its own systems to recognize and route traffic to and from the other Party's assigned NXX codes. Except as mutually agreed or as otherwise expressly defined in this Agreement, neither Party shall impose any fees or charges on the other Party for such activities.
- 7.11 Insurance. At all times during the term of this Agreement, each Party shall keep and maintain in force at Party's expense all insurance required by law, general liability insurance and worker's compensation insurance. Upon request from the other Party, each Party shall provide to the other Party evidence of such insurance (which may be provided through a program of self-insurance).
- 7.12 STPs. When using SS7/CCIS signaling, each Party is responsible for interconnecting to the other Party's CCS network. Each Party shall connect to a pair of access STPs in each LATA where traffic will be exchanged or shall arrange for signaling connectivity through a third party provider which is connected to the other Party's signaling network. The Parties shall establish interconnection at the STP, and other points, as necessary and as jointly agreed to by the Parties.

8.0 TERM AND SCOPE

- 8.1 The initial term of this Agreement shall be three (3) years (the "Initial Term") which shall commence on the Effective Date. At the end of the Initial Term, this Agreement shall automatically renew for one (1) year periods ("Renewal Term"), absent the receipt by one Party of written notice from the other Party at least one hundred twenty (120) days prior to the expiration of the Initial Term or a Renewal Term to the effect that such Party intends to terminate this Agreement (with or without cause).
- 8.2 Notwithstanding the foregoing, upon delivery of written notice at least one hundred twenty (120) days prior to the expiration of the Initial Term or any Renewal Term, either party may require negotiations of the rates, prices and charges, terms and conditions of the services to be provided under this Agreement effective upon such expiration. If the Parties are unable to satisfactorily negotiate such new rates, prices, charges and terms within ninety (90) days of such written notice, either party may petition the Commission or take such other action as may be necessary to establish

appropriate terms. If the Parties are unable to mutually agree on such new rates, prices, charges and terms or the Commission does not issue its order prior to the applicable expiration date, the Parties agree that the rates, terms and conditions ultimately ordered by such Commission or negotiated by the Parties will be effective retroactive to such expiration date. Until such time as the Commission issues its order, the rates, terms and conditions of this Agreement shall control.

- 8.3 Default. When a party believes that the other party is in violation of a term or condition of this Agreement ("Defaulting Party"), it will provide written notice to such Defaulting Party of such violation prior to commencing the dispute resolution procedures set forth in Section 29.0.
- 8.4 Payment Upon Expiration or Termination. In the case of the expiration or termination of this Agreement for any reason, each of the Parties will be entitled to payment for all services performed and expenses accrued or incurred prior to such expiration or termination.

9.0 BILLING AND PAYMENT

- 9.1 Ameritech and Carrier shall invoice each other on a monthly basis. Both Ameritech and Carrier shall pay the undisputed portion of any invoice within thirty (30) days from the date of the invoice. Past due amounts shall be assessed a late payment charge in the amount of 0.000493% per day (annual percentage rate of 18%) compounded daily, or the highest rate allowed by law, whichever is lower.
- 9.2 The parties may "net" amounts owed to one party, amounts that are due to the other party.
- 9.3 A Party shall promptly reimburse or credit the other Party for any charges that should not have been billed to the other Party as provided in this Agreement. Such reimbursements shall be set forth in the appropriate section of the invoice.
- 9.4 A Party shall bill the other Party for any charges that should have been billed to the other Party as provided in this Agreement, but have not been billed to the other Party ("Underbilled Charges"); provided, however, that, except as provided in the Disputes Section, the billing Party shall not bill for Underbilled Charges which were incurred more than two (2) years prior to the date that the billing Party transmits a bill for any Underbilled Charges.

10.0 INDEMNIFICATION

- 10.1 Each Party (the "Indemnifying Party") shall defend and indemnify the other Party, its officers, directors, employees and permitted assignees (collectively, the "Indemnified Party") and hold such Indemnified Party harmless against:
- (a) any Loss to a third party arising out of the negligence or willful misconduct by such Indemnifying Party, its agents, its Customers, contractors, or others retained by such parties, in connection with its provision of services under this Agreement;
 - (b) any Loss arising from such Indemnifying Party's use of services offered under this Agreement, involving:
 - (1) Claims for libel, slander, invasion of privacy, or infringement of Intellectual Property rights arising from the Indemnifying Party's own communications or the communications of such Indemnifying Party's Customers; or
 - (2) Claims for actual or alleged infringement of any Intellectual Property right of a third party to the extent that such Loss arises from an Indemnified Party's or an Indemnified Party's Customer's use of a service provided under this Agreement; provided, however, that an Indemnifying Party's obligation to defend and indemnify the Indemnified Party shall not apply in the case of (i) (A) any use by an Indemnified Party of a service (or element thereof) in combination with elements, services or systems supplied by the Indemnified Party or persons other than the Indemnified Party or (B) where an Indemnified Party or its Customer modifies or directs the Indemnifying Party to modify such service and (ii) no infringement would have occurred without such combined use or modification; and
 - (c) any and all penalties imposed as a result of the Indemnifying Party's failure to comply with the Communications Assistance to Law Enforcement Act of 1994 ("CALEA") and, at the sole cost and expense of the Indemnifying Party, and amounts necessary to modify or replace any equipment, facilities or services provided to the Indemnified Party under this Agreement to ensure that such equipment, facilities and services fully comply with CALEA; and

- (d) any Loss arising from such Indemnifying Party's failure to comply with applicable law.

10.2 Indemnification Procedures. Whenever a claim shall arise for indemnification under this Section, the relevant Indemnified Party, as appropriate, shall promptly notify the Indemnifying Party and request the Indemnifying Party to defend the same. Failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that the Indemnifying Party might have, except the extent that such failure prejudices the Indemnifying Party's ability to defend such claim. The Indemnifying Party shall have the right to defend against such liability or assertion in which event the Indemnifying Party shall give, within ninety (90) days of its receipt of a request to defend same, written notice to the Indemnified Party of acceptance of the defense of such claim and the identity of counsel selected by the Indemnifying Party. Until such time as the Indemnifying Party provides such written notice of acceptance of the defense of such claim, the Indemnified Party shall defend such claim, subject to any right to seek reimbursement for the costs of such defense in the event that it is determined that Indemnifying Party had an obligation to indemnify the Indemnified Party for such claim. The Indemnifying Party shall have exclusive right to control and conduct the defense and settlement of any such claims subject to consultation with the Indemnified Party. The Indemnifying Party shall not be liable for any settlement by the Indemnified Party unless such Indemnifying Party has approved such settlement in advance and agrees to be bound by the agreement incorporating such settlement. At any time, an Indemnified Party shall have the right to refuse a compromise or settlement and, at such refusing Party's cost, to take over such defense; provided that in such event the Indemnifying Party shall not be responsible for, nor shall it be obligated to indemnify the relevant Indemnified Party against, any cost or liability in excess of such refused compromise or settlement. With respect to any defense accepted by the Indemnifying Party, the relevant Indemnified Party shall be entitled to participate with the Indemnifying Party in such defense if the claim requests equitable relief or other relief that could affect the rights of the Indemnified Party and all shall be entitled to employ separate counsel for such defense at such Indemnified Party's expense. If the Indemnifying Party does not accept the defense of any indemnified claim as provided above, the relevant Indemnified Party shall have the right to employ counsel for such defense at the expense of the Indemnifying Party. Each Party agrees to cooperate and to cause its employees and agents to cooperate with the other Party in the defense of any such claim and the relevant records of each Party shall be available to the other Party with respect to any such defense.

11.0 LIMITATION OF LIABILITY

- 11.1 Each Party shall be responsible only for service(s) and facility(ies) which are provided by that Party, its authorized agents, subcontractors, or others retained by such parties, and neither Party shall bear any responsibility for the services and facilities provided by the other Party, its agents, subcontractors, or others retained by such parties.
- 11.2 Except for indemnity obligations under Section 10.0 of this Agreement, each Party's liability to the other Party for any Loss relating to or arising out of any negligent act or omission in its performance of this Agreement, whether in contract, tort, or otherwise, shall be limited to the total amount that is or would have been charged to the other Party by such negligent or breaching Party for the service(s) or function(s) not performed or improperly performed.
- 11.3 In no event shall either Party have any liability whatsoever to the other Party for any indirect, special, consequential, incidental or punitive damages, including but not limited to loss of anticipated profits or revenue or other economic loss in connection with or arising from anything said, omitted or done hereunder (collectively, "Consequential Damages"), even if the other Party has been advised of the possibility of such damages; provided, that the foregoing shall not limit a Party's obligation under Section 10.0 to indemnify, defend and hold the other Party harmless against any amounts payable to a third party, including any losses, costs, fines, penalties, criminal or civil judgments or settlements, expenses (including attorney's fees) and Consequential Damages of such third party.
- 11.4 Each Party may in its sole discretion provide in its tariffs and contracts with its Customers that relate to any Telecommunications Service or Network Element provided or contemplated under this Agreement that in no case shall such Party or any of its suppliers, contractors or others retained by such parties be liable to any Customer or third party for (i) any Loss relating to or arising out of this Agreement, whether in contract, tort, or otherwise that exceeds the amount such Party would have charged the applicable Customer for the service(s) or function(s) that give rise to such Loss and (ii) any Consequential Damages (as defined in this Agreement.)

12.0 DIRECTORY ASSISTANCE, DIRECTORY LISTINGS, DIALING PARITY AND NUMBER ADMINISTRATION

12.1 **Directory Assistance.** Directory Assistance ("DA") service shall consist of the following services:

- 12.1.1 Directory Assistance - those calls in which the Customer dials digits designated by Carrier to obtain Directory Assistance for local numbers located within his/her LATA. Two (2) listings will be provided per call.
- 12.1.2 Branding - the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch, or to choose not to provide such a message.
- 12.1.3 Information Call Completion - provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit ("ARU") the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Upon request and to the extent technically feasible, call completion to the requested number for local and intraLATA toll calls shall be sent to the network specified by Carrier without the need to route through direct trunks. Carrier shall rate and bill its Customers for Information Call Completion calls.
- 12.1.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA as provided in the Implementation Plan (or, if not set forth therein, pursuant to Carrier's Bona Fide Request) at rates that recover Ameritech's costs of developing, providing and maintaining the service. Such unbundled access to the DA database shall be for the purpose of having Carrier's Telephone Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable Carrier to read DA listing in the database that Carrier can provide a Telecommunications Service consistent with Section 251(c)(3) of the Act.

12.2 **Dialing Parity.** The Parties shall provide Dialing Parity to each other as required under Section 251(b)(3) of the Act, except as may be limited by Section 271(e)(2)(B) of the Act.

- 12.3 **Number Administration.** Until Number Administration functions are assumed by a neutral third party, in accordance with FCC rules and regulations, Ameritech will provide nondiscriminatory access to and provisioning of telephone numbers for assignment of the Requesting Carrier in accordance with the current Central Office Code (NXX) Assignment Guidelines and the current NPA Code Relief Planning Guidelines, and will comply with numbering administration guidelines, plans, or rules which may be established in the future.

13.0 911/E911 SERVICE

- 13.1 Ameritech will file a separate application with the MPSC for approval of TSLRIC-based rates for its Emergency Number Service Access ("ENSA") and Wireless Emergency Number Service Access ("WENSA") services. Rates for these services shall be based on TSLRIC plus appropriate loadings as defined in the Telecommunications Act of 1996 and as interpreted by the MPSC in Docket No. U-11280 and to be further interpreted on Docket No. U-11831. Where applicable, rate element structures for ENSA and WENSA will be the same costing methodologies and will be consistent between ENSA and WENSA, Ameritech shall file the application described herein within sixty (60) days from the Effective Date.
- 13.2 Ameritech's WENSA tariff application will contain no less than four (4) rate elements which address the following functions: 1) 911 Selective Router Interconnection; 2) ANI/ALI/SR Database Management (which includes the standard customer identification information, but not the dynamic wireless location information which is provided by the wireless carrier or its vendor); 3) 911 SR Switch Administration; and 4) ALI Data Port Connectivity. Ameritech reserves the right to specify additional rate elements. All four functionalities will be required for the WENSA service to operate correctly. If certain rate elements are purchased independently by Carrier and a third party vendor, they must be coordinated so that the components operate properly together as a single WENSA service. Under this arrangement, a third party vendor which purchases the data connection to the SR/ALI database (as described in Ameritech technical reference "Wireless Service Provider's Interconnection to a 911 Database," AM-TR-SID-000147) may provide transport to multiple carriers served by that third party vendor.
- 13.3 If Carrier obtains ALI Data Port Connectivity from a third party vendor which has already paid Ameritech's ALI Data Port Connectivity recurring and non-recurring charges, Ameritech shall not bill Carrier for those charges.

- 13.4 Ameritech and Carrier shall request that the MPSC handle the Ameritech filing on an expedited basis and pursuant to a notice and comment proceeding which does not include a contested case. This is similar to the way certain other Ameritech cost dockets have been handled in the past.
- 13.5 This Interconnection Agreement shall be amended to include the rates, terms and conditions of Ameritech's WENSA tariff as revised. In the event that Carrier orders WENSA service after this Interconnection Agreement is operative but before the WENSA tariff is revised, the rates, terms and conditions of the WENSA tariff shall apply retroactively to the date of the service order.

14.0 UNBUNDLED ACCESS

14.1 Access to Network Elements.

- 14.1.1 Ameritech shall provide Carrier access to Ameritech's Network Elements on an unbundled basis at any technically feasible point in accordance with the terms and conditions of this **Article 14** and the requirements of the Act, the FCC, or the Commission. Ameritech shall provide Carrier access to each unbundled Network Element, along with all of such unbundled Network Element's features, functions, and capabilities in accordance with the terms and conditions of this Agreement and as required by the Act, the FCC, or the Commission, whether such requirement is adopted before or after the effective date of this agreement, in a manner that shall allow Carrier to provide any Telecommunications Service that can be offered by means of that Network Element; provided that the use of such Network Element is consistent with the Act.
- 14.1.2 In the event that Carrier reasonably believes that the requirements of this Article are not being met, the Parties will meet and confer concerning such engineering, design, performance and other network data, which may be necessary to cure any engineering, design, performance or implementation deficiency. In the event that such data indicates that the requirements of this Article are not being met, Ameritech shall cure any such deficiency as soon as possible.

- 14.1.3 Ameritech shall be required to make available Network Elements only where such Network Elements, including facilities and software necessary to provide such Network Elements, are available. If Ameritech makes available Network Elements that require special construction, Carrier shall pay to Ameritech any applicable special construction charges as determined in accordance with the Act. The Parties shall mutually agree on the nature and manner of any required special construction, the applicable charges thereto and the negotiated interval(s) that will apply to the provisioning of such Network Element(s) in lieu of the standard intervals set forth on **Schedule 14.10**.
- 14.1.4 Ameritech shall permit Carrier to connect Carrier's facilities or facilities provided to Carrier by third parties with each of Ameritech's unbundled Network Elements at any point on Ameritech's network designated by Carrier that is technically feasible.
- 14.1.5 Subject to this Agreement and its attachments, Ameritech agrees to work cooperatively with Carrier to provide Network Elements that will meet Carrier's needs in providing services to its customers.
- 14.1.6 If Ameritech makes available to itself or any of its end user customers an expedited or priority provisioning capability for Network Elements and the interconnections between Network Elements, then Ameritech will make such capability available to Carrier on a nondiscriminatory basis.
- 14.2 Network Elements. At the request of Carrier, Ameritech shall provide, at a minimum, Carrier access to the following Network Elements on an unbundled basis:
- 14.2.1 Local Loops, as more fully described on **Schedule 14.2.1**;
- 14.2.2 The Network Interface Device, as more fully described on **Schedule 14.2.2**;
- 14.2.3 Switching Capability, as more fully described on **Schedule 14.2.3**;
- 14.2.4 Interoffice Transmission Facilities, as more fully described on **Schedule 14.2.4**;

- 14.2.5 Signaling Links and Call-Related Databases, as more fully described on **Schedule 14.2.5**;
 - 14.2.6 Operations Support Systems ("OSS") functions, as more fully described on **Schedule 14.2.6**;
 - 14.2.7 Operator Services and Directory Assistance, as more fully described on **Schedule 14.2.7**.
 - 14.2.8 Any other network element provided to a requesting carrier in an approved interconnection agreement or required by FCC or Commission order or rule.
- 14.3 Combination of Network Elements.
- 14.3.1 Ameritech shall provide Network Elements to Carrier in a manner that shall allow Carrier to combine such Network Elements (a "Combination") in order to provide a Telecommunications Service. When purchasing a Combination, Carrier will have access to all features and capabilities of each individual Network Element that comprises such Combination and the specific technical and interface requirements for each of the Network Elements shall apply, to the extent technically feasible given the specific manner in which Carrier has requested that the elements be combined.
 - 14.3.2 Except upon the request of Carrier, Ameritech shall provide Network Elements separately from each other, and shall not separate Network Elements it normally provides in combination into separate Network Elements.
 - 14.3.3 Upon Carrier's request, Ameritech shall perform the functions necessary to combine Ameritech's Network Elements, even if those elements are not ordinarily combined in Ameritech's network; provided that such combination is (i) technically feasible and (ii) would not impair the ability of other Telecommunications Carriers to obtain access to unbundled Network Elements or to Interconnect with Ameritech's network. In addition, upon request that is consistent with the above criteria and subject to **Section 14.1.4**, Ameritech shall perform the functions necessary to combine or connect Ameritech's Network Elements with elements or other equipment or facilities

possessed, leased or owned by Carrier in any technically feasible manner to allow Carrier to provide a Telecommunications Service.

14.3.4 Ameritech shall make available to Carrier the following Combinations at the rates set forth at Item V of the Pricing Schedule:

14.3.4.1 Unbundled Element Platform with Operator Services and Directory Assistance. This Combination is described on **Schedule 14.3.4.**

14.3.4.2 Loop Combination. This Combination is described on **Schedule 14.3.4.**

14.3.4.3 Switching combination #1. This Combination is described on **Schedule 14.3.4.**

14.3.5 The following Network Elements and Combinations shall be requested by Carrier in accordance with **Section 14.6:**

14.3.5.1 Unbundled Loop - Distribution

14.3.5.2 Unbundled Loop - Concentrators/Multiplexers.

14.3.5.3 Unbundled Loop - Feeder

14.3.5.4 Loop/Network Combination. This Combination is described on **Schedule 14.3.5.**

14.3.5.5 Switching Combination #2. This Combination is described on **Schedule 14.3.5.**

14.3.5.6 Switching Combination #3. This Combination is described on **Schedule 14.3.5.**

14.3.5.7 Switched Data Services. This Combination is described on **Schedule 14.3.5.**

14.3.5.8 Unbundled Element Platform without Operator Services and Directory Assistance. This Combination is described on **Schedule 14.3.5.**

- 14.3.6 Any request by Carrier for Ameritech to provide any Combination other than as set forth in **Section 14.3.4**, to combine the unbundled Network Elements of Ameritech with Carrier or to perform any other function under this **Section 14.3** shall be made by Carrier in accordance with **Section 14.6**.

