

## **SCHEDULE 9.2.6 SWITCHING**

### **9.2.6 Switching.**

**9.2.6.1 Definition.** The local switching capability to be provided on an unbundled basis pursuant to this Agreement is defined as set forth in FCC Rule 51.319. Without limiting the foregoing, it includes:

9.2.6.1.1 line-side facilities, which include the connection between a Loop termination at the Main Distribution Frame and a switch line card;

9.2.6.1.2 trunk-side facilities, which include the connection between trunk termination at a trunk-side cross- connect panel and a switch trunk card; and

9.2.6.1.3 all features, functions, and capabilities of the switch available from the specific port type (line side or trunk side port), which include:

9.2.6.1.3.1 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 ILEC customers, such as a telephone number, white page listing, and dial tone;

9.2.6.1.3.2 access to OS/DA and 9-1-1; and

9.2.6.1.3.3 all other features that the switch is capable of providing, including custom calling, CLASS features and Centrex, as well as any technically feasible custom routing provided by the switch.

9.2.6.1.4 Remote Switching Module functionality is included in the Local Switching function. The switching capabilities used will be based on the line side and trunk side features they support.

9.2.6.1.5 Local Switching will also be capable of routing local, intraLATA, interLATA, and calls to international customer's preferred carrier; call features (e.g., call forwarding) and Centrex capabilities.

9.2.6.1.6 Local Switching also includes the ability to perform Customized Routing to enable CLEC's local Operator Service (OS) and/or Directory

Assistance (DA), as well as CLEC's PIC'd toll traffic in a 2-PIC environment to be routed, at CLEC's option, from SBC-AMERITECH's local end office to an alternate OS/DA platform designated by CLEC.

9.2.6.1.7 Customized routing supplied by SBC-AMERITECH shall provide CLEC with the capability of directing CLEC's local traffic to its own operators and/or directory assistance agents or to those of a third party vendor. SBC-AMERITECH shall allow CLEC to commingle local and toll OS and/or DA traffic on existing OS and/or Feature Group D trunks. SBC-AMERITECH shall allow CLEC the option of directing its customers inter-switch traffic on an NPA-NXX basis to a Port or Ports other than the standard routing used by SBC-AMERITECH. SBC-AMERITECH will provide the functionality and features within its local switch (LS) to route all CLEC customer dialed 0+ and 0- calls to the CLEC designated trunk groups via Modified Operator Services Signaling (MOSS).

Customized Routing supplied by SBC-Midwest shall provide Sage with the capability of directing Sage's local OS and DA traffic to its own operators and/or directory assistance agents or to those of a third party vendor.

***9.2.6.1.7.1 Where physical trunking rearrangement work is performed in the process of establishing custom routing groups for migrating Operator and DA services to CLEC, SBC-AMERITECH shall apply only those charges necessary to recover the forward-looking economic costs of performing the trunk rearrangements.***

*9.2.6.1.7.1 Where physical network trunking rearrangement work is performed in the process of establishing custom routing trunk groups for migrating Operator and DA services to CLEC, SBC-AMERITECH shall charge for performing the trunk rearrangements. Additional charges may be applicable for SBC to recover its costs in providing the customized routing for AT&T, e.g., performing translation work and building routing tables specific to AT&T's request. Charges under this Section shall be calculated pursuant to 252(d)(1).*

9.2.6.1.8 CLEC will be solely responsible for specifying the required custom routing (including code conversions and number translations) as well as the design of any dedicated transport associated with customized routing. SBC-AMERITECH will remain solely responsible for implementing the custom routing at SBC-AMERITECH's central offices, and for the design and engineering of any SBC-AMERITECH provided shared transport.

9.2.6.1.9 Dedicated transport may be purchased from SBC-AMERITECH or CLEC may provide its own.

9.2.6.1.10 SBC-AMERITECH shall not impose any restrictions on CLEC regarding the use of the unbundled local switching it purchases from SBC-AMERITECH provided such use does not result in demonstrable harm to either SBC-AMERITECH network or personnel.

