

**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. Pursuant to that Rule, ULS includes:

9.2.6.1.1 line-side facilities, which include the connection between a Loop and or Collocation 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 The local switching element includes all vertical features that the switch is capable of providing, including customized routing functions, CLASS features, Centrex and any technically feasible customized routing functions.

9.2.6.1.3.4 CLEC may order and AT&T ILLINOIS shall provision features (switch based) that the switch is capable of providing. AT&T ILLINOIS will provide CLEC with access to AT&T ILLINOIS' service creation environment to allow CLEC to design its own AIN-based services. CLEC will request such access using the negotiation process found in 9.2.8.21.

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 the Remote Switching Module supports, including all features that the remote module obtains from the host. The features that the remote terminal provides are based on the host switch capabilities.

9.2.6.1.5 Local Switching will also be capable of routing, (originating or terminating but not transporting) local, intraLATA, interLATA calls, and providing 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 AT&T ILLINOIS' local end office to an alternate OS/DA platform designated by CLEC. CLEC will pay the appropriate customized routing charges.

9.2.6.1.7 Customized routing supplied by AT&T ILLINOIS shall provide CLEC with the capability of directing CLEC's local OS and DA traffic to its own operators and/or directory assistance agents or to those of a third party vendor AT&T ILLINOIS will evaluate additional methods of customized routing of local and/or OS/DA traffic (including, but not limited to existing Feature Group D) trunks on a BFR basis. In any event, if local traffic is routed to CLEC facilities obtained through AT&T ILLINOIS Access Tariffs, CLEC will continue to pay full access rates for these facilities. AT&T ILLINOIS will provide the functionality and features within its local switch (LS) to route all CLEC customer dialed 0+ local and 0- calls to the CLEC designated trunk groups utilizing Modified Operator Service Signaling (MOSS). For Customized Routing, AT&T ILLINOIS shall allow CLEC the option of directing its customers' local inter-switch traffic on a per switch basis to a Port or Ports other than the standard routing used by AT&T ILLINOIS.

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

9.2.6.1.7.2 CLEC may order custom routing from AT&T ILLINOIS and AT&T ILLINOIS will deploy custom routing within ten (10) business days after CLEC's order for a particular switch is received. CLEC may order custom routing with a maximum of fifty (50) switches per order. AT&T ILLINOIS will implement all valid switch requests ("CLLIs") and reject the invalid requests on an individual CLI basis.

AT&T ILLINOIS will implement custom routing for an individual switch according to the following schedule:

1-48 trunks	38 business days
49-96 trunks	40 business days
97-144 trunks	42 business days
145-193 trunks	48 business days

In any event, AT&T ILLINOIS will complete the custom routing order no later than 60 business days from receipt of a valid order unless mutually agreed by the Parties.

- 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 as it relates to customized routing as described in Section 9.2.6.1.7. AT&T ILLINOIS will remain solely responsible for implementing the custom routing at AT&T ILLINOIS' central offices, and for the design and engineering of any AT&T ILLINOIS provided shared transport.
- 9.2.6.1.9 Dedicated transport may be purchased from AT&T ILLINOIS or CLEC may provide its own.
- 9.2.6.1.10 AT&T ILLINOIS shall not impose any additional or other restrictions on CLEC regarding the use of the unbundled local switching it purchases from AT&T ILLINOIS provided such use does not result in demonstrable harm to either AT&T ILLINOIS network or personnel, or service or other offerings, or those of any other telecommunications carrier.
- 9.2.6.1.11 Intentionally left blank
- 9.2.6.1.12 Vertical features, CLASS features, and other features resident in the ILEC switch providing the ULS port are available under ULS. Any features resident in the switch but not offered and priced in this Agreement may be requested on a Bona Fide Request basis.

**9.2.6.2 Technical Requirements.**

- 9.2.6.2.1 AT&T ILLINOIS shall route local and toll calls to the appropriate trunk ports or line ports for call origination or termination utilizing AT&T ILLINOIS' shared transport network, and at CLEC's option AT&T ILLINOIS will offer customized routing for unbundled switch line ports. All interexchange traffic will be routed to the interLATA (PIC) or intraLATA toll (LPIC) Interexchange Carrier, or via shared transport, selected for that ULS port. Customized routing will include but not be limited to the customized routing of inter-switch traffic on per switch basis to a Trunk port or ports other than the standard routing used by AT&T ILLINOIS, and to the customized routing of local OS and DA calls, as well as CLEC's PIC'ed/LPIC toll traffic in a 2-PIC environment as specified by CLEC.
- 9.2.6.2.2 Intentionally Left Blank
- 9.2.6.2.3 AT&T ILLINOIS shall provide custom routing at rates as identified in the Pricing Schedule.
- 9.2.6.2.4 Intentionally Left Blank
- 9.2.6.2.5 At CLEC's option, AT&T ILLINOIS shall route all local Directory Assistance calls dialed via 411 or 555-1212 by CLEC Customers to the CLEC Network. Otherwise,