14.4 Nondiscriminatory Access to and Provision of Network Elements

- 14.4.1 Subject to **Section 14.4.3**, the quality of an unbundled Network Element, as well as the quality of the access to such unbundled Network Element that Ameritech provides to Carrier, shall be (i) the same for all Telecommunications Carriers requesting access to such Network Element and (ii) at least equal in quality to that which Ameritech provides to itself, its subsidiaries, Affiliates or any other person, unless Ameritech proves to the Commission that it is not technically feasible to provide the Network Element requested by Carrier, or access to such Network Element at a level of quality that is equal to that which Ameritech provides to itself.

- 14.4.2 Subject to **Section 14.4.3**, Ameritech shall provide Carrier access to Network Elements, on terms and conditions no less favorable than the terms and conditions under which Ameritech provides such elements to itself, its subsidiaries, Affiliates and any other person, including the time within which Ameritech provisions such access to Network Elements, except as may be provided by the Commission pursuant to **Section 14.1.2**.

- 14.4.3 Upon the request of Carrier, Ameritech shall provide to Carrier a Network Element and access to such Network Element that is different in quality to that required under **Sections 14.4.1** and **14.4.2**, unless Ameritech proves to the Commission that it is not technically feasible to provide the requested Network Element or access to such Network Element at the requested level of quality. Any request by Carrier for Ameritech to provide any Network Element or access thereto that is different in quality shall be made by Carrier in accordance with **Section 14.6**.

14.5 Provisioning of Network Elements.

- 14.5.1 Ameritech shall provide Carrier unbundled Network Elements as set forth on **Schedule 14.5**.
- 14.5.2 Ameritech shall provide Carrier access to the functionalities for Ameritech's pre-ordering, provisioning, maintenance and repair, and billing functions of the Operations Support Systems functions that relate to the Network Elements that Carrier purchases hereunder. Access to such functionalities for the Operations Support Systems functions shall be as provided on **Schedule 14.2.6** and the Implementation Plan.
- 14.5.3 Prior to submitting an order for a Network Element that replaces, in whole or in part, a service offered by Ameritech or any other telecommunications provider for which Ameritech changes a primary local exchange carrier, Carrier shall comply with the requirements regarding the selection of a primary local exchange carrier.

14.6 Availability of Additional or Different Quality Network Elements.

Any request by Carrier for access to a Network Element or a Combination or a standard of quality thereof that is not otherwise provided by the terms of this Agreement at the time of such request shall be made pursuant to a Bona Fide request and shall be subject to the payment by Carrier of all applicable costs in accordance with Section 252(d)(1) of the Act to provide such Network Element, Combination or access.

14.7 Pricing of Unbundled Network Elements.

- 14.7.1 Ameritech shall charge Carrier the non-recurring (including any applicable connection charges) and monthly recurring rates for unbundled Network Elements (including the monthly recurring rates for these specific Network Elements, service coordination fee and Cross-Connect charges) as specified in the **Pricing Schedule**. If Carrier requests or approves an Ameritech technician to perform services in excess of or not otherwise contemplated by the Line Connection Service, Ameritech may charge Carrier for any additional and reasonable labor charges to perform such services. For purposes of this Agreement, "**Line Connection Service**" means any non-recurring activity performed at the Ameritech Central Office or the Ameritech side of the network interface required to connect a specific Network Element to any Customer- or end-user-provided

element or required to interconnect contiguous Network Elements.

14.7.2 The prices contained in the **Pricing Schedule** shall be applicable to network elements provided pursuant to this Article. The rates and terms and conditions included in this Agreement shall supersede under all circumstances any tariff provision that is filed or will ever be filed by Ameritech. The parties understand and contemplate that since this is a carrier-to-carrier Agreement, the legal principle known as the filed rate doctrine, does not apply to the interconnection provided pursuant to this Agreement.

14.7.3. If Carrier orders a Combination identified in **Section 14.3.4**, and the provision of any such Combination requires Ameritech to modify any of its existing systems, service development processes or its network (beyond that required for Ameritech to provision its own retail services) to provide access to such Combination, Carrier shall be required to compensate Ameritech for any costs incurred to provide access to such Combination.

14.7.4. The rates and charges set forth or identified in this Agreement are inclusive, and no other charges apply.

14.8 Billing. Ameritech shall bill Carrier for access to unbundled Network Elements pursuant to the requirements of **Article 9** to this Agreement.

14.9 Maintenance of Unbundled Network Elements.

14.9.1 If (i) Carrier reports to Ameritech a suspected failure of a Network Element, (ii) Carrier requests a dispatch, (iii) Ameritech dispatches a technician, and (iv) such trouble was not caused by Ameritech's facilities or equipment, then Carrier shall pay Ameritech a trip charge and time charges as set forth at **the Pricing Schedule**.

14.9.2 Ameritech shall provide Carrier maintenance of unbundled Network Elements provided by Ameritech hereunder on terms and conditions no less favorable than Ameritech provides for itself, consistent with the Act.

14.10 Standards of Performance.

- 14.10.1 Ameritech shall provide to Carrier access to unbundled Network Elements (i) in accordance with this **Section 14.10** (including any Combinations, service levels and intervals that may be requested by Carrier and agreed upon by the Parties pursuant to a Bona Fide Request) and (ii) as required by the Commission (collectively, the "**Ameritech Network Element Performance Benchmarks**").
- 14.10.2 To determine Ameritech's compliance with the Ameritech Network Element Performance Benchmarks, Ameritech shall maintain records of (i) specific criteria listed in **Schedule 14.10**, which criteria are the criteria that Ameritech currently measures to evaluate its provision of unbundled Network Elements, and (ii) such additional criteria the Parties agree upon regarding Ameritech's compliance with different performance levels and intervals of such Network Elements (and Combination thereof) requested by Carrier and provided by Ameritech pursuant to **Section 14.6** and a Bona Fide Request (each, a "**Network Element Performance Activity**"). Ameritech shall provide records relating to the access to unbundled Network Elements Ameritech provides to itself, its subsidiaries and Affiliates (the "**Ameritech NE Records**") and parallel records of the access to unbundled Network Elements Ameritech provides to (x) Carrier (the "**Carrier NE Records**") and (y) other LECS in the aggregate (the "**Other LEC NE Records**").
- 14.10.3 Ameritech shall provide to Carrier for each Reporting Period, by the Twenty-second (22nd) day of the following month, in a self-reporting format, the Ameritech NE Records, the Carrier NE Records and the other LEC NE Records so that the Parties can determine Ameritech's compliance with the Ameritech Network Element Performance Benchmarks. If (i) Ameritech fails to comply with an Ameritech Network Element Performance Benchmark with respect to a Network Element Performance Activity for a Reporting Period, (ii) the sample size of the Network Element Performance Activity measured for such Reporting Period is statistically valid and (iii) the amount by which the applicable Ameritech Network Element Performance Activity deviates from the corresponding Network Element Performance Benchmark is statistically significant, then Ameritech shall have committed a "**Network Element Specified Performance Breach.**" Notwithstanding anything to the contrary in this **Section**

14.10.3, the Parties acknowledge that (i) Ameritech shall not be required to provide to Carrier those other LEC NE Records that correspond to and measure a level of quality and performance levels and intervals of unbundled Network Elements that are requested by an other LEC pursuant to 47 C.F.R. § 51.311 and **Section 14.6** and that are superior to that which Carrier requested Ameritech provide to Carrier hereunder, (ii) the other LEC NE Records shall be provided to Carrier on an aggregate basis and (iii) such other LEC NE Records shall be provided to Carrier in a manner that preserves the confidentiality of each other LEC and any of such LEC's proprietary information (including CPNI).

14.10.4 In no event shall Ameritech be deemed to have committed a Network Element Specified Performance Breach if Ameritech's failure to meet or exceed a Network Element Performance Activity is caused by a Delaying Event. If a Delaying Event (i) prevents Ameritech from performing a certain function or action that affects a Network Element Performance Activity, then such occurrence shall be excluded from the calculation of such Network Element Performance Activity and the determination of Ameritech's compliance with the applicable Ameritech Network Element Performance Benchmark of (ii) only suspends Ameritech's ability to timely perform such Network Element Performance Activity, then the applicable time-frame in which Ameritech's compliance with the Ameritech Network Element Performance Benchmark is measured shall be extended on a like-time basis equal to the duration of such Delaying Event.

14.10.5 Upon the occurrence of a Network Element Specified Performance Breach by Ameritech, Carrier may forego the dispute escalation procedures set forth in **Section 32** and (i) bring an action against Ameritech in an appropriate Federal district court, (ii) file a complaint against Ameritech with the FCC pursuant to Sections 207 or 208 of the Act, (iii) seek a declaratory ruling from the FCC, (iv) file a complaint in accordance with the rules, guidelines and regulations of the Commission and/or (v) seek other relief under Applicable Law.

- 14.10.6 Carrier shall also be entitled to any Credit Allowances as described in Schedule 14.2.

15.0 DISCLAIMER OF REPRESENTATIONS AND WARRANTIES

EXCEPT AS EXPRESSLY PROVIDED UNDER THIS AGREEMENT, OR AN APPLICABLE TARIFF, IF ANY, NO PARTY MAKES OR RECEIVES ANY WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICES, FUNCTIONS AND PRODUCTS IT PROVIDES OR IS CONTEMPLATED TO PROVIDE UNDER THIS AGREEMENT AND THE PARTIES DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR OF FITNESS FOR A PARTICULAR PURPOSE.

16.0 REGULATORY APPROVAL

- 16.1 The Parties understand and agree that this Agreement will be filed with the Commission and may thereafter be filed with the FCC. Each Party covenants and agrees to fully support approval of this Agreement by the Commission or the FCC. If the Commission or the FCC rejects any portion of this Agreement, the Parties agree to meet and negotiate in good faith to arrive at a mutually acceptable modification of the rejected portion; provided that such rejected portion shall not affect the validity of the remainder of this Agreement. The Parties acknowledge that nothing in this Agreement shall limit a Party's ability, independent of such Party's agreement to support and participate in the approval of this Agreement, to assert public policy issues relating to the Act.
- 16.2 **Regulatory Changes.** If any final and nonappealable legislative, regulatory, judicial or other legal action materially affects the ability of a Party to perform any material obligation under this Agreement, a Party may, on thirty (30) days' written notice (delivered not later than thirty (30) days' following the date on which such action has become legally binding and has otherwise become final and nonappealable) to the other Party require that the affected provision(s) be renegotiated, and the Parties shall renegotiate in good faith such mutually acceptable new provision(s) as may be required; provided that such affected provisions shall not affect the validity of the remainder of this Agreement.
- 16.3 If Ameritech enters into an agreement (the "Other Agreement") approved by the Commission pursuant to Section 252 of the Act which provides for interconnection within Michigan to another requesting Telecommunications Carrier including itself or its Affiliate, Ameritech shall make available to Carrier any such interconnection, service or network element arrangement, together with any related terms and conditions,

upon the same rates, terms and conditions as those provided in the Other Agreement. Carrier may avail itself of either (i) the other Agreement in its entirety or (ii) any interconnection service or network element arrangement, together with any related terms and conditions.

- 16.4 Upon Carrier's election to adopt a provision of the Other Agreement, the Parties shall amend this Agreement to reflect such term(s) within thirty (30) days after Ameritech's receipt of notice specifying such election. Notwithstanding the foregoing, Carrier may not avail itself of any of the arrangement in the Other Agreements if the Commission finds and concludes that Ameritech (i) would incur greater cost to provide such interconnection, service or network element arrangement to Carrier than it incurred to provide such arrangement to the Telecommunications Carrier that is party to the Other Agreement, or (ii) the provision of such interconnection, service or network element arrangement to Carrier is not technically feasible.

17.0 AUTHORIZATION

- 17.1 Ameritech Information Industry Services, a division of Ameritech Services, Inc., is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has full power and authority to execute and deliver this Agreement and to perform the obligations hereunder on behalf of Ameritech Michigan.
- 17.2 Thumb Cellular is a duly organized limited partnership, validly existing and in good standing under the laws of the State of Michigan and has full power and authority to execute and deliver this Agreement and to perform its obligations hereunder.

18.0 COMPLIANCE

Each party shall Comply with all applicable federal, state, and local laws, rules, and regulations applicable to its performance under this Agreement.

19.0 INDEPENDENT CONTRACTOR

Each Party shall perform services hereunder as an independent contractor and nothing herein shall be construed as creating any other relationship between the Parties. Each Party and each Party's contractor shall be solely responsible for the withholding or payment of all applicable federal, state and local income taxes, social security taxes and other payroll taxes with respect to their employees, as well as any taxes, contributions or other obligations imposed by

applicable state unemployment or workers' compensation acts. Each Party has sole authority and responsibility to hire, fire and otherwise control its employees.

20.0 FORCE MAJEURE

Neither Party shall be liable for any delay or failure in performance of any part of this Agreement from any cause beyond its control and without its fault or negligence including, without limitation, acts of nature, acts of civil or military authority, government regulations, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, work stoppages, equipment failure, 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 carriers (individually or collectively, a "Force Majeure Event").

21.0 CONFIDENTIALITY

21.1 Any information such as specifications, drawings, sketches, business information, forecasts, models, samples, data, computer programs and other software and documentation of one Party (a "Disclosing Party") that is furnished or made available or otherwise disclosed to the other Party or any of such other Party's employees, contractors, agents or Affiliates (its "Representatives" and with a Party, a "Receiving Party") pursuant to this Agreement ("Proprietary Information") shall be deemed the property of the Disclosing Party. Proprietary Information, if written, shall be marked "Confidential" or "Proprietary" or by other similar notice, and, if oral or visual, shall be confirmed in writing as confidential by the Disclosing Party to the Receiving Party within ten (10) days after disclosure. Unless Proprietary Information was previously known by the Receiving Party free of any obligation to keep it confidential, or has been or is subsequently made public by an act not attributable to the Receiving Party, or was independently developed by the receiving party, or was already in the public domain, or is explicitly agreed in writing not to be regarded as confidential, it (a) shall be held in confidence by each Receiving Party; (b) shall be disclosed to only those Representatives who have a need for it in connection with the provision of services required to fulfill this Agreement and shall be used only for such purposes; and (c) may be used for other purposes only upon such terms and conditions as may be mutually agreed to in advance of use in writing by the Parties. Notwithstanding the foregoing sentence, a Receiving Party shall be entitled to disclose or provide Proprietary Information as required by any governmental authority or applicable law only in accordance with Section 18.2.

- 21.2 If any Receiving Party is required by any governmental authority or by applicable law to disclose any Proprietary Information, then such Receiving Party shall provide the Disclosing Party with written notice of such requirement as soon as possible and prior to such disclosure. The Disclosing Party may then either seek appropriate protective relief from all or part of such requirement or, if it fails to successfully do so, it shall be deemed to have waived the Receiving Party's compliance with this Section with respect to all or part of such requirement. The Receiving Party shall use all commercially reasonable efforts to cooperate with the Disclosing Party in attempting to obtain any protective relief which such Disclosing Party chooses to obtain.
- 21.3 In the event of the expiration or termination of this Agreement for any reason whatsoever, each Party shall return to the other Party or destroy all Proprietary Information (including all copies thereof) obtained from the other Party in connection with this Agreement and shall use all reasonable efforts, including instructing its employees and others who have had access to such information, to keep confidential and not to use any such information, unless such information is now, or is hereafter disclosed, through no act, omission or fault of such Party, in any manner making it available to the general public.

22.0 GOVERNING LAW

For claims under this Agreement that are based upon issues within the jurisdiction of the FCC, the exclusive jurisdiction shall be provided for by the FCC and the Act. For claims under this Agreement that are based upon issues exclusively within jurisdiction of the Commission, the exclusive jurisdiction shall be with such Commission. Nothing herein shall be construed as a waiver by either party of its right to bring a claim before either the FCC or The Commission where the FCC or The Commission has jurisdiction. In all other respects, this Agreement shall be governed by the domestic laws of the State of Michigan without reference to conflict of law provisions.

23.0 TAXES

Each Party purchasing services hereunder shall pay or otherwise be responsible for all federal, state, or local sales, use, excise, gross receipts, transaction or similar taxes, fees, surcharges penalties or interest ("Taxes") levied against upon such purchasing Party (or the providing Party when such providing Party is permitted to pass along to the purchasing Party such Taxes) and neither shall responsible for any Tax on the other Party's corporate existence, status or income. Whenever possible, these amounts shall be billed as a separate item on the invoice. To the extent a sale is claimed to be for resale tax exemption, the

purchasing Party shall furnish the providing Party a proper resale tax exempt certificate as authorized or required by statute or regulation by the jurisdiction providing said resale tax exemption. Failure to timely provide said resale exemption certificate will result in no exemption being available to the purchasing Party for any charges invoiced prior to the date such exemption certificate is furnished. The Parties acknowledge receipt of each other's resale exemption certificate.

24.0 NON-ASSIGNMENT

Neither Party may assign or transfer (whether by operation of law or otherwise) this Agreement (or any rights or obligations hereunder) to a third party without the prior written consent of the other Party; provided that each Party may assign this Agreement to a corporate Affiliate or an entity under its common control or an entity acquiring all or substantially all of its assets or equity by providing prior written notice to the other Party of such assignment or transfer. Any attempted assignment or transfer that is not permitted is void ab initio. Without limiting the generality of the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the Parties' respective successors and assigns.

25.0 NON-WAIVER

Failure of either Party to insist on performance of any term or condition of this Agreement or to exercise any right or privilege hereunder shall not be construed as a continuing or future waiver of such term, condition, right or privilege.

26.0 AMENDMENT OR OTHER CHANGES TO THE ACT

The Parties acknowledge that the respective rights and obligations of each Party as set forth in this Agreement are based on the text of the Act and the rules and regulations promulgated thereunder by the FCC and the Commission as of the Effective Date. In the event of any amendment of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, or any legislative, regulatory, judicial order, rule or regulation or other legal action that revises or reverses the Act, the FCC's First Report and Order in CC Docket Nos. 96-98 and 95-185 or any applicable Commission order or arbitration award purporting to apply the provisions of the Act ("Amendment to the Act"), either Party may, by providing written notice to the other Party require that the affected provisions be renegotiated in good faith and that this Agreement be amended to reflect the pricing, terms and conditions of each such Amendment to the Act. If any regulatory order, judicial order, rule or regulation affects any rates or charges of the services provided hereunder, e.g., by authorizing new rates or by establishing a new methodology by which rates are calculated, such new rates

shall be effective upon the effective date of the regulatory order, judicial order, rule or regulation.

27.0 PUBLICITY AND USE OF TRADEMARKS OR SERVICE MARKS

Neither Party nor its subcontractors or agents shall use the other Party's trademarks, service marks, logos or other proprietary trade dress in any advertising, press releases, publicity matters or other promotional materials without such Party's prior written consent.

28.0 NOTICES

Notices given by one Party to the other Party under this Agreement shall be in writing and shall be (a) delivered personally, (b) delivered by express delivery service, (c) mailed, certified mail or first class U.S. mail postage prepaid, return receipt requested or (d) delivered by telecopy to the following address of the Parties:

To Carrier:

Thumb Cellular
82 South Main Street
Pigeon, MI 48755
Attn: Paul Picklo
Telecopy Number (517) 453-4363

To Ameritech:

Ameritech Information Industry Services
350 North Orleans
Fifth Floor
Chicago, Illinois 60654
Attn: Vice President and General Counsel
Telecopy Number (312) 595-1504

With a copy to:

Ameritech Information Industry Services
350 North Orleans
Fifth Floor
Chicago, Illinois 60654
Attn: Vice President - Network Providers
Telecopy Number (312) 335-2927

or to such other address as either Party shall designate by proper notice. Notices will be deemed given as of the earlier of (i) the date of actual receipt, (ii) the next business day when notice is sent via express mail or personal delivery, (iii) on the date set forth on the confirmation in the case of telecopy.