9.2.6.1.12 Vertical features, CLASS features, and other features resident in the ILEC switch are available under ULS.

### **9.2.6.2 Technical Requirements.**

9.2.6.2.1 SBC-AMERITECH shall route local and toll calls to the appropriate trunk ports or line ports for call origination or termination utilizing SBC-AMERITECH's shared transport network, and at CLEC's option SBC-AMERITECH will offer customized routing for unbundled switch line ports. Customized routing will include but not be limited to the customized routing of inter-switch traffic via the BFR process on an NPA-NXX basis to a Port or Ports other than the standard routing used by SBC-AMERITECH, and to the customized routing of local OS and DA calls, as well as CLEC's PIC'ed toll traffic in a 2-PIC environment as specified by CLEC.

9.2.6.2.2 Where CLEC purchases Local Switching, at CLEC's option, SBC-AMERITECH will provide the functionality and features required to either modify the originating subscriber's line at SBC-AMERITECH's local switch (LS) through the use of routing tables, e.g., via line class codes, or provide AIN functionality, to route all local DA, as well as CLEC's PIC'ed toll DA traffic in a 2-PIC environment, to the CLEC Network. This custom routing functionality must be fully tested and be capable of being broadly deployed by SBC-AMERITECH. Functionality and features may also be provided in any other manner mutually agreed to by the parties.

9.2.6.2.3 SBC-AMERITECH will provide Customized Routing via LCC technology. SBC-AMERITECH shall provide custom routing at TELRIC based rates as identified in the **Pricing Schedule**.

9.2.6.2.4 At CLEC's option, OS traffic shall be custom routed over trunk groups specified by CLEC using standard Operator Services dialing protocols of 0+ or 0- where technically feasible SBC-AMERITECH will provide the functionality and features within its local switch (LS) to route all CLEC customer dialed 0+ and 0- calls to the CLEC designated trunk groups via Modified Operator Services Signaling (MOSS), where technically feasible and subject to the completion of successful testing. Otherwise, SBC-AMERITECH shall handle these calls on behalf of CLEC and route the calls to SBC-AMERITECH's operator platform for processing.

9.2.6.2.5 At CLEC's option, SBC-AMERITECH shall route all local Directory Assistance calls dialed via 411 or 555-1212 by CLEC Customers to the CLEC Network. Otherwise, SBC-AMERITECH shall handle these calls on behalf of CLEC and route the calls to SBC-AMERITECH's directory assistance platform for processing.

9.2.6.2.6 SBC-AMERITECH shall route all toll and InterLATA Directory Assistance dialed via (NPA) 555-1212, by CLEC Customers, to the customer's PIC'ed carrier for toll and interLATA service respectively.

9.2.6.2.7 When CLEC is the PIC'd custom carrier, any custom routing will be specified by CLEC.

9.2.6.2.8 At CLEC's option, SBC-AMERITECH shall perform code conversions to route all CLEC customer dialed local and toll Directory Assistance calls to an CLEC designated telephone number (i.e., xxx-xxx-xxxx) prior to delivery to the CLEC Network. In the event that SBC-AMERITECH cannot perform this custom routing for any reason, SBC-AMERITECH will either place unconverted dialed calls on the CLEC designated trunk group, or continue to provide CLEC with unbundled Operator Services at CLEC's request.

9.2.6.2.9 All dialing capabilities described herein shall permit CLEC Customers to dial the same telephone numbers to reach CLEC Directory Assistance, or an CLEC Operator that similarly-situated SBC-AMERITECH customers dial for reaching equivalent SBC-AMERITECH Directory Assistance and SBC-AMERITECH operators.

9.2.6.2.10 If requested by CLEC, SBC-AMERITECH shall provide standard recorded network announcements. At CLEC's request, UNE dedicated and local switching with shared transport originated by an CLEC UNE ULS customer shall be left unbranded by SBC-AMERITECH. Requests for other announcement treatment, that is, CLEC's "sparkle tone", shall be subject to the BFR process.

9.2.6.2.11 Where requested by CLEC, SBC-AMERITECH will change a subscriber from SBC-AMERITECH's retail services to CLEC's resale or unbundled network element platform without loss of feature availability and functionality, and when no physical work is entailed in the migration, without any charges other than for the direct costs of a software only change. Where physical work is performed in the process of migrating a customer, SBC-AMERITECH shall apply only those charges necessary to recover the total element long-run incremental costs of performing the necessary work.