AT&T ILLINOIS shall handle these calls on behalf of CLEC and route the calls to AT&T ILLINOIS' directory assistance platform under the terms and conditions of the OS/DA Schedule in this agreement.

9.2.6.2.6 AT&T ILLINOIS 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 Intentionally Left Blank

9.2.6.2.8 Subject to CLEC's BFR, AT&T ILLINOIS 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 AT&T ILLINOIS cannot perform this custom routing for any reason, AT&T ILLINOIS 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 If customized routing is established, 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 AT&T ILLINOIS customers dial for reaching equivalent AT&T ILLINOIS Directory Assistance and AT&T ILLINOIS operators.

9.2.6.2.10 Intentionally Left Blank

9.2.6.2.11 Intentionally Left Blank

9.2.6.2.12 Where CLEC purchases unbundled switching and AT&T ILLINOIS provides CLEC with access to AT&T ILLINOIS' 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 AT&T ILLINOIS does not provide CLEC with access to AT&T ILLINOIS' electronic interfaces to perform routing testing (e.g. MLT), AT&T ILLINOIS 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 AT&T ILLINOIS shall repair, restore and maintain AT&T ILLINOIS provided equipment that has produced trouble conditions using the same methods, procedures and timeframes used to restore similar AT&T ILLINOIS equipment in a non-discriminatory manner.

9.2.6.2.14 AT&T ILLINOIS shall control congestion points such as mass calling events, and network routing abnormalities, using appropriate network capabilities.

9.2.6.2.15 AT&T ILLINOIS shall record potentially billable events, as applicable, involving usage of the Network Element, and send the appropriate recording data to CLEC as outlined in Article 27 (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 AT&T ILLINOIS shall provide nondiscriminatory access to switching service point (SSP) capabilities and signaling software to interconnect the signaling links destined to AT&T ILLINOIS STPs.

9.2.6.2.18 CLEC may request and AT&T ILLINOIS will provide call blocking options (e.g., 900, 976) at parity with those provided to AT&T ILLINOIS' own customers

**9.2.6.3 Interface Requirements.**

9.2.6.3.1 AT&T ILLINOIS 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 Schedule 2.2 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 Telecordia GR-962-CORE. Where a capability is desired by CLEC but is not specified by this TR, is not currently deployed in the AT&T ILLINOIS Tandem (as a switch vendor orderable feature), or is not specifically identified in this Schedule, CLEC will submit 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 AT&T ILLINOIS Tandem, CLEC may submit a request 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 Technical Reference;
- 9.2.6.4.3.1.4 Tandem Switching shall provide access to Toll Free number portability database as described in Section 9.2.6.4.3.1 above;
- 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, Dial Pulse, 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.
- 9.2.6.4.3.2 Intentionally left blank.
- 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 CLEC Profile. Billing requirements are specified in Article 27 (Billing and Recording) of this Agreement.

9.2.6.4.3.5 AT&T ILLINOIS 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 AT&T ILLINOIS 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, AT&T ILLINOIS 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 AT&T ILLINOIS traffic (e.g., AT&T ILLINOIS 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 AT&T ILLINOIS shall provide all signaling necessary to provide Tandem Switching 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 originating from or terminating to an CLEC end user that is transiting via AT&T ILLINOIS 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 AT&T ILLINOIS shall be required to provide nondiscriminatory access to unbundled Packet Switching capability for use with unbundled Loops within the service area of an AT&T ILLINOIS central office (a "Service Area") only where each of the following conditions apply:

- (i) AT&T ILLINOIS 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 AT&T ILLINOIS central office; and
- (ii) There are no spare copper loops capable of supporting the xDSL services CLEC seeks to offer; and
- (iii) AT&T ILLINOIS 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 CFR 51.319(b); and
- (iv) AT&T ILLINOIS 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 General Terms and Conditions – Dispute Resolution.