29.0 JOINT WORK PRODUCT

This Agreement is the joint work product, of the Parties and has been negotiated by the Parties and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against either Party.

30.0 NO THIRD PARTY BENEFICIARIES; DISCLAIMER OF AGENCY

This Agreement is for the sole benefit of the Parties and their permitted assigns, and nothing herein express or implied shall create or be construed to create any third-party beneficiary rights hereunder. Except for provisions herein expressly authorizing a Party to act for another, nothing in this Agreement shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or inc any liability or any obligations of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this Agreement, no Party undertakes to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

31.0 SURVIVAL

The Parties' obligations under this Agreement which by their nature are intended to continue beyond the termination or expiration of this Agreement shall survive the termination or expiration of this Agreement.

32.0 DISPUTES

32.1 Disputed Amounts

- 32.1.1 If any portion of an amount due to a Party (the "Billing Party") under this Agreement is subject to a bona fide dispute between the Parties, the Party billed (the "Non-Paying Party") shall within sixty (60) days of its receipt of the invoice containing such disputed amount give written notice to the Billing Party of the amounts it disputes ("Disputed Amounts") and include, in such notice the specific details and reasons

for disputing each item, provided, however, that a failure to provide such notice by that date shall not preclude a Party from subsequently challenging billed charges. The Non-Paying Party shall pay when due all undisputed amounts to the Billing Party. Notwithstanding the foregoing, a Party shall be entitled to dispute only those charges for which the Bill Due Date was within the immediately preceding twenty-four (24) months or the date on which the other Party received notice of such Disputed Amounts.

Accordingly, if a Non-Paying Party disputes charges and the dispute is resolved in favor of the Billing Party, the Non-Paying Party shall pay the Billing Party the amount of the Disputed Amounts and any associated late payment charges as set forth in Section 9.1 no later than the second Bill Due Date after the resolution of the Dispute. In no event, however, shall any late payment charges be assessed on any previously assessed late payment charges.

If the Parties are unable to resolve the issues related to the Disputed Amounts in the normal course of business within sixty (60) days after delivery to the Billing Party of notice of the Disputed Amounts, each of the Parties shall appoint a designated representative who has authority to settle the dispute and who is at a higher level of management than the persons with direct responsibility for administration of this Agreement. The designated representatives shall meet as often as they reasonably deem necessary in order to discuss the dispute and negotiate in good faith in an effort to resolve such dispute. The specific format for such discussions will be left to the discretion of the designated representatives, however all reasonable requests for relevant information made by one Party to the other Party shall be honored.

- 32.1.2 If the Parties are unable to resolve issues related to the Disputed Amounts within forty-five (45) days after that Parties' appointment of designated representatives pursuant to Section 29.1.2, then either Party may (i) bring an action in an appropriate Federal district court, (ii) file a complaint with the FCC pursuant to Section 207 or 208 of the Act, (iii) seek a declaratory ruling from the FCC, (iv) file a complaint in accordance with the rules, guidelines and regulations of the Commission or (v) seek other relief under applicable law.

32.1.3 The Parties agree that all negotiations pursuant to this Section shall remain confidential and shall be treated as compromise and settlement negotiations for purposes of the Federal Rules of Evidence and state rules of evidence.

32.1.4 Any undisputed amounts not paid when due shall accrue interest from the date such amounts were due at the lesser of (i) one and one-half percent (1 ½%) per month or (ii) the highest rate of interest that may be charged under applicable law.

32.2 Dispute Escalation and Resolutions for Disputes other than Disputed Amounts.

Except as otherwise provided herein, any dispute, controversy or claim (individually and collectively, a "Dispute") arising under this Agreement shall be resolved in accordance with the procedures set forth in this Section 32. In the event of a Dispute between the Parties relating to this Agreement and upon the written request of either Party, each of the Parties shall appoint a designated representative who has authority to settle the Dispute and who is at a higher level of management than the persons with direct responsibility for administration of this Agreement. The designated representatives shall meet as often as they reasonably deem necessary in order to discuss the Dispute and negotiate in good faith in an effort to resolve such Dispute. The specific format for such discussions will be left to the discretion of the designated representatives; however, all reasonable requests for relevant information made by one Party to the other Party shall be honored. If the Parties are unable to resolve issues related to a Dispute within thirty (30) days after the Parties' appointment of designated representative as set forth above, a Party may (i) bring an action in an appropriate Federal district court, (ii) file a complaint with the FCC pursuant to Section 207 or 208 of the Act, (iii) seek a declaratory ruling from the FCC, (iv) file a complaint in accordance with the rules, guidelines and regulations of the Commission or (v) seek other relief under applicable law.

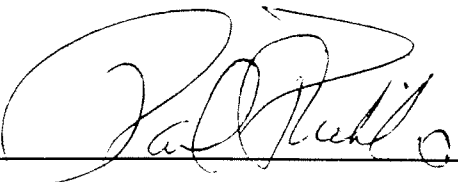
33.0 ENTIRE AGREEMENT

The terms contained in this Agreement and any Schedules, Exhibits, tariffs and other documents or instruments referred to herein, which are incorporated into this Agreement by this reference, constitute the entire agreement between the Parties with respect to the subject matter hereof, superseding (subject to Section 31.0) all prior understandings, proposals and other communications, oral or

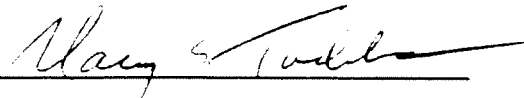
written. Neither Party shall be bound by any preprinted terms additional to or different from those in this Agreement that may appear subsequently in the other Party's form documents, purchase orders, quotations, acknowledgment, invoices or other communications. This Agreement may only be modified by a writing signed by an officer of each Party.

IN WITNESS WHEREOF, this Agreement has been executed by the Parties on the date set forth above.

Thumb Cellular

By: 
Date: 10/13/99
Title: General Manager

Ameritech Information Industry
Services, a division of Ameritech
Services, Inc., on behalf of Ameritech
Michigan

By: 
Date: 10/21/99
Title: President

Attachment A **Reciprocal Compensation Rates**

Switching and Shared Transport

Per Minute of Use

Figure 1 (Ameritech to Carrier Calls)

For calls originated on Ameritech's

network and terminated on Carrier's network:

\$0.0051607

Figure 2 (Carrier to Ameritech calls)

For calls originated on Carrier's network
and terminated on Ameritech's network-

\$0.0051607

Type 1 Service, local call

\$0.0051607

Type 2A Service, local call

\$0.004053

Type 2B Service, local call

Signaling

Both Ameritech and Carrier will pay each other at the same rates as approved by the Commission in Case No. U-11280. The Parties agree that if any rates change as a result of a Commission Order in Case No. U-11831, the rates approved by the Commission in Case No. U-11831 shall prevail.

Non-recurring

Charge

Monthly

Rate

Usage
Charge

Signal Transfer Point, per port

\$254.79

\$270.11

Originating Point Code, per service
added or changed

9.63

Global Title Address Translation,
per service added or changed

5.18

Signal Switching, per ISUP message	\$0.000121
Signal Switching, per TCAP message	0.000103
Signal Transport, per ISUP message	0.000046
Signal Transport, per TCAP message	0.000031
Signal Formulation, per ISUP message	0.000699
Signal Formulation, per TCAP message	0.000417
Signal Tandem Switching, per ISUP message	0.000207
Reverse Billing	\$0.005017

Attachment B

Transit Traffic Charges

Per Minute of Use	<u>.004346 per minute</u>
Calls originating on Carrier's network and terminating to another Carrier's network and transiting Ameritech's network:	

Attachment C

Report Charges

Figure 1

Type 2 Ameritech Originating Traffic Report and Type 2 Transit Traffic Report - Land-to-Mobile Charges	\$100.00
Type 2 Traffic Report - Land-to-Mobile Charges per report, per ACNA, per State, per month	
Additional Copies	No charge

Figure 2

Type 2 Transit Traffic Report - Mobile-to-Land per report, per ACNA, per State, per month	No charge
Additional Copies	No charge

Type 2 Ameritech Originating Traffic Report			
Attachment D			
State - Month - Year			
NPA	NXX	MIN	OCN
312	NXX	132,098	XXXX
312	NXX	122,954	XXXX
312	NXX	544	XXXX
630	NXX	12,540	XXXX
708	NXX	145,099	XXXX
847	NXX	256,237	XXXX
847	NXX	239,011	XXXX
Total Minutes of Use		x,xxx,xxx	\$xx,xxx
Total Reciprocal Comp. Amount			

Attachment E

Type 2 Transit Traffic Report

Wireless-to-Land

Customer ACNA _____

Year/Month _____

State _____

Telecommunications
Carrier

MOUS

General Tel

2,575

Century

16,597

Deerfield Farmers

75,996

Spring-CENTEL

467,260

Lennon

35,746

112-Wire ADSL-Compatible Loop" or "ADSL 2W" is a transmission path which facilitates the transmission of up to a 6 Mbps digital signal downstream (toward the Customer) and up to a 640 kbps digital signal upstream (away from the Customer) while simultaneously carrying an analog voice signal. An ADSL-2W is provided over a 2-Wire, non-loaded twisted copper pair provisioned using revised resistance design guidelines and meeting ANSI Standard T1.413-1995 and AM-TR-TMO-000123. An ADSL-2W terminates in a 2-wire electrical interface at the Customer premises and at the Ameritech Central Office frame. ADSL technology can only be deployed over Loops which extend less than 18 Kft. from Ameritech's Central Office. ADSL compatible Loops are available only where existing copper facilities can meet the ANSI T1.413-1995 specifications.

"2-Wire ISDN 160 Kbps Digital Loop" or "BRI-ISDN" which supports digital transmission of two 64 kbps bearer channels and one 16 kbps data channel (2B + D). BRI-ISDN is a 2B+D Basic Rate Interface-Integrated Services Digital Network (BRI-ISDN) Loop which will meet national ISDN standards and conform to Technical Reference AM-TR-TMO-000123, Ameritech Unbundled Digital Loops (including ISDN).

114-Wire Analog Voice Grade Loop" or "Analog 4W," which supports transmission of voice grade signals using separate transmit and receive paths and terminates in a 4-wire electrical interface at both ends. Analog 4W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.

"2-Wire Analog Voice Grade Loop" or "Analog 2W," which supports analog transmission of 300-3000 Hz, repeat loop start, loop reverse battery, or ground start seizure and disconnect in one direction (toward the End Office Switch), and repeat ringing in the other direction (toward the Customer) and terminates in a 2-Wire interface at both the central office MDF and the customer premises. Analog 2W includes Loops sufficient for the provision of PBX trunks, pay telephone lines and electronic key system lines. Analog 2W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.

Subject to **Section 1.1 of Schedule 14.5**, Ameritech shall allow Carrier to access the following Loop types (in addition to those Loops available under applicable tariffs) unbundled from local switching and local transport.

LOCAL LOOPS

SCHEDULE 14.2.1

112-Wire HDSL-Compatible Loop " or "HDSL 2W" is a transmission path which facilitates the transmission of a 768 kbps digital signal over a 2-Wire, non-loaded twisted copper pair meeting the specifications in ANSI T1E1 Committee Technical Report Number 28. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 and AM-TR-TMO-000123 specifications.

114-Wire HDSL-Compatible Loop " or **HHDSL 4W**" is a transmission path which facilitates the transmission of a 1.544 Mbps digital signal over two 2-Wire, non-loaded twisted copper pairs meeting the specifications in ANSI T1E1 Committee Technical Report Number 28 and AM-TR-TMO-000123. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 specifications.

114 Wire 64 Kbps Digital Loop " or **114 Wire 64 Digital**" is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 64 Kbps and terminates in a 4 Wire electrical interface at both the Customer premises and on the MDF in Ameritech's Central Office. 4 Wire 64 Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-000123.

"4 Wire 1.544 Mbps Digital Loop" or **"1.544 Mbps Digital"** is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 1.544 Mbps and terminates in a 4 Wire electrical interface at the Customer premises and on the DSX frame in Ameritech's Central Office. 1.544 Mbps Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-00023.

Sch. 14.2.2 - 1

UNBUNDLED ACCESS TO NETWORK INTERFACE DEVICES

SCHEDULE 14.2.2

Ameritech's Network Interface Device ("NID") is a Network Element that utilizes a cross-connect device to connect loop facilities to inside wiring.

Ameritech will permit Carrier to connect Carrier's loop to the inside wiring of the Customer's premises through Ameritech's NID, where necessary. Carrier must establish the connection to Ameritech's NID through an adjoining NID which serves as the network interface or demarcation for Carrier's loop.

Maintenance and control of premises (inside wiring) is under the control of the Customer. Any conflict between service providers for access to the Customer's inside wire must be resolved by the Customer.

Sch. 14.2.3 - 1

- interconnected to the Tandem Switch.
- (b) the basic switching function of creating a temporary transmission path that connects Carrier's trunks to the trunks of Ameritech, IXCS, ICOS, CMRS, and other LECs
- Tandem Switches, which includes Interconnection with the trunk at the Tandem Distribution Frame ("TDF") and the Tandem Switch trunk ports:
- (a) an unbundled Network Element in Ameritech's Class 4 non-TOPS digital
- 2.1 The Tandem Switching Capability Network Element is defined as:
- 2.0 Tandem Switching.
- available from such switch.
- CLASS features and Centrex, as well as any technically feasible customized routing functions
- (c) all other features that the switch provides, including custom calling,
- (b) access to operator services, directory assistance and 9-1-1; and
- (a) the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to Ameritech's Customers, such as a telephone number, white page listing, dial tone and signaling;
- specific port type (line side or trunk side port), which include:
- (3) all features, functions, and capabilities of the switch available from the
- termination at a trunk-side cross-connect panel and a switch trunk card; and
- (2) trunk-side facilities, which include the connection between trunk
- termination at the Main Distribution Frame and a switch line card;
- (1) line-side facilities, which include the connection between a Loop
- as:
- 1.0 Local Switching. The local switching capability of a Network Element is defined

SWITCHING CAPABILITY

SCHEDULE 14.2.3

2.2 Interconnecting trunk types which can be switched include FGB, FGC, FGD and Type H. Signaling support includes Rotary, MF, and SS7 and any signaling conversions between these signaling formats.

2.3 Variations in Tandem Switching equipment used to provide service in specific locations may cause differences in the operation of certain features.

2.4 The unbundled Tandem Switching Network Element will provide to Carrier all available basic Tandem Switching functions and basic capabilities that are centralized in the Tandem Switch (and not in End Office Switches) including the following functions Ameritech makes available to its Customers:

2.4.1 Routing of calls from an inbound trunk to an outbound trunk based on destination digits.

2.4.2 Routing of Equal Access or Operator Service calls from an inbound trunk to an outbound trunk based on the CIC forwarded by the inbound trunk.

2.5 Translations, screening, blocking, and route indexing are provided if technically feasible under the standard switching translations and screening in use in that switch. A request for translations, screening, blocking, route indexing other than what is in use in that switch will be provided where technically feasible as a Bona Fide Request. Ameritech will provide these features if technically feasible and, upon agreement by Carrier to pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the capability. Variations in the Tandem Switching equipment or translation and screening used to provide service in specific locations may cause differences in the operation of the element.

Sch. 14.2.4 - 1

2. Ameritech shall offer Interoffice Transmission Facilities in each of the following ways:
 - 2.1. As a dedicated transmission path DS1, DS3, OC3, OC12 and OC48).
 - 2.2. As a shared transmission path as described in Section 1.3 above.
 - 2.3. Dark Fiber.
- 1.3. Shared transport transmission facilities ("Shared Transport") are a billing arrangement where two (2) or more carriers share the features, functions and capabilities of transmission facilities between the same types of locations as described for dedicated transport in Sections 1.1 and 1.2 preceding and share the costs.
- 1.2. "Unbundled dedicated entrance facility" is a dedicated facility connecting Ameritech's transmission equipment in an Ameritech Central Office or to a tandem switching facility in a Class 4 Office with Carrier's transmission equipment and switching facilities in Carrier's Switching Office for the purposes of providing Telecommunications Services.
- 1.1. Unbundled dedicated interoffice transport facility ("Dedicated Transport") is a dedicated facility connecting two Ameritech Central Offices buildings via Ameritech transmission equipment. All applicable digital Cross-Connect, multiplexing, and Collocation space charges apply at an additional cost.
1. Ameritech provides several varieties of unbundled Interoffice Transmission Facilities:
 - Interoffice Transmission Facilities are Ameritech transmission facilities dedicated to a particular Customer or carrier, or shared by more than one Customer or carrier, that provide Telecommunications Services between Wire Centers owned by Ameritech or Carrier, or between Switches owned by Ameritech or Carrier.

INTEROFFICE TRANSMISSION FACILITIES

SCHEDULE 14.2.4

3. Where Dedicated Transport or Shared Transport is provided, it shall include (as appropriate):

3.1. The transmission path at the requested speed or bit rate.

3.2. The following optional features are available; if requested by Carrier at additional cost:

3.2.1. Clear Channel Capability per 1.544 Mbps (DS 1) bit stream.

3.2.2. Ameritech provided Central Office multiplexing;

(a) DS3 to DS1 multiplexing; and

(b) DS1 to Voice/Base Rate/128, 256, 384 Kbps Transport multiplexing

3.3. If requested by Carrier, the following are available at an additional cost:

3.3.1. 1 + 1 Protection for OC3, OC 12 and OC48.

3.3.2. 1 + 1 Protection with Cable Survivability for OC3, OC12 and OC48.

3.3.3. 1 + 1 Protection with Route Survivability for OC3, OC12 and OC48.

4. Technical Requirements.

This Section sets forth technical requirements for all Interoffice Transmission Facilities:

4.1. When Ameritech provides Interoffice Transmission Facilities as a circuit, the entire designated transmission facility (DS1, DS3, and OC3) shall be dedicated to Carrier designated traffic.

4.2. Ameritech shall offer Interoffice Transmission Facilities in all then currently available technologies including DS1 and DS3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates, except subrate services, where available.

4.3. For DS1 facilities, Interoffice Transmission Facilities 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 applicable technical references set forth under Shared Transport in the Technical Reference Schedule.

4.4. For DS3 facilities, and higher rate facilities, Interoffice Transmission Facilities 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 applicable technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.