9.2.6.2.12 Where CLEC purchases unbundled switching and SBC-AMERITECH provides CLEC with access to SBC's electronic interfaces to perform routine testing (e.g. Mechanized Loop Tests (MLT)), CLEC will be allowed to perform MLT, issue trouble tickets, view status, and view trouble history on-line.

Where CLEC purchases unbundled switching and SBC does not provide CLEC with access to SBC's electronic interfaces to perform routing testing (e.g. MLT), SBC will perform such testing for CLEC and additionally will issue trouble tickets, provide status, and provide trouble history to CLEC.

9.2.6.2.13 SBC-AMERITECH shall repair, restore and maintain SBC-AMERITECH provided equipment that has produced trouble conditions using the same methods, procedures and timeframes used to restore similar SBC-AMERITECH equipment in a non-discriminatory manner.

9.2.6.2.14 SBC-AMERITECH shall control congestion points such as mass calling events, and network routing abnormalities, using appropriate network capabilities.

9.2.6.2.15 After October 8, 2000, SBC-AMERITECH shall record potentially billable events, as applicable, involving usage of local switching and/or shared transport, and send the appropriate recording data to CLEC as outlined in Article XXVII (Billing and Recording) of this Agreement.

9.2.6.2.16 Unbundled local switching will include 911 access in a nondiscriminatory manner.

9.2.6.2.17 SBC-AMERITECH shall provide nondiscriminatory access to switching service point (SSP) capabilities and signaling software to interconnect the signaling links destined to SBC-AMERITECH STPs.

9.2.6.2.18 CLEC may request and SBC-AMERITECH will provide call blocking options (e.g., 900, 976) at parity with those provided to SBC-AMERITECH's own customers.

### **9.2.6.3 Interface Requirements.**

9.2.6.3.1 SBC-AMERITECH shall provide at a minimum the following unbundled Local Switching ports:

Analog basic (POTS)	line side, Loop start or ground start signaling
Analog Centrex	line side, Loop start or ground start signaling.
Analog PBX	line side, Loop start, or ground start signaling
Analog DID	trunk side, Loop signaling, associated with a PBX

DS1 (DID)	trunk side, associated with a PBX
DS1	trunk side
ISDN BRI	two circuit-switched b-channels (64 Kbits/s each) and one D-channel (16 Kbits/s)
ISDN PRI	twenty three circuit-switched b-channels (64 Kbits/s each) and one D-channel (64 Kbits/s)

9.2.6.3.2 Additional interfaces may be requested in accordance with the BFR Process, as set forth in Article II of this Agreement.

#### **9.2.6.4 Tandem Switching.**

9.2.6.4.1 Definition. Tandem Switching is defined as:

9.2.6.4.1.1 trunk-connect facilities, including but not limited to the connection between trunk termination at a cross-connect panel and a switch trunk card,

9.2.6.4.1.2 the basic switching function of connecting trunks to trunks; and

9.2.6.4.1.3 all technically feasible functions that are centralized in tandem switches (as distinguished from separate end-office switches), including but not limited to call recording, the routing of calls to operator services, and signaling conversion features.

9.2.6.4.2 The charges for Tandem Switching are reflected in the **Pricing Schedule.**

9.2.6.4.3 Technical Requirements

9.2.6.4.3.1 Tandem Switching shall have the same capabilities or equivalent capabilities as those described in Telcordia TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90. Where a capability is desired by CLEC but is not specified by this TR, is not currently deployed in the SBC-AMERITECH Tandem (as a switch vendor orderable feature), or is not specifically identified in this Schedule 9.2.6, SBC-AMERITECH will work with CLEC to reasonably implement such a custom request using the BFR process. As described in this TR, the requirements for Tandem Switching include, but are not limited to the following:

9.2.6.4.3.1.1 Tandem Switching shall provide signaling including MF, SS7 and any signaling conversions between these signaling formats to establish a tandem connection;

9.2.6.4.3.1.2 Tandem Switching shall provide screening and routing. Requests for screening or routing not currently deployed in the SBC-AMERITECH Tandem will be provided, where technically feasible, in accordance with the BFR process;