- 4.5. When requested by Carrier, Interoffice Transmission Facilities shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 4.6. When physical diversity is requested by Carrier, Ameritech shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by Carrier).
- 4.7. Any request by Carrier for diversity shall be subject to additional charges pursuant to this Agreement and applicable tariffs.
- 4.8. Ameritech shall offer the following interface transmission rates for Interoffice Transmission Facilities:
- 4.8.1. DS 1 (Extended SuperFrame - ESF and D4);
- 4.8.2. DS3 (C-bit Parity and M13 shall be provided);
- 4.8.3. SONET standard interface rates in accordance with the applicable ANSI technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.
- 4.9. Ameritech shall permit, to the extent technically feasible and at applicable rates, Carrier to obtain the functionality provided by DCS together with and separate from dedicated transport in the same manner that Ameritech offers such capabilities to IXCs that purchase transport services. If Carrier requests additional functionality, such request shall be made through the Bona Fide Request process.
- 4.10. Upon Carrier's request, Ameritech shall provide Carrier with electronic provisioning control of an Carrier specified Dedicated Transport through Ameritech Network Reconfiguration Service (ANRS) on the rates, terms and conditions in F.C.C. Tariff No. 2.
- 4.11. Notwithstanding any other provisions in this Agreement, Carrier is not required to establish or pay for a collocation arrangement in order to purchase an interoffice transmission facility.

SIGNALING NETWORKS AND CALL-RELATED DATABASES

SCHEDULE 14.2.5

1.0 Signaling Transfer Points.

A Signaling Transfer Point (STP) is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.

1.1. Technical Requirements.

1.1.1. STPs shall provide access to all other Network Elements connected to Ameritech SS7 network. These include:

1.1.1.1. Ameritech Local Switching or Tandem Switching;

1.1.1.2. Ameritech Service Control Points/Databases;

1.1.1.3. Third-party local or tandem switching systems; and

1.1.1.4. Third-party-provided STPSs.

1.1.2. The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the Ameritech SS7 network. This explicitly includes the use of the Ameritech SS7 network to convey messages which neither originate nor terminate at a Signaling End Point directly connected to the Ameritech SS7 network (Lg., transient messages). When the Ameritech 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.

1.1.3. If an Ameritech Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an Carrier local switch and third party local switch, the Ameritech SS7 network shall convey the TCAP messages that are necessary to provide Call Management Features (Automatic Callback, Automatic Recall, and Screening List Editing) between the Carrier local STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to the Ameritech STPSs, based on the routing instruction provided in each message.

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- 1.2. Signaling Link Transport.
- 1.1.9.2. SSCP Performance, as specified in ANSI T1.112.5.
- 1.1.9.1. MTP Performance, as specified in ANSI T1.111.6; and
- 1.1.9. STPs shall be equal to or better than the following performance requirements:
- standards and available capabilities of Ameritech STPs.
- the specifications for Interwork MRVT and SRVT if and when these become approved ANSI
- an SS7 network connected with the Ameritech SS7 network. This requirement shall be superseded by
- signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in
- connected to the Ameritech SS7 network. STPs shall perform MRVT and SRVT to the destination
- switching system or database, or is a Carrier or third party local or tandem switching system directly
- 1.1.8. In cases where the destination signaling point is an Ameritech local or tandem
- 1.1.7.2. SSCP Routing Verification Test (SRVT).
- 1.1.7.1. MTP Routing Verification Test (MRVT); and
- includes:
- 1.1.7. STPs shall provide all functions of the OMAP commonly provided by STPs. This
- ANSI T1.111.8, when this capability becomes available on Ameritech STPs.
- 1.1.6. STPs shall also provide the capability to route SSCP messages based on ISNI, as specified in
- destination.
- connected with the Ameritech SS7 network, and shall not perform SSCP Subsystem Management of the
- STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network
- messages to the destination and SSCP Subsystem Management of the destination. In all other cases,
- switching system directly connected to the Ameritech SS7 network. STPs shall perform final GTT of
- an Ameritech local or tandem switching system or database, or is a Carrier or third party local or tandem
- SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is
- service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and
- 1.1.5. STPs shall provide all functions of the SSCP necessary for Class 0 (basic connectionless)
- 1.1.4.3. Signaling Network Management functions, as specified in ANSI T1.111.4.
- 1.1.4.2. Signaling Link functions, as specified in ANSI T1.111.3; and
- 1.1.4.1. Signaling Data Link functions, as specified in ANSI T1.111.2.
- includes:
- 1.1.4. STPs shall provide all functions of the MTP as specified in ANSI T1.111. This

1.2.1. Definition. Signaling Link Transport is a set of two (2) or four (4) dedicated 56Kbps transmission paths between Carrier-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

Technical Requirements.

1.2.2. Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.

1.2.3. Of the various options available, Signaling Link Transport shall perform in the following two (2) ways:

- a) As an "A-link" which is a connection between a switch or SCP and a Signaling Transfer Point Switch (STPS) pair; and
- b) As a "D-link" which is a connection between two (2) STP mated pairs in different company networks (e.g., between two (2) STPS pairs for two Competitive Local Exchange Carriers (CLECs).

1.2.4. Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:

- a) An A-link layer shall consist of two (2) links.
 - b) A D-link layer shall consist of four (4) links.
- 1.2.5. A signaling link layer shall satisfy a performance objective such that:
- a) There shall be no more than two (2) minutes down time per year for an A-link layer; and
 - b) There shall be negligible (less than two (2) seconds) down time per year for a D-link layer.

1.2.6. A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

- a) 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 (2) separate physical paths end-to-end); and
- b) No two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).

1.2.7. Interface Requirements. There shall be a DS1 (1.544 Mbps) interface at the Carrier-designated SPOL. Each 56 Kbps transmission path shall appear as a DSO channel within the DS1 interface.

2.1. Toll Free Database Services.

2.1.1. Call Routing Service. The Call Routing Service provides for the identification of the carrier to whom a call is to be routed when a toll-free (1 + 800-NXX-XXXX or 1 + 888NXX-XXXX) call is originated by Customer. This function uses the dialed digits to identify the appropriate carrier and is done by screening the full ten digits of the dialed number. The Call Routing Service may be provided in conjunction with a Customer's InterLATA or IntraLATA Switched Exchange Access Service.

When 800 Call-Routing service is provided, an originating call is suspended at the first switching office equipped with a Service Switching Point (SSP) component of the SSC/SS7 Network. The SSP launches a query over signaling links (A-links) to the Signal Transfer Point (STP), and from there to the SCP. The SCP returns a message containing the identification of the carrier to whom the call should be routed and the call is processed.

Carrier's SS7 network is used to transport the query from its End Office to the Ameritech SCP. Once Carrier's identification is provided, Carrier may use the information to route the toll-free traffic over its network. In these cases, Ameritech Switched Access services are not used to deliver a call to Carrier. The toll-free carrier ID date may not be stored for Carrier's future use.

2.1.2. Routing Options. In addition to the toll-free service offerings, new routing options are offered. These options are purchased by toll-free service providers to allow their clients to define complex routing requirements on their toll-free service. Toll-free routing options allow the service provider's Customer to route its toll-free calls to alternate carriers and/or destinations based on time of day, day of week, specific dates or other criteria. These routing options are in addition to the basic toll-free call routing requirements which would include the toll-free number, the intraLATA carrier, the interLATA carrier and the Area of Service (AOS).

2.1.3. Carrier Identification. Carrier may choose the 800 Carrier Identification service to obtain toll-free number screening. With this service, Carrier will launch a query to the Ameritech database using its own Service Switching Points (SSPs) network. In contrast to the Call Routing Service described in Section 2.1.1 above, with the 800 Carrier Identification service, no routing is performed.

2.1.4. Number Administration. Carrier, at its option may elect to use Ameritech's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, Ameritech will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible

Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If Carrier does not select NAS, Carrier will perform the Responsible Organization service.

2.2. LIDB Database Service.

2.2.1. The Line Information Database (LIDB) Query Response Service is a validation database system. It enables Carrier to offer alternately billed services to its Customers. The database provides an efficient way to validate calling cards and toll billing exception (TBE) (i.e., restricts a collect or third-party billed call). Toll fraud protection and reduced call set up expenses are among the benefits of the service.

2.2.2. Billing information records include the Customer name, phone number security personal identification numbers and third-party acceptance indications. Prior to call completion, a query is launched to the LIDB to determine the validity of the requested billing method. The call is then completed or denied based on the LIDB's response.

2.3. Local Number Portability.

2.3.1. Ameritech's provision of LNP will utilize LRN switch software based on requirements developed by the workshop participants and concurred in by the Commission. These requirements are fully compliant with the principles adopted by the FCC in its First Report and Order, CC Docket No. 95-116 (the "Number Portability Order"). The detailed description and technical specifications for the planned LRN implementation can be found in various documents produced by the FCC Local Number Portability workshop.

2.3.2. Ameritech is fully prepared to provide LNP database access to Carrier. However, in adopting its Number Portability Order, the FCC referred certain technical issues to the North American Numbering Council (NANOC) and issued a further notice addressing the recovery of costs associated with LNP implementation. Until these activities are concluded, Ameritech cannot finalize product descriptions and rates for access to its LNP database. Nonetheless, Ameritech is willing to begin discussions through the Implementation Team with Carrier to discuss Carrier's access to Ameritech's LNP databases in lieu of constructing Carrier's own.

2.4. Unbundled ALN Application Process.

2.4.1. The ALN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which ALN Network Elements interact.

2.4.2. Ameritech's Unbundled ALN (Advanced Intelligent Network) Applications Access service will enable Carrier (whether it purchases unbundled switching capabilities from

Amnitech or owns its own SSP (Service Switching Point)) to offer its Customers ALN services without first having to deploy a full ALN infrastructure within its own networks. Amnitech will make available existing ALN retail applications, as well as newly created services that Carrier creates via the Amnitech ALN Service Creation Environment (SCE) Access service. Unbundled ALN Applications Access provides for the ALN functionality necessary for the day to day ongoing call processing associated with a specific ALN applications execution. This includes the SS7 transport and SCP processing of the query associated with the specific service.

2.4.3. Associated with the ALN SCP is a Service Creation Environment (SCE) and a Service Management System (SMS). Amnitech offers access to the Amnitech SMS and SCE capabilities via two (2) ALN offerings: ALN Service Creation Environment Access Service and ALN Service Management System Access Service.

2.4.4. Carriers will share the common ALN infrastructure components provided by Amnitech, such as a Service Control Point (SCP), a Signaling Transfer Point (STP), Service Management System (SMS), and, if Carrier purchases Unbundled Switching from Amnitech, the ALN Service Switching Point (SSP). Carrier shall be responsible for assuring the compatibility of its ALN SSP software generics with the Amnitech ALN Applications and SCP software releases. Interconnection of the Carrier SSP with the Amnitech SS7 network is required, and can be accomplished in a number of ways.

2.4.5. Activation of the desired application at the Amnitech SCP requires subscription by both the ordering carrier (Carrier) and the end-user. In general, ALN operations require close cooperation between Amnitech and the requesting carrier.

2.4.6. The SSP and SCP vendors provide logical capabilities which Amnitech uses to create each ALN service. The SSP and SCP vendors have no knowledge of the specific ALN Applications that Amnitech has created. Amnitech's ALN deployment is based on ALN 0.1.

3.1. ALN Service Creation Environment Access Service.

Access to Amnitech's ALN service creation functionality will be provided in a nondiscriminatory manner to Carrier to enable it to create new ALN services on Amnitech's network. If Carrier has a new ALN service concept, it can utilize all or some of the features below to obtain a fully functional ALN service. Subsections 3.1.1 through 3.1.10 lists the logical steps of the ALN Service Creation Environment Access Service. When this service is ordered by Carrier, Carrier shall be responsible for the steps described in Subsections 3.1.1, if applicable, and Amnitech shall, subject to Carrier's payment of applicable charges, be responsible for the steps described in subsections 3.1.5 through 3.1.10.

3.1.1. Service Concept Description: The description of service idea should detail requirements such as: dialing patterns, information exchange, announcements, voice prompts, expected service management screens and reports, and CPE requirements.

3.1.2. Creation of Technical Specification: Translation of a new service description into technical specification including engineering requirements for Ameritech's network. The technical specification must detail how the service interacts in the network, translated in network terms, should include any expected/anticipated feature interaction discrepancies, and will include the process flows on how the service traverses the network.

3.1.3. Service Logic Design: The development of service design from SCP perspective to include Algorithms, Data Structures and Flow Diagrams.

3.1.4. Service Logic Coding: Development of machine logic in the SCE to include tables, SIBs, and other elements as necessary.

3.1.5. Service Logic Testing: Service logic testing isolated within the SCE ensure accuracy of compilation and code development, and compliance with Ameritech's ALN environment.

3.1.6. SMS Interface Requirements: Development of Carrier SMS interface access including screens, flow-through interface and reports. This is required to allow Carrier to activate, update, modify, and administer Customer data associated with the new service.

3.1.7. Platform Access Logic Configuration: Service specific updates to global infrastructure required to enable new service. Includes modification of the access logic to enable a new service.

3.1.8. Service Integration Testing (SIL): Intensive laboratory testing of service in conjunction with all Ameritech Switch types and or provider switch types and generics (as necessary) to minimize potential feature interaction conflicts and negative network reactions.

3.1.9. Network Implementation: Conditioning of the SMS, SCP, SSP, or STP to accept service including network translations, signaling connectivity, dialing plans, and coordination of provisioning process.

3.1.10. Field Testing. Comprehensive controlled testing in live switch environment, possibly at Carrier's SSP location.

3.2. ALN Service Management System Access Service.

3.2.1. Access to Ameritech's ALN service management system functionality will be provided in a nondiscriminatory manner to Carrier to enable it to manage ALN services located wholly within Ameritech's network (SCP & SSP) or to manage ALN services where the service logic is located within Ameritech's SCP and the Customer is served from Carrier's ALN compatible SSP. Upon request of Carrier, Ameritech shall provide Carrier the unbundled ALN Applications Access service product description and a list of existing Ameritech ALN applications.

3.2.2. The Service Management System (SMS) is the administration system for the service logic and data in the Advanced Intelligent Network (AIN) Service Control Point (SCP). The SMS contains the master copy of service level, subscriber level and subscription level data. The SMS also contains a copy of the service logic.

Logical access to the SMS will be managed by a set of programs designed by Ameritech. These programs provide security for the data that resides on the AIN platforms by allowing user access to only specific data that is appropriate to the customer or carrier. Whether explicitly stated in this document or not, all access to the SMS is managed through these programs. The only exceptions to managed access to SMS functionality are for the Ameritech Network Services organizations that administer the AIN platforms. They require direct access in order to appropriately administer the platforms.

Access to SMS functionality will be provided through interface programs that will be developed for specific services. Carrier will have access to all of the data that the service requires in order to administer that service for its Customers. This includes service level, subscriber level, and subscription level data as well as any reports and measurement data that is mutually agreed upon by Ameritech and Carrier.

3.2.3. Service Logic. The SMS receives a copy of the service logic and service management logic from the Service Creation Environment (SCE) system. After population of specific network level and service level data, the SMS downloads a view of the service logic to the designated SCPs. The service management logic remains in the SMS to complement SMS utilities in the monitoring and administration of a specific service.

It is required that all of the service creation unit testing, System Integration Lab (SIL) testing and Network Deployment Testing has been completed.

Depending on the service, it may be necessary for Carrier to negotiate timing and supply service specific data before that service can be deployed in the appropriate SCPs. Ameritech, however, is totally responsible for service logic deployment and initial SCP memory load in its network.

3.2.4. Service Administration.

Service administration involves the management of service level data which the service logic requires for its execution. SMS supports the management of service specific common data. Generally, any changes to the data representation of the Ameritech network, which impact one or more carrier services will be administered by Ameritech. Other Carrier specific or service specific data changes will be identified and administered by Carrier.

SCHEDULE 14.2.6

OPERATIONS SUPPORT SYSTEMS FUNCTIONS

1.0 Operations Support Systems Functions – Provisioning.

- (a) Electronic Interface for Pre-Ordering, Ordering, and Provisioning. Ameritech will provide an electronic interface for the transfer and receipt of data necessary to perform the pre-ordering, ordering, and provisioning functions (e.g., order entry, telephone number selection, and due date selection) associated with Resale Services or UNEs. The interface will be administered through a gateway that will serve as a single point of contact for the transmission of such data. This gateway will provide for equivalent functionality for pre-ordering, ordering and provisioning (as such terms are defined in this Section 1.0) as Ameritech uses in its provision of retail services for the above functions. The interface will be consistent with the Alliance for Telecommunications Industry Solutions (ATIS), Telecommunications Industry Forum (TCIF), Electronic Data Interchange (EDI) Customer Service Guideline, issue 5, and Ameritech's Service Order Interface Document, version 2.00. The electronic interface to be provided by Ameritech will provide system-to-system communications on a real-time basis (response in seconds), with built-in error recovery and built in operations, administration and maintenance functionality, at a ninety-five percent (95%) network reliability level. However, as an industry standard interface is developed by the appropriate industry forum, and generally accepted for implementation by the industry, Ameritech shall implement such interface.

- (b) Service Ordering and Provisioning. Service Orders will be placed by Carrier and provisioned by Ameritech in accordance with the procedures described in this Section 1.0 and the Implementation Plan. Any Service Order activity resulting in primary local exchange carrier changes will comply with the requirements of 47 C.F.R. § 64.1100.

- (c) Provisioning Support. Ameritech shall provide provisioning support to Carrier on the same basis Ameritech provides to its retail Customers. Provisioning support may be expanded as mutually agreed by the Parties.

- (d) Status Reports. After receipt and acceptance of a Service Order, Ameritech shall provide Carrier with service status notices on an exception basis.

- (e) Engineering Support. When requested by Carrier, Ameritech shall provide timely engineering support.

(f) Requests for Service Changes. Where Arnetech provides installation, Arnetech's representatives shall inform a Carrier Customer to contact Carrier if such Customer requests a service change at the time of installation.

(g) Non-Interruption of Service. Except as specifically provided in this Agreement or pursuant to an order of a court or commission of competent jurisdiction, Arnetech may not initiate any disconnect, suspension or termination of a Carrier Customer's Resale Service, unless directed to do so by Carrier by transmission of a Service Order or Arnetech's receipt of proper authorization to change such customer's primary local exchange carrier to a carrier other than Carrier.

2.0 Operations Support Systems Functions – Maintenance

(a) Electronic Interface for Maintenance and Repair. Arnetech will provide an electronic interface for the transfer and receipt of data necessary to perform the maintenance and repair functions (e.g., trouble receipt and trouble status). This interface will be administered through a gateway that will serve as a single point of contact for the transmission of such data. This gateway will provide for equivalent functionality for maintenance and repair (as such terms are defined in this Section 2.0) as Arnetech uses for maintenance and repair for its retail services. The interface will be consistent with the Alliance for Telecommunications Industry Solutions (ATIS), T1-Telecommunications (T1) - Operations, Administration, Maintenance and Provisioning (OAM&P), standard T1.227-95 and T1.228-95, and the Arnetech Electronic Bonding Interface (EBI) document. However, as an industry standard interface is developed by the appropriate industry forum, and generally accepted for implementation by the industry, Arnetech shall implement such interface. Procedures for implementing any changes to the interface will be included in the Implementation Plan.

3.0 Billing. Arnetech will provide appropriate usage data to Carrier to facilitate Customer billing with attendant acknowledgments and status reports and exchange information to process claims and adjustments.

SCHEDULE 14.2.7

OPERATOR SERVICES AND DIRECTORY SERVICES

1.0 Armentech shall provide Operator Services including the following services at parity with itself, its Affiliates and subsidiaries.

1.1 Manual Call Assistance - manual call processing with operator involvement for the following:

- (a) Calling card - the Customer dials 0+ or 0- and provides operator with calling card number for billing purposes.
- (b) Collect - the Customer dials 0+ or 0- and asks the operator to bill the call to the called number; provided such billing is accepted by the called number.
- (c) Third number billed - the Customer dials 0+ or 0- and asks the operator to bill the call to a different number than the calling or called number.
- (d) Operator assistance - providing local and intraLATA operator assistance for the purposes of:

- (1) assisting Customers requesting help in completing calls or requesting information on how to place calls;
- (2) handling emergency calls;
- (3) handling credits and coin telephone local refund requests; and
- (4) handling person-to-person calls.
- (e) Operator Transfer Service ("OTS") - calls in which the Customer dials "O", is connected to an Armentech operator and then requests call routing to an IXC subscribing to OTS. The operator will key the IXC's digit carrier identification code to route the Customer to the requested IXC's point of termination.

- (f) BLV - Service in which operator verifies a busy condition on a line.
- (g) BLVI - service in which operator, after verifying a busy line, interrupts the call in progress.

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- Automated Call Assistance - mechanized call processing without operator involvement for the following:
- 1.2 Automated Call Assistance - mechanized call processing without operator involvement for the following:
- (a) Automated calling card service ("ACCS") - the Customer dials 0 and a telephone number, and responds to prompts to complete the billing information.
- (1) ACCS calculates charges, relates the charge to the Customer, and monitors coins deposited before connecting the 1 + intraLATA or interLATA call.
- (b) Automated Alternate Billing Service ("AABS") -
- (1) the Customer dials 0 and a telephone number and responds to prompts to process the call and complete the billing information.
- 1.3 Line Information Database ("LIDB") Validation - mechanized queries to a LIDB for billing validation.
- 1.4 Database Access - To the extent technically feasible, Ameritech will provide access to databases Operator Reference Information) used in the provisioning of Operator Services via Carrier's Bona Fide Request.
- 2.0 Directory Assistance. Directory Assistance ("DA") service shall consist of the following services:
- 2.1 Directory Assistance - those calls in which the Customer dial digits designated by Carrier to obtain Directory Assistance for local numbers located within his/her local calling area. Two (2) listings will be provided per call.
- 2.2 Branding - the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch, or to choose not to provide such a message.
- 2.3 Information Call Completion - provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit ("ARU") the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Information Call Completion is currently available to Carrier if it direct trunks its DA calls to Ameritech. Upon request and to the extent technically feasible, call completion to the requested number for local and intraLATA toll calls shall be sent to the network specified by

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Carrier without the need to route through direct trunks. Carrier shall rate and bill its Customers for Information Call Completion calls.

2.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA as provided in the Implementation Plan (or, if not set forth therein, pursuant to Carrier's Bona Fide Request) at rates that recover Ameritech's costs of developing, providing and maintaining the service. Such unbundled access to the DA database shall be for the purpose of having Carrier's Telephone Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable Carrier to read DA listing in the database that Carrier can provide a Telecommunications Service consistent with Section 251(c)(3) of the Act.

3.0 Rate Application. Ameritech shall bill Carrier the applicable rates on a monthly basis, in accordance with the following methodology:

3.1 Manual Call Assistance - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.2 Automated Call Assistance (ACCS and AABS) - call occurrences multiplied by the per call occurrence rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.3 LIDB Validation - validation occurrences multiplied by the LIDB validation per occurrence rate. Total validation occurrences shall include all validations whether or not the call is completed. Ameritech will accumulate operator occurrences, automated occurrences, and LIDB validation occurrences via its Operator Services Call Analysis System ("OSCAS"). OSCAS utilizes TOPS AMA recordings to produce monthly summaries of mechanized and manual call occurrences.

3.4 BLV - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.5 BLVI - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.6 Lost Records. If Ameritech is responsible for lost, destroyed, or mutilated TOPS AMA recordings, Ameritech will not bill Carrier for those calls for which there are no records. Likewise, Ameritech shall not be held responsible by Carrier for lost revenue. However, if within ninety (90) days, actual data should become available, Ameritech will bill Carrier for those calls using actual data.

SCHEDULE 14.3.4

COMBINATIONS

1. Unbundled Element Platform with Operator Services and Directory Assistance.
Unbundled Loop
Local Switching
Operator Services and Directory Assistance
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. Loop Combination

Unbundled Loop
Network Interface Device

3. Switching Combination #1

Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

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SCHEDULE 14.3.5

COMBINATIONS AVAILABLE THROUGH BONA FIDE REQUEST

1. Loop/Network Combination

Unbundled Loop
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. Switching Combination #2

Network Interface Device
Local Switching
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

3. Switching Combination #3

Network Interface Device
Local Switching
Operator Systems
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

4. Switched Data Services

Network Interface Device
Local Switching
Shared Transport
Dedicated Transport
Tandem Switching

5. Unbundled Element Platform Without Operator Services and Directory Assistance

Unbundled Loop
Local Switching
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

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SCHEDULE 14.5

PROVISIONING OF NETWORK ELEMENTS

1.0 General Provisioning Requirements.

1.1 Subject to the terms of Article 14, Carrier may order and/or request Elements either individually or as Combinations.

The Combinations set forth on Schedule 14.3.4 and any additional Combination provided previously hereunder by Ameritech pursuant to the Bona Fide Request process may thereafter be identified and described by Carrier so that it can be ordered and provisioned as a Combination and shall not require the enumeration of each Network Element within that Combination on each provisioning order; provided that in each case Carrier shall specify on each order the type of service to be provided as well as any necessary engineering and routing characteristics (e.g., redundancy requirements and data transfer rates) Carrier requests for such Combination.

Carrier may order from Ameritech multiple individual Network Elements on a single order without the need to have Carrier send an order for each such Network Element if such Network Elements are (i) for a single type of service, (ii) for a single location and (iii) for the same account.

1.2 Ameritech shall provide provisioning services to Carrier Monday through Friday from 8:00 a.m. to 5:00 p.m. CST. Carrier may request Ameritech to provide Saturday, Sunday, holiday, and/or off-hour provisioning services. If Carrier requests that Ameritech perform provisioning services at times or on days other than as required in the preceding sentence, Ameritech shall quote, within three (3) Business Days of the request, a cost-based rate for such services. If Carrier accepts Ameritech's quote, Ameritech shall perform such provisioning services.

1.3 Ameritech shall provide a Single Point of Contact (each, a "SPOC") for ordering and provisioning contacts and order flow involved in the purchase and provisioning of Ameritech's unbundled Network Elements or Combinations. The SPOCs shall provide an electronic interface twenty-four (24) hours a day, seven (7) days a week for all ordering and provisioning order flows. Each SPOC shall also provide to Carrier a toll-free nationwide telephone number (operational from 8:00 a.m. to 5 p.m., Monday through Friday) which will be answered by capable staff trained to answer questions and resolve problems in connection with the provisioning of Network Elements or Combinations.

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1.4 Ameritech shall provide to Carrier a single point of contact (the "Unbundling Ordering Center") for ordering unbundled Network Elements. A national toll-free number will be provided from 7:00 a.m. to 5:00 p.m. CST, Monday through Friday. This Unbundling Ordering Center is responsible for order acceptance, order issuance, and return of the Firm Order Commitment (FOC) to Carrier as specified in this Schedule 14.5.

In addition, Ameritech shall provide to Carrier a single point of contact (the "Unbundling Service Center") for all provisioning, maintenance, repair, and cutover coordination. A national toll-free number will be provided from 6:30 a.m. to 12:00 midnight CST Monday through Friday. Out of hours maintenance questions are handled by a "Fold Down Center." Ameritech will recognize Carrier as the Customer of Record of all Network Elements and agreed to Combinations ordered by Carrier and will send all notices, invoices and pertinent Customer information directly to Carrier.

1.6 When requested by Carrier, Ameritech will schedule installation appointments with Ameritech's representative on the line with Carrier's representative until Carrier has access to Ameritech's scheduling system.

1.7 Ameritech will provide Carrier with a Firm Order Confirmation (FOC) for each order, within forty-eight (48) hours of Ameritech's receipt of that order, or within a different time interval agreed upon by the Implementation Team. The FOC must contain an enumeration of Carrier's ordered Network Elements or Combination features, options, physical Interconnection, quantity, and Ameritech commitment date for order completion ("Committed Due Date"), which commitment date shall be established on a nondiscriminatory basis with respect to installation dates for comparable orders at such time.

1.8 Upon work completion, Ameritech will provide Carrier electronically (unless otherwise notified by Carrier) with an order completion per order that states when that order was completed. Ameritech shall respond with specific order detail as enumerated on the FOC.

1.9 As soon as identified, Ameritech shall provide notification electronically of Carrier orders that are incomplete or incorrect and therefore cannot be processed.

1.9.1 Ameritech will perform pre-testing of Network Elements and Combinations in accordance with Ameritech's standards. At Carrier's request, Ameritech will make available to Carrier on a weekly batch basis any available test and turn-up results in support of the Network Elements or Combinations ordered by Carrier. Carrier shall be responsible for any costs, as determined in accordance with the Act, incurred by Ameritech to provide copies of any available results. If Carrier requests Ameritech to provide Carrier with any test or turn-up results which Ameritech does not then generate, Carrier shall request such results through the Bona Fide Request process.

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- 1.10 As soon as identified, Ameritech shall provide notification electronically of any instances when Ameritech's Committed Due Dates are in jeopardy of not being met by Ameritech on any element or feature contained in any order for Network Elements or Combinations. Ameritech shall indicate its new committed due date as soon as such date is available.
- 1.10.1 Within twenty-four (24) hours of Carrier's request, Ameritech will perform cooperative testing with Carrier (including trouble shooting to isolate any problems) to test Network Elements or Combinations purchased by Carrier in order to identify any performance problems.
- 1.11 Subject to Article 14, Network Elements and Combinations will be provisioned with a combination of customer-specific and bulk orders as specified by Carrier.
- 1.11.1 When Carrier orders Network Elements or Combinations that provide the same functionality as a bundled (resold) service, and which are currently interconnected and functional and remain interconnected to the same adjacent Network Elements, such Network Elements and Combinations will remain interconnected and functional without any disconnection or disruption of functionality. There shall be no charge for such interconnection, except for any applicable service charge.
- 1.12 Ameritech shall provide to Carrier upon request:
- (a) a list of all services and features technically available from each switch that Ameritech may use to provide Local Switching, including whether the switch has the capability of supporting inter and intraLATA PICs by switch CLLI;
 - (b) a listing by street address detail, of the service coverage area of each switch CLLI;
 - (c) when available, all engineering design and layout information for each Network Element and Combination; provided that Carrier shall pay Ameritech for the costs, as determined in accordance with the Act, incurred by Ameritech to provide Carrier with copies of such information;
 - (d) a listing of all technically available functionalities for each Network Element or Combination; and
 - (e) advanced information on the details and requirement for planning and implementation of NPA splits.

1.13 Promptly after the Effective Date, Ameritech shall provide Carrier an initial electronic copy of the following information:

- (a) Street address verification;
- (b) Switch identification by service address; and
- (c) Switch feature verification.

Electronic updates to such information shall be provided monthly to Carrier as changes are made to such information.

1.14 For order of Network Elements (and INP with the Installation of a Loop) that require coordination among Ameritech, Carrier and Carrier's Customer, Carrier shall be responsible for any necessary coordination with the Carrier Customer.

1.15 Provided Carrier has appropriate Documentation of Authorization, Ameritech shall recognize Carrier as an agent for the subscriber in coordinating the disconnection of services provided by another CLEC or Ameritech.

1.16 Order Rejections

Ameritech shall reject and return to Carrier any order that Ameritech cannot provision, and in its reject notification provide an error code identifying the reasons for which the order was rejected.

1.17 Service Order Changes

1.17.1 If an installation or other Carrier-ordered work requires a change from the original Carrier service order in any manner, Ameritech shall call Carrier in advance of performing the installation or other work to obtain authorization. Ameritech shall then provide Carrier an estimate of additional labor hours and/or materials. After all installation or other work is completed, Ameritech shall notify Carrier of actual labor hours and/or materials used in accordance with regular service order completion schedules.

1.17.2 If a Carrier Customer requests a service change at the time of installation or other work being performed by Ameritech on behalf of Carrier, Ameritech, while at the Customer premises, shall direct the Carrier Customer to contact Carrier so as to avoid unnecessary delays in service activation should the Ameritech representative leave the Customer premises.

2.0 Unbundled Local Loop Transmission

2.1 Access to Unbundled Local Loops.

2.1.1 Carrier shall access Ameritech's Unbundled Local Loops via Collocation or in accordance with Article 14 of this Agreement at the Ameritech Wire Center where that element exists and each Loop shall be delivered to Carrier's Collocation by means of a Cross-Connection, which shall be an additional charge.

2.1.2 Ameritech shall provide Carrier access to its unbundled Loops at each of Ameritech's Wire Centers. In addition, if Carrier requests one or more Loops serviced by Integrated Digital Loop Carrier or Remote Switching technology deployed as a Loop concentrator, Ameritech shall, where available, move the requested Loop(s) to a spare, existing physical Loop at no charge to Carrier. If, however, no spare physical Loop is available, Ameritech shall within forty-eight (48) hours of Carrier's request notify Carrier of the lack of available facilities. Carrier may then at its discretion make a Bona Fide Request for Ameritech to provide the unbundled Loop through the demultiplexing of the integrated digitized Loop(s). Notwithstanding anything to the contrary in this Agreement, the provisioning intervals set forth in Section 2.2.2 of this Schedule and the Ameritech Network Element Performance Benchmarks set forth in Schedule 14.10 of this Agreement shall not apply to unbundled Loops provided under this Section 2.1.2.

2.1.3 If Carrier orders a Loop type and the distance requested on such Loop exceeds the transmission characteristics as referenced in the corresponding Technical Reference specified below, distance extensions may be requested where technically feasible to meet the specification using such distance extensions and additional rates and charges shall apply as set forth at Item V of the Pricing Schedule.

Loop Type	Technical Reference/Limitation
Electronic Key Line	2.5 miles
ISDN	Bellcore TA-NWT-000393
HD SL 2W	T1E1 Technical Report Number 28
HD SL 4W	T1E1 Technical Report Number 28
AD SL 2W	ANSI T1.413-1995 Specification

2.2 Provisioning of Unbundled Loops.

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

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2.2.6 Requests for maintenance or repair of unbundled Loops are initiated using the industry standard "electronic bonding" interface (EBI) and are handled by the Ameritech Unbundling Service Center ("USC"). The USC works with local Ameritech personnel to perform any manual testing that may be required to isolate the trouble.

2.2.5 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of "live" Telephone Exchange Service to the connection of an unbundled Network Element at the Carrier Collocation interface point will be five (5) minutes or less. If a conversion interval exceeds five (5) minutes and such delay is caused solely by Ameritech (and not by a Carrier contributing Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element. If Carrier has ordered INP with the installation of a Loop, Ameritech will coordinate the implementation of INP with the Loop conversion during the five (5) minute interval at no additional charge.

If Carrier requests the New Conversion Time, Carrier shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

2.2.4 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "New Conversion Time"). If the New Conversion Time is within the Loop Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the Loop Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

2.2.3 Ameritech agrees to coordinate with Carrier at least forty-eight (48) hours prior to the due date a scheduled conversion date and time (the "Scheduled Conversion Time") within a two-hour period (as applicable, the "Loop Conversion Window").

2.2.2 Ameritech shall provision unbundled Loops in accordance with the time frames set forth on Schedule 14.10 or within such other intervals as agreed upon by the Parties.

2.2.1 Carrier shall request unbundled Loops from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "Service Order") using the electronic interface described in Schedule 14.2.6. Within forty-eight (48) hours of Ameritech's receipt of a Service Order, Ameritech shall provide Carrier the firm order commitment ("FOC") date according to the applicable Ameritech Network Element Performance Benchmarks set forth in Section 14.10 of this Agreement by which the Loop(s) covered by such Service Order will be installed.

2.2.7 Ameritech shall test for Carrier dial-tone ("Dial Tone Test") at Ameritech's MDF for Carrier's Virtual Collocated Equipment or Physical Collocated equipment during a window not greater than forty-eight (48) hours but not less than eight (8) hours prior to the Scheduled Conversion Time (or New Scheduled Time as applicable). Ameritech shall perform the Dial Tone Test at no charge until the end of Contract Year One (1) Thereafter, Ameritech shall charge Carrier for Dial Tone Test based on the mutual agreement of the Parties.

3.0 Network Interface Device Capability.

3.1 Ameritech will provide Carrier access to NIDs in a manner that will permit Carrier to connect its loop facilities to the Customer's inside wiring through Ameritech's NID, as required. Carrier shall establish this connection, through an adjoining NID provided by Carrier.

3.2 Due to the wide variety of NIDs utilized by Ameritech (based on Customer size and environmental considerations), Carrier may access the Customer's inside wire by any of the following means:

(a) Where an adequate length of inside wire is present and environmental conditions permit, Carrier may remove the inside wire from Ameritech's NID and connect that wire to Carrier's NID;

(b) Enter the Customer access chamber or "side" of "dual chamber" NID enclosures for the purpose of extending a connected jumper wire from the inside wire through a suitable "punch-out" hole of such NID enclosures;

(c) Enter Ameritech's loop terminal enclosure located at a multiple dwelling unit ("MDU") for the purpose of accessing Customer premises inside wire and extending such wire to Carrier's own adjoining NID; or

(d) Request Ameritech to make other rearrangements to the inside wire terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting party Carrier, its agent, the building owner or the Customer).

3.3 If Carrier accesses the Customer's inside wire as described in Section 3.2(d), the time and materials charges will be billed to the requesting party Carrier, its agent, the building owner or the Customer).

3.4 In no case shall Carrier remove or disconnect Ameritech's loop facilities from Ameritech's NIDS, enclosures, or protectors.

3.5 In no case shall Carrier remove or disconnect ground wires from Ameritech's NIDS, enclosures, or protectors.

3.6 Maintenance and control of premises wiring (inside wire) is the responsibility of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

3.7 Due to the wide variety of NID enclosures and outside plant environments, Ameritech will work with Carrier to develop specific procedures to establish the most effective means of implementing this Section 3.0.

4.0 Unbundled Local Switching

4.1 Access to Unbundled Local Switching

4.1.1 Carrier shall access Ameritech's Unbundled Local Switching via Collocation or in accordance with Article 14 of this Agreement at the Ameritech Wire Center where that element exists and each line-side and/or trunk-side port will be delivered to Carrier by means of a Cross-Connection, which shall be an additional charge.

4.1.2 Ameritech shall provide Carrier access to its Unbundled Local Switching at each of Ameritech's Wire Centers and will provide Carrier (i) all available basic local switching functions and basic capabilities that the switch provides or (ii) for which Ameritech Operations Support Systems functions are capable of provisioning pursuant to a Bona Fide Request.

4.1.3 Unbundled Local Switching also provides access to additional features and capabilities that the switch has available for activation. Carrier has the capability of activating these features on a line-by-line basis via an electronic interface. The additional features available for activation on the basic Unbundled Local Switching include:

- (a) vertical features;
- (b) Custom Calling, Custom Local Area Signaling Service features
- (c) Centrex features.

4.1.4 Other basic and/or additional capabilities, functions and features that the switch is capable of providing, but which Ameritech does not currently provide, may be requested as optional special capabilities. Ameritech will provide these special

capabilities if technically feasible and upon Carrier's Bona Fide Request. Carrier will pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the requested capability.