9.2.6.4.3.1.3 Tandem Switching shall provide recording, where available, of billable events as described in the above-cited Tandem Supplement TR;

9.2.6.4.3.1.4 Tandem Switching shall provide access to Toll Free number portability database as described in the above-cited TR and TR-NWT-000533, Issue 3, January 1994, "Database Services Switching Points" Section 3.1.2 ("Access Tandem/SSP" for calls between Equal Access End Offices and the Access Tandem);

9.2.6.4.3.1.5 Tandem Switching (if the Tandem is so equipped) shall accept all trunk interconnections discussed in (Physical Network Interconnection) Section of this Agreement (e.g., SS7, MF, DTMF, DialPulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911)). If the Tandem is not equipped with the capability desired, then CLEC will request such capacity via the BFR process;

9.2.6.4.3.1.6 Tandem Switching shall provide connectivity to transit traffic to and from other carriers as described in Section 9.2.6.4.3.2.

9.2.6.4.3.2 Tandem Switching shall accept trunk connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, SBC-AMERITECHs, ICOs, CAPs and CLEC switches.

9.2.6.4.3.3 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed. Additional signaling information and requirements are provided in the Signaling and Signaling System 7 Sections of this Agreement.

9.2.6.4.3.4 Tandem Switching shall record billable events and send them to the destination supplied by CLEC on the Unbundling Questionnaire. Billing requirements are specified in Article XXVII (Billing and Recording) of this Agreement.

9.2.6.4.3.5 SBC-AMERITECH shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its

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

9.2.6.4.3.6 SBC-AMERITECH shall maintain CLEC's trunks and interconnections associated with Tandem Switching at least at parity to its own trunks and interconnections.

9.2.6.4.3.7 When requested by CLEC, on a case-by-case basis, SBC-AMERITECH shall provide performance data regarding traffic characteristics or other measurable elements to CLEC for review.

9.2.6.4.3.8 Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on CLEC traffic shall be at parity with controls being provided or imposed on SBC-AMERITECH traffic (e.g., SBC-AMERITECH shall not block CLEC traffic and leave its traffic unaffected or less affected).

9.2.6.4.3.9 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

#### 9.2.6.4.4 Interface Requirements

9.2.6.4.4.1 SBC-AMERITECH shall provide all signaling necessary to provide Tandem Switching (as described in TR-TSY-000540) with no loss of feature functionality.

9.2.6.4.4.2 Tandem Switching shall accept trunks from CLEC's switch for traffic that is transiting via SBC-AMERITECH network to interLATA or intraLATA carriers.

#### **9.2.6.5 Packet Switching.**

9.2.6.5.1 Definition. Packet Switching is defined as the packet switching capability network element, as set forth in F.C.C Rule 51.319. Without limiting the foregoing, it includes the following. Packet Switching is defined as the basic packet switching function of routing or forwarding packets, frames, cells or other data units based on address or other routing information contained in the packets, frames, cells or other data units. Packet Switching also includes the Digital Subscriber Line Access Multiplexers (DSLAMs) functionality, including but not limited to:

(i) the ability to terminate copper customer loops (which included both a low band voice channel and a high-band data channel, or solely a data channel);

(ii) the ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches;

(iii) the ability to extract data units from the data channels on the loops, and

(iv) the ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.

9.2.6.5.2 SBC-AMERITECH shall be required to provide nondiscriminatory access to unbundled Packet Switching capability for use with unbundled Loops within the service area of an SBC-AMERITECH central office (a "Service Area") only where each of the following conditions apply:

(i) SBC-AMERITECH has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems anywhere within such Service Area; or has deployed any other system that does not enable CLEC to obtain a continuous copper facility between the retail customer's premises and SBC-AMERITECH central office; and

(ii) There are no spare copper loops capable of supporting the xDSL services CLEC seeks to offer; and

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

(iv) SBC-AMERITECH has deployed packet switching capability for its own use.

9.2.6.5.3 All disputes arising under these provisions shall be resolved in accordance with the Alternative Dispute Resolution process set forth in Article XXVIII of this Agreement.

AMERITECH ILLINOIS / SAGE TELECOM, INC.  
INTERCONNECTION AGREEMENT