4.1.5 Ameritech will also, upon Carrier's Bona Fide Request, provide any technically feasible customized local routing of traffic through Unbundled Local Switching, by class of call (e.g., operator, directory assistance, 9-1-1, toll, local, etc.). Ameritech will develop and provide any requested customized routing the switch is capable of providing upon agreement by Carrier to pay recurring and nonrecurring costs of developing, installing, updating, providing and maintaining such custom routing.

4.1.6 Ameritech provides, on an optional basis, the ability to connect line side ports and/or trunk side ports within the same switch with a group of common attributes. An example is a request for Unbundled Local Switching to provide a Centrex service with intercom calling within the system and with certain common features. The attributes available include intercom calling, group call pick up, and Automatic Route Selection (ARS). Intercom calling is defined as the ability of the line side ports to call one another by dialing 3-7 digits. Group call pick up is defined as allowing one line side port to answer a call directed to another line side port in the same call pick up group. ARS is defined as the ability to route calls to a specific group of trunk side ports.

4.1.7 Normally, Ameritech will switch traffic through its local switching element in accordance with Ameritech standard switching translations and screening in use in that switch. The custom routing optional feature enables Carrier to specify special routing, by class of call, of some or all traffic incoming into its unbundled local switch using any technically feasible routing capability of that switch. Variations in the End-Office switching equipment used to provide service in specific locations may cause differences in the operation of certain features. Special routing capabilities that are not otherwise available (e.g., features that the switch is capable of providing) will be developed on an individual case basis through the Bona Fide Request process and will be installed, updated, maintained and provided following Carrier's agreement to pay the applicable costs.

4.2 Provisioning of Unbundled Local Switching.

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

4.2.1 Carrier shall request Unbundled Local Switching from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "Service Order") using the electronic interface described on Schedule 14.2.6. In addition, pre-ordering functions are supported via electronic data interchange (EDI) format as utilized

for Resale Services. Within forty-eight (48) hours of Ameritech's receipt of a Service Order, Ameritech shall provide Carrier the firm order commitment ("FOC") date by which the Unbundled Local Switching ports covered by such Service Order will be installed.

Where connection of the Unbundled Local Switching port(s) to customized routing is required by Carrier, the specific custom routing pattern desired must already exist. In those instances where the custom routing pattern does not already exist, Carrier may request the development and establishment of such customer routing pattern via a Bona Fide Request. While the custom routing pattern is being developed, Carrier may do one of the following: (a) defer activation of the Unbundled Local Switching port until the routing pattern is established, (b) offer the Customer resale on an interim basis, or (c) convert the existing basic office routing pattern. If Carrier elects option (c) and later desires to convert the Unbundled Local Switching port using Ameritech's office routing pattern to a customized routing pattern, an additional Line Connection Charge will apply.

4.2.2 Ameritech agrees to coordinate with Carrier at least forty-eight hours prior to the due date a scheduled conversion date and time (the "Scheduled Conversion Time") in the "A.M." (12:00 midnight to 12:00 noon) or "P.M." (12:00 noon to 12:00 midnight) (as applicable, the "LS Conversion Window").

For subscriber conversions requiring coordinated cut-over activities, on a per order basis, Ameritech and Carrier will agree on a scheduled conversion time, which will be on a designated date.

4.2.3 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "New Conversion Time"). If the New Conversion Time is within the LS Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the LS Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

If Carrier requests the New Conversion Time, Carrier shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

Ameritech will notify Carrier when conversion is complete.

4.3.3 Tandem Switching performance will be measured to ensure parity with all other Telecommunications Carriers that are interconnected with Ameritech. Performance will be measured on switching, call recording, and network management controls.

4.3.2 Ameritech will service, operate, and maintain the unbundled Tandem Switching for Carrier at parity with the service, operation, and maintenance Ameritech provides to itself, its subsidiaries, Affiliates and any other person. Unless requested otherwise, where applicable and technically feasible, Ameritech will provide unbundled Tandem Switching using the same specifications, interfaces, parameters, intervals, procedures and practices it uses to provide comparable Tandem Switching for all other Customers and carriers. Any feature or function existing in the Tandem Switch will be provided to Carrier on a non-discriminatory basis. Congestion control and overflow routing will be provided on a non-discriminatory basis.

4.3.1 Tandem Switching creates a temporary transmission path between interoffice trunks that are interconnected at a switch for the purpose of routing a call or calls. Unbundled Tandem Switching is ordered using electronic interfaces. Trunk side ports are ordered using the Access Service Request ("ASR") which provides for electronic ordering based on industry standards adopted through OBF. ASR is the process used as of the Effective Date to order Exchange Access Services. Both pre-ordering and ordering functions and access to associated Operations Support Systems functions are supported electronically through these interfaces.

4.3 Tandem Switching

4.2.6 Unless otherwise directed by Carrier and to the extent technically feasible, when Carrier orders a Network Element or Combination, all pre-assigned trunk or telephone numbers currently associated with that Network Element or Combination shall be retained without loss of feature capability.

4.2.5 When ordering a Local Switching Element, Carrier may order from Ameritech separate interLATA and intraLATA capabilities (i.e., 2 PICs where available) on a line basis.

Ameritech shall provide Carrier the functionality of blocking calls (e.g., 900, 976 international calls) by line or trunk on an individual switching element basis.

4.2.4 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of "live" Telephone Exchange Service to the connection of an unbundled Network Element at the Carrier Collocation interface point will be Sixty (60) minutes or less. If a conversion interval exceeds Sixty (60) minutes and such delay is caused solely by Ameritech (and not by an Carrier contributing Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element.

4.3.4 Switch downtime will be measured through FCC reportable incidents report. CPI Index will be measured calls blocked and customer out of service incidents.

4.3.5 Electronic Billing Accuracy Centers (EBAC) measures billing errors from the CABS error hold file report. Ameritech employs RAVE/A&T which enables on-line investigation of AMA volumes and will alert EBAC to possible AMA recording failures.

4.3.6 Congestion Control and overflow criteria are set by the use of NTMOS Surveillance system which polls EDAS and NMA data on call volumes and make busy standards. Ameritech sets automatic thresholds with preplan routing and overflow selection. The system is also monitored via a manual surveillance system early recognition of performance problems.

5.0 Interoffice Transmission Facilities.

Ameritech shall:

5.1 Provide Carrier exclusive use of Interoffice Transmission Facilities dedicated to Carrier, or use of the features, functions, and capabilities of Interoffice Transmission Facilities shared by more than one Customer or carrier, including Carrier;

5.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that Carrier could use to provide Telecommunications Services;

5.3 Permit, to the extent technically feasible, Carrier to connect such interoffice facilities to equipment designated by Carrier, including Carrier's Collocated facilities; and

5.4 Permit, to the extent technically feasible, Carrier to obtain the functionality provided by Ameritech's digital cross-connect systems separate from dedicated transport.

6.0 Signaling Networks and Call-Related Databases

6.1 Signaling Networks.

6.1.1 If Carrier purchases Switching Capability from Ameritech, Ameritech shall provide access to its signaling network from that switch in the same manner in which Ameritech obtains access to such switch itself. In addition, Ameritech shall provide Carrier access to Ameritech's signaling network for each of Carrier's switches when Carrier uses its own switching facilities. This connection shall be made in the same manner as Ameritech connects one of its own switches to an STP. Notwithstanding the foregoing, Ameritech shall not be required to unbundle those signaling links that connect Service Control Points to STPs or to permit Carrier to link its own STPs directly to Ameritech's switch or call-related databases.

6.1.2 If Carrier has its own switching facilities, Ameritech shall provide Carrier access to STPs to each of Carrier's switches, in the same manner in which Ameritech connects one of its own switches to an STP, or in any other technically feasible manner bringing an "A" link from Carrier's switch to Carrier's STP, or linking Carrier's switch to its own STP and then connecting that STP to Carrier's STP via a "B" or "D" link; provided that Ameritech shall not be required to (i) unbundle the signaling link connecting STPs to STPs, (ii) permit direct linkage of Carrier's own STPs to Carrier's switch or call-related databases or (iii) unbundle an SCP from its associated STP.

6.1.3 The Parties shall agree upon appropriate mediation facilities and arrangements for the Interconnection of their signaling networks and facilities, as necessary to adequately safeguard against intentional and unintentional misuse of the signaling networks and facilities of each Party. Such arrangements shall provide at a minimum:

Certification that Carrier's switch is compatible with Ameritech's SS7 network;

Certification that Carrier's switch is compatible with Ameritech's ALN SCP;

Certification that Carrier's switch is compatible with a desired ALN application residing on Ameritech's SCP;

Agreement on procedures for handling maintenance and troubleshooting related to ALN services;

Usage of forecasts provided by Carrier, so that Ameritech can provide sufficient SS7 resources for Carrier and all other requesting carriers;

Mechanisms to control signaling traffic at agreed-upon levels, so that Ameritech's SS7 resources can be fairly shared by all requesting carriers;

Mechanisms to restrict signaling traffic during testing and certification, as necessary to minimize risks to the service quality experienced by Customers served by Ameritech's network and those of other carriers while compatibility and interconnection items are verified; and

Mechanisms to ensure protection of the confidentiality of Proprietary Information of both carriers and Customers.

6.2 Call-Related Databases.

6.2.1 For purposes of switch query and database response through a signaling network, Ameritech shall provide Carrier access to its call-related databases, including the Line Information Database, Toll Free Calling database, downstream number portability databases, and Advanced Intelligent Network databases by means of physical access at the STP linked to the unbundled database.

6.2.2 If Carrier purchases Unbundled Local Switching, Carrier may, upon request, use Ameritech's SCP in the same manner, and via the same signaling links, as Ameritech. If Carrier has deployed its own switch, and has linked that switch to Ameritech's signaling system, Carrier shall be given access to Ameritech's SCP in a manner that allows Carrier to provide any call-related, database-supported services to Customers served by Carrier's switch. If the Implementation Team is unable to agree in the Implementation Plan to appropriate mediation mechanisms with respect to access to the AIN SCPS, the Parties shall adopt the mechanisms adopted by the Commission. Ameritech shall provide Carrier access to call-related databases in a manner that complies with the CPNI requirements of Section 222 of the Act.

6.2.3 The Parties shall agree upon appropriate mediation facilities arrangements for the Interconnection of their signaling networks, databases, and associated facilities, as necessary to adequately safeguard against intentional and unintentional misuse of the signaling networks and facilities of each Party. Such arrangements shall provide for at a minimum:

- Capabilities to protect each Party's information;
- Agreements on handling maintenance and troubleshooting related to AIN services;
- Usage forecasts provided by Carriers so that Ameritech can provide sufficient resources for other requesting carriers, and capabilities to ensure that the Parties abide by such forecasts;
- Procedures to ensure, prior to deployment, that each service will properly operate within Ameritech's network;
- Procedures to verify proper deployment of each service in the network; and
- Mechanisms to ensure protection of the confidentiality of proprietary information of both carriers and customers.

6.3 Service Management Systems.

6.3.1 Ameritech shall provide Carrier with the information necessary to enter correctly, or format for entry, the information relevant for input into Ameritech's Service Management System ("SMS"). In addition, Ameritech shall provide Carrier equivalent access to design, create, test, and deploy Advanced Intelligent Network based services at the SMS.

6.3.2 Ameritech shall provide Carrier with the information necessary to enter correctly, or format for entry, the information relevant for input into its SMS. Access will be provided in an equivalent manner to that which Ameritech currently uses to provide such access to itself (go., submitting magnetic tapes if Carrier inputs magnetic tapes, or through an electronic interface equivalent to that used by Carrier). The Implementation Team shall set forth in the Implementation Plan the terms and conditions relating to such access. If the Implementation Team is unable to agree to appropriate mediation mechanisms with respect to access to the AIN SMSs and SCEs, the Parties shall adopt the mechanisms adopted by the Commission.

6.3.3 Ameritech shall provide access to its SMS in a manner that complies with the CPNI requirements of Section 222 of the Act.

7.0 Operations Support Systems Functions

7.1 Ameritech shall provide Carrier access to Operations Support Systems functions on or before the dates set forth on the Implementation Schedule.

7.2 Ameritech shall also provide Carrier access to the functionality of any internal gateway systems Ameritech employs in performing the above-listed OSS functions for its own Customers. A "gateway system" means any electronic interface Ameritech has created for its own use in accessing support systems for providing any of the above-listed OSS functions.

8.0 Operator Services and Directory Services.

8.1 Ameritech shall provide Carrier access to Ameritech's Operator Service and Directory Assistance facilities where technically feasible.

8.2 Ameritech shall provide unbundled Operator Services ("OS") and Directory Assistance ("DA") to Carrier in conjunction with Telephone Exchange Service provided to Carrier as a purchaser of Resale Services and as an Unbundled Local Switching Network Element or directly as a separate Network Element. A list identifying the NPA/Exchange areas of Ameritech Directory Assistance, and dependent Information Call Completion services will be provided to Carrier and will be updated as such DA services are provided in additional NPA/Exchange Areas.

- 8.3 As a facilities-based provider, Carrier will obtain any required custom routing and obtain or provide the necessary direct trunking and termination facilities to the mutually agreed upon meet point with Ameritech facilities for access to unbundled OS and DA services. Carrier is responsible for delivering its OS and DA traffic to Ameritech's operator service switch. Specifically, Carrier shall deliver its traffic direct from the End Office to the operator service switch location, and there can be no Tandem Switching for OS. The operator service location to which Carrier will deliver its OS or DA traffic will be determined by Ameritech based on the existing capacity of its service centers. Ameritech will, if technically feasible, enable Carrier to deliver its OS or DA traffic to the operator service switch most closely located to the Carrier's NPA/exchange originating the call.
- 8.4 Ameritech will provide and maintain the equipment at its OS and DA centers necessary to perform the services under this Agreement, with the goal of ensuring that the OS and DA service meets current industry standards.
- 8.5 Ameritech will provide OS and DA in accordance with its then current internal operating procedures and/or standards.
- 8.6 Ameritech will maintain a quality of service that will satisfy the standards, if any, established by the Commission having jurisdiction over the provision of such service. Carrier has the right, once annually, to visit each Ameritech owned or subcontracted office upon reasonable notice to Ameritech or with greater frequency by mutual consent of the Parties. Upon request, Ameritech will provide monthly system results including speed of answer, average work time and, for DA only, abandon from queue measurements.
- 8.7 Carrier is solely responsible for providing all equipment and facilities to deliver OS and DA traffic to the point of interconnection with Ameritech facilities.
- 8.8 Carrier will provide and maintain the equipment at its offices necessary to permit Ameritech to perform its services in accordance with the equipment operations and traffic operations which are in effect in Ameritech's DA and OS offices. Carrier will locate, construct, and maintain its facilities to afford reasonable protection against hazard and interference.
- 8.9 Upon request and to the extent technically feasible, Ameritech will unbundle OS and DA from resellers of its Telephone Exchange Service, and for Carrier, so Carrier can provide its own OS or DA service or obtain it from a third party. Carrier will acquire any required custom routing and arrange for or provide other facilities, services and Network Elements necessary to deliver its OS and DA traffic to Carrier's designated office, or to the office of another provider, as applicable.

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8.14.1 To the extent that Carrier does not mirror Ameritech's operator surcharge rates, then Ameritech will, if technically feasible, enter Carrier's surcharge rates into Ameritech's rate tables, and will charge Carrier for changing those tables at the rates then charged by Ameritech for such service.

8.14 Carrier will furnish all information necessary for provision of OS and DA. This information, to the extent it is identified as such, shall be treated as Proprietary Information. For OS this information includes emergency agency phone numbers, rate information (such as mileage bands and operator surcharge information), and originating screening information. Carrier will furnish to Ameritech all information necessary for provision of OS and DA.

8.13 Access of resellers and Carrier to DA and OS of Ameritech, and the DA and OS Network Elements provided hereunder, whether provided on a bundled or unbundled basis, will, as applicable and as feasible, be provided through the standard interfaces, parameters, intervals, service descriptions, protocols, procedures, practices and methods that Ameritech provides to all Ameritech end-user customers of its DA and OS services. Upon request, Ameritech will, as technically feasible, provide a different quality of service, upon agreement by Carrier to pay to Ameritech its costs of developing, installing, maintaining and repairing access to and provision of the Network Element at such quality of service.

8.12 Specifically, upon request, Ameritech will provide through an electronic interface, unbundled access to its DA database to permit Carrier to have its local exchange directory assistance listings in the areas incorporated into the database, and/or to read the DA listing (with the exception of non-published listing) in that database for the purpose of providing its own DA service. Such unbundled access will be provided in a technically feasible manner based upon the facilities, equipment and software involved, and upon agreement by Carrier to pay to Ameritech its costs as defined in the Act of developing, installing, providing and maintaining such network element.

8.11 The Parties shall provide DA data in a form mutually agreed upon by the Parties. If available, DA data shall specify whether the subscriber is a residential, business, or government subscriber and shall include, if available, all levels of indentation and all levels of information.

8.10 Upon request, and as technically feasible, Ameritech will provide through an electronic interface, unbundled access to its databases used to provide DA and OS for purpose of enabling Carrier to provide its own OS or DA service, or as otherwise authorized by the FCC or the Commission. Such unbundled access to DA and OS databases is provided as is technically feasible based upon the facilities, equipment and software involved, and upon agreement by Carrier to pay to Ameritech its costs as defined in the Act of developing, installing, providing and maintaining such Network Element.

8.14.2 For DA services, Carrier will furnish Ameritech ninety (90) days (or such earlier time as the Parties may agree upon) before DA service is initiated details necessary to provide that service. This information includes listing information for the areas to be served by Ameritech and network information necessary to provide for the direct trunking of the DA calls.

8.14.3 Carrier will keep these records current and will inform Ameritech, in writing, at least thirty (30) days prior to any changes in the format to be made in such records. Carrier will inform Ameritech of other changes in the records on a mutually agreed-upon schedule.

8.15 Upon request, and as technically feasible, Ameritech will rebrand such OS and DA services based upon Carrier's agreement to pay rates that compensate Ameritech for any costs it incurs in developing, installing, providing and maintaining such rebranded service. To the extent that multiple carriers request the same branding service, such rate shall be allocated on a pro rata share. For branding of calls, Carrier must provide two (2) cassette tapes of an announcement, no longer than three (3) seconds or at parity with Ameritech, for installation on each OS and DA switch serving Carrier's Customers.

8.16 Branding: Re-branding is available as follows:

- (a) Mechanized front-end branding is available for all manual and automated OS calls.
- (b) Mechanized back-end branding is available for automated calling card calls handled via ACCS.
- (c) On mechanized collect and billed to third calls, back-end branding is not currently available.

(1) Such calls can be manually handled and branded.

(2) If Customer desires mechanized branding, the feature can be installed if Carrier pays for feature purchase and installation.

Normally, OS and DA services, both bundled and unbundled, will be branded with Ameritech's name as the provider of the service. Upon request from Carrier, and as technically feasible, Ameritech will re-brand OS and DA traffic from Carrier's telephone exchange lines, or to Carrier's unbundled OS or DA Network Element. Re-branded service requires that Carrier arrange to have the subject OS or DA traffic delivered to

Amnietech's Central Office on separate trunks, which may require that it obtain custom routing, and obtain or provide such trunks and other applicable. Re-branding is provided at rates that recover Amnietech's costs of developing, installing, providing and maintaining such service.

8.17 Carrier will provide Amnietech during the term of this Agreement its DA listings. DA listings provided to Amnietech by Carrier under this Agreement will be used and maintained by Amnietech only for providing Telecommunications Services. and will not be disclosed to third parties. This section does not prohibit Amnietech and Carrier from entering into a separate agreement which would allow Amnietech to provide or sell Carrier's DA listing information to third parties, but such provision or sale would only occur under the terms and conditions of the separate agreement.

8.18 Amnietech will supply Carrier with call detail information so that Carrier can rate and bill the call. This information excludes rating and invoicing of Customers, unless negotiated on an individual case basis.

SCHEDULE 14.10

NETWORK ELEMENT PERFORMANCE BENCHMARKS

A. Network Elements not otherwise specified below.

Volume*	Interval
1-24	2 Business Days
25-48	2 Business Days
49-96	5 Business Days
97+	Negotiated
*Number of Network Elements per order	

B. DS1 Unbundled Local Transport

1. Facilities Available	<u>Interval</u> 7 Business Days
2. Facilities or Force not available	Negotiated Interval

C. DS3-Unbundled Local Transport

Negotiated Interval

D. OC-N-Unbundled Local Transport

Negotiated Interval

E. Measurements

Ameritech shall provide reports of the following measures as set forth in Section 14.10.

- a) Percent Rejection of Service Caused By Ameritech for Unbundled Network Elements
- b) Percent Unbundling Installation Provided Correctly in less than 4 Business Days
- c) Percent Completion of Order by Committed Due Date for Unbundled Network Elements

F. Request for Standards Greater than Parity.

See Section 14-6.

G. Additional Reporting Requirements

The Parties agree that it may be necessary to alter the reporting requirements during the course of this Agreement.

PRICING SCHEDULE

The interim prices for Network Elements to be incorporated are the rates that were approved by the Commission pursuant to Order No. U-11280. The permanent prices for Network Elements should be incorporated into the Agreement and shall be equal to those approved by the Commission in Docket No. U-11831 at the time such order is adopted.

S:\149\AMERITEC\INTCON.923

AMENDMENT
To
INTERCONNECTION AGREEMENT
by and between

MICHIGAN BELL TELEPHONE COMPANY D/B/A
AMERITECH MICHIGAN¹
and
THUMB CELLULAR

The Interconnection Agreement, by and between Michigan Bell Telephone Company, d/b/a Ameritech Michigan ("SBC") and THUMB CELLULAR ("the Agreement"), which was approved by the Michigan Public Service Commission ("Commission") on January 10, 2000, is hereby amended as follows:

1. The Reverse Billing option described in Section 6.7 of the Agreement, and the associated and currently applicable pricing in the Agreement, shall continue and shall be available as an option to Carrier through June 30, 2004; however, such Reverse Billing option, and the associated and currently applicable pricing in the Agreement, shall be discontinued and unavailable as an option to Carrier after June 30, 2004. Carrier understands and agrees that the Reverse Billing option is based upon blocks of telephone numbers (*e.g.*, per NPA/NXX), and further agrees that it shall remain fully responsible for payment of all Reverse Billing charges for all telephone numbers within a Reverse Billing block of telephone numbers, notwithstanding any legal obligations Carrier may have regarding telephone numbers, including but not limited to number pooling and number portability, that may result in a portion of such numbers being utilized by customers of other telecommunications carriers. The Parties agree to cooperate to take all steps necessary to effectuate this provision and complete conversion of Reverse Billing to Standard Billing on or before June 30, 2004. In addition, the Parties agree that should June 30, 2004 be after the date of the expiration and/or termination of the Agreement, this provision, only with respect to the availability of the Reverse Billing option until June 30, 2004 (by which date Carrier must have moved to Standard Billing), shall be incorporated into the successor agreement between the Parties. Notwithstanding any other provision in the Agreement or this Amendment to the contrary, including any change in law with respect to rates, the Reverse Billing rate reflected on Attachment A to the Agreement shall remain in effect until June 30, 2004, unless amended by mutual agreement of the Parties.
2. Sections 8.1 and 8.2 of Section 8.0, "TERM AND SCOPE," of the Agreement are hereby revised to read:
 - 8.1 The initial term of this Agreement shall end on February 9, 2003 (the "Initial Term"). At the end of the Initial Term, this Agreement shall automatically renew for one (1) year periods ("Renewal Term"). Notwithstanding the foregoing, either Party may provide written notice to the other Party no more than one-hundred eighty (180) calendar days and no less than one-hundred twenty (120) days prior to the expiration of the Initial Term or any Renewal Term to the effect that such Party wishes to terminate and/or renegotiate this Agreement ("Notice of Intent to Terminate") and the term of the Agreement shall expire at the end of the applicable Initial Term or Renewal Term. However, the rates, terms and conditions of this Agreement shall remain in full force and effect on

¹The underlying Agreement was entered into by Ameritech Information Industry Services, a division of Ameritech Services, Inc., on behalf of and as agent for Ameritech Michigan, which is the d/b/a for Michigan Bell Telephone Company.

and after such expiration until termination of the Agreement pursuant to the terms of this Section 8.0.

8.2 Following delivery of timely Notice of Intent to Terminate this Agreement by either Party as provided in Section 8.1 above, Carrier shall have until and including the date thirty (30) calendar days prior to the resulting expiration of the Agreement (e.g., January 10, 2004) to provide SBC written confirmation if Carrier wishes to pursue a successor agreement with SBC, or, subject to Section 31, "Survival" (which includes, but is not limited to, surviving payment, confidentiality and indemnity obligations), the Agreement shall terminate and the rates, terms and conditions thereof shall no longer remain in force and effect. If Carrier wishes to pursue a successor agreement with SBC, Carrier shall attach to its written confirmation or Notice of Intent to Terminate, as applicable, a written request to commence negotiations with SBC under Sections 251/252 of the Act. The date SBC receives Carrier's written request to negotiate a successor agreement shall constitute the date on which SBC received a request for negotiation as provided in Section 252(a)(1) of the Act, and the Parties shall commence good faith negotiations for a successor agreement pursuant to Section 252 of the Act.

8.2.1 Following delivery of timely Notice of Intent to Terminate this Agreement and Carrier's request to commence negotiations as provided in Sections 8.1 and 8.2 above, the rates, terms and conditions of this Agreement shall continue in full force and effect until the earlier of: (i) the effective date of a successor agreement, whether such successor agreement is established via negotiation, arbitration or pursuant to Section 252(i) of the Act; or (ii) the date that is ten (10) months after the date on which SBC received Carrier's request to negotiate a successor agreement pursuant to Section 8.1 above. Upon the applicability of 8.2.1(i) or (ii), subject to Section 31, "Survival" (which includes, but is not limited to, surviving payment, confidentiality and indemnity obligations), the Agreement shall terminate and the rates, terms and conditions thereof shall no longer remain in force and effect.

8.2.2 Notwithstanding any other provision of this Agreement, and subject to Section 31, "Survival" (which includes, but is not limited to, surviving payment, confidentiality and indemnity obligations), (1) should either Party lose the ability to provide, or should it cease providing, telecommunications services in the state of Michigan for a period in excess of sixty (60) consecutive days, this Agreement shall automatically terminate, and the rates, terms and conditions thereof shall no longer remain in force and effect on the date of the expiration of such sixty (60) day period, without action by either Party; and, (2) the Parties may terminate this Agreement at any time upon mutual written agreement.

3. The rates presently in Attachments A and B of the Pricing Schedule to the Agreement are removed and replaced with the applicable new rates from various orders in the tariff sheets approved by the Michigan Public Service Commission ("Commission") in Case No. U-11831. The new rates in the attached revised Pricing Schedule shall apply to various time periods in accordance with the applicable tariff effective dates. A copy of the revised Pricing Schedule is attached as Exhibit A.

4. In entering into this Amendment, the Parties acknowledge and agree that neither Party is waiving any of its rights, remedies or arguments with respect to any orders, decisions or proceedings and any remands thereof, including but not limited to its rights under the United States Supreme Court's opinion in *Verizon v. FCC*, 535 U.S. ____ (2002); the D.C. Circuit's decision in *United States Telecom Association, et. al v. FCC*, No. 00-101 (May 24, 2002); the FCC's Order *In the Matter of the Local Competition Provisions of the Telecommunications Act of 1996*, (FCC 99-370) (rel. November 24, 1999), including its Supplemental Order Clarification (FCC 00-183) (rel. June 2, 2000) in CC Docket 96-98; or the FCC's Order on Remand and Report and Order in CC Dockets No. 96-98 and 99-68 (the "ISP Inter-carrier Compensation Order") (rel. April 27, 2001), which was remanded in *WorldCom, Inc. v. FCC*, No. 01-1218 (D.C. Cir. 2002). Rather, in entering into this Amendment, each Party fully reserves all of its rights, remedies and arguments

with respect to any decisions, orders or proceedings, including but not limited to its right to dispute whether any UNEs and/or UNE combinations identified in the Agreement and this Amendment must be provided under Sections 251(c)(3) and 251(d) of the Act, and under this Agreement. Notwithstanding anything to the contrary in this Agreement and in addition to fully reserving its other rights, SBC Michigan reserves its right to exercise its option at any time in the future to adopt on a date specified by SBC Michigan the FCC ISP terminating compensation plan, after which date ISP-bound traffic will be subject to the FCC's prescribed terminating compensation rates, and other terms and conditions. In the event that the FCC, a state regulatory agency or a court of competent jurisdiction, in any proceeding finds, rules and/or otherwise orders that any of the UNEs and/or UNE combinations provided for under this Agreement and this Amendment do not meet the necessary and impair standards set forth in Section 251(d)(2) of the Act, the affected provision will be immediately invalidated, modified or stayed as required to effectuate the subject order upon written request of either Party. In such event, the Parties shall have sixty (60) days from the effective date of the order to attempt to negotiate and arrive at an agreement on the appropriate conforming modifications required to the Agreement. If the Parties are unable to agree upon the conforming modifications required within sixty (60) days from the effective date of the order, any disputes between the Parties concerning the interpretations of the actions required or the provisions affected by such order shall be handled under the Dispute Resolution Procedures set forth in this Agreement.

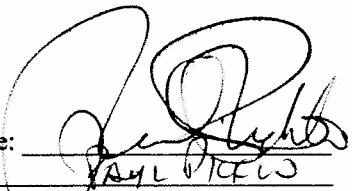
5. EXCEPT AS MODIFIED HEREIN, ALL OTHER TERMS AND CONDITIONS IN THE UNDERLYING AGREEMENT REMAIN UNCHANGED.
6. This Amendment shall be filed with and is subject to approval by the Commission and shall become effective ten (10) days following approval by such Commission.

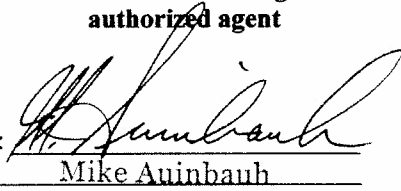
This Amendment to the Agreement was exchanged in triplicate on this ____ day of January, 2003, by Michigan Bell Telephone Company, d/b/a Ameritech Michigan, signing by and through its duly authorized representative, and Thumb Cellular, signing by and through its duly authorized representative.

Thumb Cellular

**Michigan Bell Telephone Company d/b/a
Ameritech Michigan**

By: SBC Telecommunications, Inc.,
Its authorized agent Its authorized agentIts
authorized agentIts authorized agentIts
authorized agent

Signature: 
Name: RAYL DICKES
(Print or Type)
Title: General Manager

Signature: 
Name: Mike Aulinbaugh
(Print or Type)
Title: President-Industry Markets

Date: <u>3/10/03</u>	Date: <u>APR 11 2003</u>
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EXHIBIT A
Revised Pricing Schedule
[copy attached]

Attachment A
Reciprocal Compensation Rates

Switching and Shared Transport
Per Minute of Use

Effective 2/17/00 Effective 10/3/00

Figure I (Ameritech to Carrier Calls)

For calls originated on Ameritech's
network and terminated on Carrier's network: \$0.003376 \$0.001282

Figure 2 (Carrier to Ameritech calls)

For calls originated on Carrier's network
and terminated on Ameritech's network--

Type 1 Service, local call	\$0.003925	\$0.001491
Type 2A Service, local call	\$0.003925	\$0.001491
Type 2B Service, local call	\$0.002357	\$0.001004

Signaling

Both Ameritech and Carrier will pay each other at the same rates as approved by the Commission in Case No. U-11280. The Parties agree that if any rates change as a result of a Commission Order in Case No. U-11831, the rates approved by the Commission in Case No. U-11831 shall prevail. **Rates below became effective 2/17/00.**

	Non-recurring Charge	Monthly Rate	Usage Charge
Signal Transfer Point, per port	\$879.58	\$235.73	
Originating Point Code, per service added or changed	\$22.40		
Global Title Address Translation, per service added or changed	\$12.29		

Signal Switching, per ISUP message	\$ 0.000073
Signal Switching, per TCAP message	0.000056
Signal Transport, per ISUP message	0.000051
Signal Transport, per TCAP message	0.000034
Signal Formulation, per ISUP message	0.000229
Signal Formulation, per TCAP message	0.000118
Signal Tandem Switching, per ISUP message	0.000123
Reverse Billing	\$ 0.005017

Attachment B
Transit Traffic Charges

	Effective 2/17/00 <u>Per Minute of Use</u>	Effective 10/3/00 <u>Per Minute of Use</u>
Cans originating on Carrier's network and terminating to another Carrier's network and transiting Ameritech's	\$0.006314	\$0.005177

**MPSC SEPTEMBER 21, 2004 ORDER AMENDMENT
TO THE INTERCONNECTION AGREEMENT UNDER
SECTIONS 251 AND 252 OF THE TELECOMMUNICATIONS ACT OF 1996**

This MPSC September 21, 2004 Order Amendment to the Interconnection Agreement under Sections 251 and 252 of the Telecommunications Act of 1996 (the "Amendment") is being entered into by and between Michigan Bell Telephone Company d/b/a SBC Michigan ("SBC Michigan")¹ and Thumb Cellular ("Carrier").

WHEREAS, SBC Michigan and Carrier are parties to an interconnection agreement that was previously submitted to the Michigan Public Service Commission ("MPSC" or "Commission") for approval, and may have been amended prior to this Amendment (the "Agreement");

WHEREAS, the MPSC issued an order ("Order") in Case No. U-13531, on September 21, 2004, approving certain cost studies for unbundled network elements ("UNEs") that may be included in the Agreement and requiring SBC Michigan to file a compliance cost study showing the resulting UNE rates in summary form as an illustrative interconnection agreement pricing schedule (the "Compliance Filing");

WHEREAS, SBC Michigan made the Compliance Filing on November 5, 2004;

WHEREAS, provisions of the Agreement provide for the incorporation into the Agreement of new rates and rate structures such as those established by the Order; and

WHEREAS, based on the foregoing, this Amendment incorporates into the Agreement the same rate and rate structure changes as reflected in the illustrative interconnection agreement pricing schedule submitted as part of the Compliance Filing, subject to the reservation of rights and other provisions hereof.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Agreement shall be amended as follows:

1. INTRODUCTION

- 1.1 Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Agreement.
- 1.2 To the extent there is a conflict or inconsistency between the provisions of this Amendment and the provisions of the Agreement (including all incorporated or accompanying Appendices, Addenda and Exhibits to the Agreement), the provisions of this Amendment shall control and apply but only to the extent of such conflict or inconsistency.

2. AMENDMENT TO THE AGREEMENT

2.1 The Agreement is hereby amended by referencing and incorporating the following:

- 2.1.1 Solely to conform the Agreement to effectuate certain rate and rate structure changes established by the Commission in the Order, the Agreement is amended to add the attached pricing schedule labeled Attachment A (which is incorporated herein).
- 2.1.2 The new rates and rate structures in Attachment A shall begin to apply on November 6, 2004. That is, the new rates and rate structures shall be applied retroactively from the Amendment Effective Date (as defined in Section 3 of this Amendment) back to November 6, 2004 (with SBC Michigan performing any necessary true-up and thereafter issuing the necessary credits or bills, as appropriate) as well as from the Amendment Effective Date going forward.² In the event the MPSC in

¹ Michigan Bell Telephone Company (Michigan Bell), a Michigan corporation, offers telecommunications services and operates under the names "SBC Michigan" and "SBC Ameritech Michigan" (used interchangeably herein), pursuant to assumed name filings with the State of Michigan.

² Notwithstanding anything to the contrary in the Agreement (including, as applicable, this Amendment and any other amendments to the Agreement, including the Revised Amendment, if any), in the event that any other telecommunications carrier ("Adopting Carrier") should adopt, directly or indirectly, this Amendment or provisions thereof ("MFN Provisions") pursuant to Section 252(i) of the Act, the rates and rate

a subsequent order issued as a result of its review of the Compliance Filing revises the rates and/or rate structures reflected in the Compliance Filing, thereby resulting in new rates and/or rate structures under Attachment A hereto, this Amendment with a revised Attachment A conforming to such subsequent order ("Revised Amendment") shall be promptly filed with the Commission for immediate approval, upon which the Revised Amendment shall replace this Amendment, including without limitation that such rates and rate structures in the revised Attachment A shall apply as if such rates and rate structures went into effect on November 6, 2004 (with SBC Michigan performing any necessary true-up and thereafter issuing the necessary credits or bills, as appropriate).²

- 2.2 This Amendment is provided as a means by which SBC Michigan and Carrier, which have an interconnection agreement under Sections 251 and 252 of the Telecommunications Act of 1996, can obtain the rights and obligations under the MPSC's Order. Nothing in this Amendment expands, contracts, or otherwise affects either SBC Michigan's or Carrier's rights or obligations under the Agreement beyond the express provisions of this Amendment.
- 2.3 To the extent the underlying Agreement does not contain terms and conditions for network elements classified as UNE(s) listed in Attachment A to this Amendment, this Amendment does not provide Carrier with the ability to obtain and/or order such network elements as UNEs. Rather, Carrier must negotiate a separate amendment incorporating the appropriate terms and conditions into the underlying Agreement before ordering and/or obtaining any such UNE(s) under this Agreement, provided, however, that nothing herein shall obligate SBC Michigan to negotiate and/or enter into such an amendment including without limitation if such UNE(s) are subject to the FCC's *Order and Notice of Proposed Rulemaking*, FCC 04-179, in Unbundled Access to Network Elements, WC Docket No. 04-313/Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange, CC Docket No. 01-338 (rel. August 20, 2004).

3. AMENDMENT EFFECTIVE DATE

- 3.1 The effective date of this Amendment shall be immediate upon approval of this Amendment by the MPSC under Section 252(e) of the Act or, absent such MPSC approval, the date this Amendment is deemed approved under Section 252(e)(4) of the Act ("Amendment Effective Date"); provided, however, that the rates contained herein shall be applied in accordance with Sections 2.1.2 of this Amendment.

4. TERM OF AMENDMENT

- 4.1 EXCEPT AS MODIFIED HEREIN, ALL OTHER RATES, TERMS AND CONDITIONS OF THE UNDERLYING AGREEMENT SHALL REMAIN UNCHANGED. This Amendment will become effective as of the Amendment Effective Date, and will terminate on the termination or expiration of the Agreement; provided, however, this Amendment, in whole or in part, may terminate or expire earlier pursuant to other provisions of this Amendment, including Section 6. This Amendment does not extend the term of the Agreement.

5. APPLICATION OF FEDERAL REQUIREMENTS AND OBLIGATIONS

- 5.1 This Amendment is the result of the MPSC's Order and solely addresses rates and rate structures. Accordingly, no aspect of this Amendment qualifies for portability into any other state under any state or federal statute, regulation, order or legal obligation (collectively "Law"), if any. The entirety of this Amendment and its provisions are non-severable, and are "legitimately related" as that phrase is understood under Section 252(i) of Title 47, United States Code.

6. RESERVATIONS OF RIGHTS

- 6.1 In entering into this Amendment, neither Party is waiving, and each Party hereby expressly reserves, any of the rights, remedies or arguments it may have at law or under the intervening law or regulatory change

structures in Attachment A shall begin to apply prospectively from the date that the MFN Provisions become effective between SBC Michigan and the Adopting Carrier, following the date the MPSC approves or is deemed to have approved the Adopting Carrier's Section 252(i) adoption ("Section 252(i) Effective Date"). In no event shall an Adopting Carrier be entitled to the application of any rate or rate structures under its MFN Provisions to a date prior to its Section 252(i) Effective Date.

provisions in the underlying Agreement (including intervening law rights asserted by either Party via written notice predating this Amendment) with respect to any orders, decisions, legislation or proceedings and any remands thereof, including, without limitation, the following actions, which the Parties have not yet fully incorporated into this Agreement or which may be the subject of further government review: *Application of SBC Michigan for a consolidated change of law proceeding to conform 251/252 interconnection agreements to governing law pursuant to Section 252 of the Communications Act of 1934, as amended*, MPSC Case No. U-14305, *Verizon v. FCC, et. al*, 535 U.S. 467 (2002); *USTA, et. al v. FCC*, 290 F.3d 415 (D.C. Cir. 2002) and following remand and appeal, *USTA v. FCC*, 359 F.3d 554 (D.C. Cir. 2004); the FCC's Triennial Review Order (rel. Aug. 21, 2003) including, without limitation, the FCC's MDU Reconsideration Order (FCC 04-191) (rel. Aug. 9, 2004) and the FCC's Order on Reconsideration (FCC 04-248) (rel. Oct. 18, 2004); and the FCC's Order on Remand and Report and Order in CC Dockets No. 96-98 and 99-68, 16 FCC Rcd 9151 (2001), (rel. April 27, 2001), which was remanded in *WorldCom, Inc. v. FCC*, 288 F.3d 429 (D.C. Cir. 2002).


- 6.2 This Amendment does not in any way prohibit, limit, or otherwise affect either SBC Michigan or Carrier from taking any position with respect to the Order or any other MPSC order or any issue or subject addressed or implicated therein, or from raising and pursuing its rights and abilities with respect to the Order or any other MPSC order or any issue or subject addressed or implicated therein, or any legislative, regulatory, administrative or judicial action with respect to any of the foregoing.
- 6.3 Notwithstanding this Amendment and without limiting Sections 6.1 or 6.2, SBC Michigan (and its affiliates) is not waiving its rights, abilities, remedies or arguments with respect to the non-applicability of, and interaction between, the Telecommunications Act of 1996 (including Sections 251 and 252) to the Order or any other MPSC order (including the Michigan-specific requirements regarding wholesale subject matters addressed therein). SBC Michigan (and its affiliates) fully reserves its rights to raise and take any position with respect thereto, and to pursue such rights, abilities, remedies and arguments.

7. MISCELLANEOUS

- 7.1 On and from the Amendment Effective Date, reference to the Agreement in any notices, requests, orders, certificates and other documents shall be deemed to include this Amendment, whether or not reference is made to this Amendment, unless the context shall be otherwise specifically noted.
- 7.2 This Amendment constitutes the entire amendment of the Agreement and supersedes all previous proposals, both verbal and written.

IN WITNESS WHEREOF, each Party has caused this Amendment to be executed by its duly authorized representative.

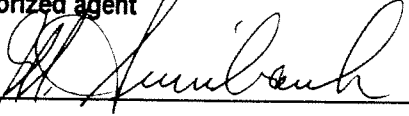
Thumb Cellular

By: 
Printed: PAUL PICKLES

Title: GM

Date: 1/11/05

Michigan Bell Telephone Company d/b/a SBC
Michigan by SBC Telecommunications, Inc., its
authorized agent

By: 
Printed: Mike Auinbauh

Title: *For/* Senior Vice President - Industry Markets
& Diversified Businesses

Date: 1-21-05

FACILITIES-BASED OCN # _____

ACNA _____

**SBC Michigan Rates
per Order in Case No. U-13531**

Type 2A		.001145
Type 2B		.000631
Type 1		.001145
Transiting		
Per conversation MOU		.000454

MERGER AMENDMENT TO THE INTERCONNECTION AGREEMENT

This Merger Amendment to the Interconnection Agreement under Sections 251 and 252 of the Telecommunications Act of 1996 (the "**Amendment**") is dated as of December 1, 1999 by and between Ameritech Information Industry services, a division of Ameritech Services, Inc., on behalf of and as an agent of Ameritech Michigan, with its principal offices at 350 North Orleans, Chicago, Illinois 60654 ("**Ameritech**") and Thumb Cellular on behalf of itself and its affiliates and markets operated by it, with its principal offices at 82 S. Main Street, Pigeon, MI 48755 ("**Requesting Carrier**").

WHEREAS, Ameritech and Requesting Carrier are parties to that certain Interconnection dated as of October 14, 1999 (the "**Agreement**");

WHEREAS, Ameritech, in the proposed Conditions for FCC Order Approving SBC/Ameritech Merger, CC Docket No. 98-141 (the "FCC Conditions"), agreed to implement an alternative dispute resolution ("**ADR**") process designed to resolve carrier-to-carrier disputes before such disputes become formal complaints before the Michigan Public Service Commission (the "**Commission**"); and

WHEREAS, the Parties are entering into this Amendment to incorporate into the Agreement the rates, terms and conditions that reflect the ADR process, as described in the FCC Conditions and incorporated by reference into this Amendment.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Parties agree as follows.

1.0 DEFINED TERMS; DATES OF REFERENCE

1.1 Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Agreement and in the FCC Conditions.

1.2 "**Amendment Effective Date**" shall mean the date on which this Amendment is approved by the Commission under Section 252(e) of the Act.

2.0 AMENDMENTS TO THE AGREEMENT

Subject to **Section 3.0** below, on and after the Amendment Effective Date, the Agreement is hereby amended as follows:

2.1 **Section 32.0** of the Agreement is amended by adding the following Section 32.3 thereto:

32.3 In addition to the foregoing, upon Requesting Carrier's request, the Parties shall adhere to and implement, as applicable, the Alternative Dispute Resolution guidelines and procedures described in Paragraph 54 and Attachment D of the FCC Conditions, the terms and conditions of which are incorporated herein by this reference.

2.2 **Section 16.0** is amended by adding the following **Section 16.5** thereto:

16.5 **Conflicting Conditions.** In accordance with Paragraph 75 of the FCC Conditions, if any of the FCC Conditions contained in this Agreement and conditions imposed in connection with the merger under Michigan law grant similar rights against Ameritech, Requesting Carrier shall not have a right to invoke the relevant terms of these FCC Conditions contained in this Agreement, if Requesting Carrier has invoked substantially related conditions imposed on the merger under Michigan law.

2.3 **Section 1.0** of the Agreement is amended by adding the following definition in appropriate alphabetical order:

"FCC Conditions" means the proposed Conditions for FCC Order Approving SBC/Ameritech Merger, CC Docket No. 98-141.

3.0 SUSPENSION OF CONDITIONS

Notwithstanding anything to the contrary in the Agreement or this Amendment, if the Merger Agreement is terminated, or the FCC Conditions is overturned or any of the provisions of the FCC Conditions that are incorporated herein by reference are amended or modified as a result of any order or finding by a court of competent jurisdiction or other governmental authority, the provisions described in **Section 2.0** of this Amendment shall be automatically, without notice, suspended as of the date of such termination or order or finding and shall not apply after the date of such termination or order or finding.

4.0 MISCELLANEOUS

4.1 The Agreement, as amended hereby, shall remain in full force and effect. On and from the Amendment Effective Date, reference to the Agreement in any notices, requests, orders, certificates and other documents shall be deemed to include this Amendment, whether or not reference is made to this Amendment, unless the context shall otherwise specifically noted.

4.2 This Amendment shall be deemed to be a contract made under and governed by the Act and the domestic laws of the State of Michigan, without reference to conflict of law provisions.

4.3 This Amendment may be executed in counterparts, each of which shall be deemed an original but all of which when taken together shall constitute a single agreement.

4.4 This Amendment constitutes the entire Amendment between the Parties and supersedes all previous proposals, both verbal and written.

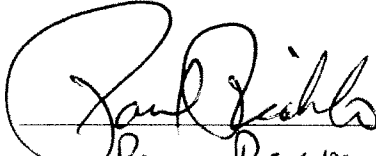
IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their duly authorized representatives as of the Amendment Effective Date.

Thumb Cellular, on behalf of itself and its affiliates and markets operated by it

By:

Printed:

Title:

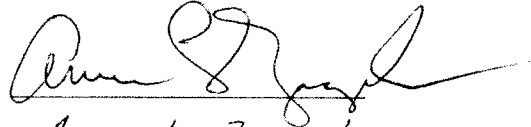

PAUL PICKKO
Gen MGR

Ameritech Information Industry Services, a division of Ameritech Services, Inc., on behalf of and as agent for Ameritech Michigan

By:

Printed:

Title:


Anne L. Zaczek
VP - Finance

AT&T Wholesale Amendment

**2012 AMENDMENT TO THE INTERCONNECTION AGREEMENT
BETWEEN
THUMB CELLULAR, LLC
AND
MICHIGAN BELL TELEPHONE COMPANY d/b/a AT&T MICHIGAN**

This 2012 Amendment (the "Amendment") amends the interconnection agreement dated October 14, 1999 (the "Agreement") between Michigan Bell Telephone Company, d/b/a AT&T Michigan ("AT&T Michigan") (previously referred to as Ameritech Information Industry Services), and Thumb Cellular, LLC ("Carrier"). AT&T Michigan and Carrier are hereinafter referred to collectively as the "Parties" and individually as a "Party."

WHEREAS, AT&T Michigan and Carrier are parties to an Interconnection Agreement under Sections 251 and 252 of the Communications Act of 1996, for Commercial Mobile Radio Service ("CMRS"), which the Michigan Public Service Commission ("MPSC"), approved on January 10, 2000, in MPSC Case No. U-11989, as has been or may be amended from time to time;

WHEREAS, pursuant to the Report and Order and Further Notice of Proposed Rulemaking, issued by the Federal Communications Commission ("FCC") on November 18, 2011 (FCC 11-161), and as amended by the FCC on December 23, 2011 (FCC 11-189), (collectively, the "FCC ICC Order"), the Parties desire to amend the Agreement to establish bill-and-keep as the compensation arrangement for Intra-MTA Traffic exchanged between the Parties;

WHEREAS the FCC ICC Order constitutes a change of law;

WHEREAS, the FCC has amended various federal regulations, including 47 CFR 51.705;

WHEREAS, among other rule changes, the FCC has revised 47 CFR 51.705(a), 47 CFR 20.11(b) and 47 CFR 51.713 of its rules to now provide that, "[n]otwithstanding any other provision of the Commission's rules, by default, transport and termination for Non-Access Telecommunications Traffic exchanged between a local exchange carrier and a CMRS provider within the scope of §51.701(b)(2) shall be pursuant to a bill-and-keep arrangement, as provided in §51.713" for traffic exchanged on and after July 1, 2012; and that "[b]ill-and-keep arrangements are those in which carriers exchanging telecommunications traffic do not charge each other for specific transport and/or termination functions or services", and that "Local exchange carriers and commercial mobile radio service providers shall exchange Non-Access Telecommunications Traffic, as defined in §51.701 of this chapter, under a bill-and-keep arrangement, as defined in §51.713 of this chapter, unless they mutually agree otherwise."

NOW, THEREFORE, in consideration of the FCC ICC Order and the change of law provision in the Agreement, the Parties agree to amend the Agreement as follows:

1. **The foregoing recitals are hereby incorporated into this Amendment.**
2. **Name Change of Carrier:**

AT&T Michigan shall reflect a name change for Carrier from "Thumb Cellular" to "Thumb Cellular, LLC" only for the main billing account (header card) for each of the accounts previously billed to Thumb Cellular. AT&T Michigan shall not be obligated, whether under this Amendment or otherwise, to make any other changes to AT&T Michigan's records with respect to Carrier's accounts, including to the services and items provided and/or billed under Carrier's accounts or under the Agreement. Without limiting the foregoing, Thumb Cellular, LLC affirms, represents, and warrants that the ACNA and OCN for its accounts shall not change from that previously used by Thumb Cellular with AT&T Michigan, for those accounts, and for services and items provided and/or billed under Carrier's accounts or under the Agreement.

3. The Parties agree to replace Section 16.2 of the Agreement with the following language:



16.2 Regulatory Changes. If any legislative action, regulatory action, or judicial action materially affects the ability of a Party to perform any material obligation under the Agreement, a Party may, on thirty (30) days written notice to the other Party request that the Parties renegotiate in good faith the provision that is affected by the legislative action, regulatory action, or judicial action. If the Parties reach a mutually agreeable agreement after those renegotiations, the Parties must memorialize that in an amendment to this Agreement. In entering into this Agreement and any Amendments to such Agreement and carrying out the provisions herein, neither Party waives, but instead expressly reserves, all of its rights, remedies and arguments with respect to any orders, decisions, legislation or proceedings and any remands thereof and any other federal or state regulatory, legislative or judicial action(s) which the Parties have not yet fully incorporated into this Agreement or which may be the subject of further review. If any action by any state or federal regulatory or legislative body or court of competent jurisdiction invalidates, modifies, or stays the enforcement of laws or regulations that were the basis or rationale for any rate(s), term(s) and/or condition(s) ("Provisions") of the Agreement and/or otherwise affects the rights or obligations of either Party that are addressed by this Agreement, the affected Provision(s) shall be immediately invalidated, modified or stayed consistent with the action of the regulatory or legislative body or court of competent jurisdiction upon the written request of either Party in accordance with Section 28.0 below. With respect to any written notices hereunder, the Parties shall have sixty (60) days from the written notice to attempt to reach agreement on appropriate conforming modifications to the Agreement. If the Parties are unable to agree upon the conforming modifications within sixty (60) days from the written notice, any disputes between the Parties concerning such actions shall be resolved pursuant to the dispute resolution process provided for in this Agreement.

4. The Parties agree to amend the definitions of the Agreement, to be consistent with the new definitions that the FCC is using in its new rules, as follows:

Any references in the Agreement to "Local Telecommunications Traffic," "Local Traffic," and/or "Local Call," are replaced with the term, "Non-Access Telecommunications Traffic." Similarly, any references in the Agreement to "Toll," "Non-Local" or "InterMTA" traffic are replaced with the term, "Access Telecommunications Traffic." Specifically, consistent with FCC Rule §51.701(b), the term "Non-Access Telecommunications Traffic" means traffic exchanged between a LEC and a CMRS provider that, at the beginning of the call, originates and terminates within the same Major Trading Area. Non-Access Telecommunications Traffic does not include transit or Intermediary Traffic. For the avoidance of doubt, "Intermediary Traffic" is a term that means transit traffic.

5. Effective July 16, 2012, the Parties shall implement bill-and-keep for Non-Access Telecommunications Traffic exchanged between the Parties over Type 2A, Type 2B or Type 1 interconnection trunks and facilities. For purposes of this Agreement, "bill-and-keep" means an arrangement, as defined in 47 CFR 51.713 in which carriers exchanging telecommunications traffic do not charge each other for specific transport and/or termination functions or services. Such specific transport and/or termination functions or services subject to Bill and Keep pursuant to this section reflect a price of \$0.00 on the attached pricing sheet.
6. In accordance with the schedule in FCC Order 11-161, effective July 16, 2012, for terminating intrastate or interstate InterMTA Traffic, i.e. non-IntraMTA Traffic, Carrier shall pay a blended rate that consists of the average of AT&T's intrastate and interstate rates for the switched network access service rate elements, on a per minute of use basis, as are set forth in AT&T's Intrastate Access Services Tariff, and Interstate Access Services Tariff as those tariffs may be amended from time to time. This provision does not apply to transit traffic.
7. The Parties agree to replace the rates listed under "Switching and Shared Transport Per Minute of Use" for Type 2A, Type 1 and Type 2B in Attachment A Reciprocal Compensation Rates of the Agreement with the rates contained in **Exhibit A** attached hereto.
8. The Parties agree that the terms and conditions of the Agreement, as hereby amended, shall apply only to CMRS traffic that, at the beginning of the call, originates from or terminates to a wireless carrier's network e.g. this

Agreement specifically does not include traffic that only uses a wireless carrier's FCC licensed CMRS services to relay the call from one wireline facility to another carrier.

9. In the event that a Third Party Carrier adopts the Parties' Agreement, as hereby amended, there shall be no retroactive application of any provision of this Amendment prior to the Effective Date of the adopting Carrier's agreement.
10. EXCEPT AS MODIFIED HEREIN, ALL OTHER TERMS AND CONDITIONS OF THE UNDERLYING AGREEMENT SHALL REMAIN UNCHANGED AND IN FULL FORCE AND EFFECT.
11. In entering into this Amendment, neither Party waives, and each Party expressly reserves, any rights, remedies or arguments it may have at law, or under the intervening law, or regulatory change provisions, in the underlying Agreement (including intervening law rights asserted by either Party via written notice predating this Amendment) with respect to any orders, decisions, legislation or proceedings and any remands thereof, which the Parties have not yet fully incorporated into this Agreement or which may be the subject of further review.
12. This Amendment shall not modify or extend the Effective Date or Term of the underlying Agreement, but rather, shall be coterminous with such Agreement.
13. This Amendment shall be filed with and is subject to approval by the Michigan Public Service Commission and shall become effective ten (10) days following approval by such Commission ("Amendment Effective Date").

Thumb Cellular, LLC

Signature: _____

Name: _____

(Print or Type)

Title: _____

(Print or Type)

Date: _____

Michigan Bell Telephone Company d/b/a AT&T Michigan by
AT&T Services, Inc., its authorized agent

Signature: _____

Name: _____

(Print or Type)

Title: _____

Director - Regulatory

(Print or Type)

Date: _____

Attachment	State	Product	Rate Element Description	COS (Class of Service)	USOC	Zone	Monthly Recurring Charge (MRC)	Non- Recurring Charge (NRC) First	Non- Recurring Charge (NRC) Additional	Per Unit
W2	MI	Local Interconnection (Call Transport and Termination)	Section 251(b)(5) Calls Transport and Termination - Type 2A				\$0.00			MOU
W2	MI	Local Interconnection (Call Transport and Termination)	Section 251(b)(5) Calls Transport and Termination - Type 2E				\$0.00			MOU
W2	MI	Local Interconnection (Call Transport and Termination)	Section 251(b)(5) Calls Transport and Termination - Type 1				\$0.00			MOU