

## ATTACHMENT 11: NETWORK INTERCONNECTION ARCHITECTURE

\*This Attachment 11: Network Interconnection Architecture to the Agreement describes the technical arrangement by which CLEC and SBC MISSOURI will interconnect their networks in the event that CLEC is providing its own switching facilities in a given Exchange Area. The arrangements described herein do not apply to the provision and utilization of unbundled Network Elements which are addressed in Attachment 6: Unbundled Network Elements.

### 1. DEFINITIONS

- 1.1 "Access Tandem Switch" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for IXC-carried traffic.
- 1.2 "End Office" or "End Office Switch" is a switching machine that directly terminates traffic to and receives traffic from end users purchasing local exchange services. A PBX is not considered an End Office Switch.
- 1.3 "Facility-Based Provider" is defined as a telecommunications carrier that has deployed its own switch and transport facilities.
- 1.4 "IntraLATA Toll Traffic" is defined as traffic between one SBC MISSOURI-local calling area and another SBC MISSOURI local calling area or another LEC within the same LATA.
- 1.5 "IntraLATA Toll Trunk Group" is defined as a trunk group carrying IntraLATA Toll Traffic as defined above.
- 1.6 "ISP-Bound Traffic" is as defined in Attachment 12: Compensation
- 1.7 "Local Tandem" refers to any Local Only, Local/IntraLATA, or Local/Access Tandem Switch serving a particular LCA (defined below).
- 1.8 "Local/Access Tandem Switch" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for Section 251(b)(5)/IntraLATA Toll Traffic and IXC-carried traffic.
- \*1.9 A "Local Calling Area" or "LCA" is an SBC MISSOURI local calling area, as defined in SBC MISSOURI's Local Exchange Tariff, except that the entirety of a Metropolitan Calling Area ("MCA") shall be considered a Local Calling Area. LCA is synonymous with "Local Exchange Area" (LEA).
- \*1.10 "Local Interconnection Trunk Groups" are one-way or two-way trunk groups used to carry Section 251(b)(5)/IntraLATA Toll Traffic between CLEC end users and SBC MISSOURI end users.
- 1.11 "Local/IntraLATA Tandem Switch" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for Section 251(b)(5)/IntraLATA Toll Traffic.

\*Arbitration Result - Conformed to MO Arbitration Award T0-2005-0336.

- 1.12 “Local Only Tandem Switch” is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for Section 251(b)(5) and ISP Bound Traffic.
- 1.13 “Offers Service” – At such time as CLEC opens an NPA/NXX, ports a number to serve an end user, or pools a block of numbers to serve end users.
- 1.14 “Remote End Office Switch” is an SBC MISSOURI switch that directly terminates traffic to and receives traffic from end users of local Exchange Services, but does not have full feature, function and capability of an SBC MISSOURI End Office Switch. Such features, function, and capabilities are provided SBC MISSOURI Remote End Office Switch via an umbilical and an SBC MISSOURI Host End Office.
- 1.15 Section 251(b)(5) Traffic is as defined in Attachment 12: Compensation.
- \*1.16 “Section 251(b)(5)/ IntraLATA\_Toll Traffic” shall mean for purposes of this Attachment, (i) Section 251(b)(5) Traffic, (ii) ISP-Bound Traffic, (iii) Optional EAS traffic, (v) Transit Traffic, (vi) out of area traffic, (iii) intraLATA FX or virtual FX traffic (iv) IntraLATA Toll Traffic originating from an end user obtaining local dialtone from SBC-MISSOURI where SBC-MISSOURI is both the Section 251(b)(5) Traffic and intraLATA toll provider.
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- \*1.18 “Tandem Serving Area” or “TSA” is an SBC MISSOURI area defined by the sum of all local calling areas served by SBC MISSOURI End Offices that subtend an SBC MISSOURI tandem for Section 251(b)(5)/IntraLATA Toll Traffic as defined in the LERG.

## 2. REQUIREMENTS FOR ESTABLISHING POINTS OF INTERCONNECTION.

Section 2.1 through Section 2.9 are the Parties’ requirements for establishing a Point of Interconnection (POI) for the Exchange of Section 251(b)(5)/IntraLATA Toll Traffic.

- \*2.1 CLEC may utilize facilities of third parties to satisfy all requirements herein, and SBC shall, if requested by CLEC, route section 251(b)(5) traffic/Toll Traffic that is dialed to CLECs customers to Points of Interconnection of another provider for transiting to CLEC, provided such Point(s) of Interconnection comply with requirements in this agreement and provided that CLEC does not have trunking of its own to the same local calling areas. SBC also shall, if requested by CLEC, and if CLEC’s circuits are busy, route overflow traffic to a third party provider/s Point(s) of Interconnection, provided such Point(s) of interconnection comply with requirements herein. SBC shall accept CLECs traffic routed by way of a third party’s Point of Interconnection, provided such Point of Interconnection complies with requirements herein and provided that CLEC’s traffic complies with the requirements herein.
- \*2.2 The Parties will interconnect their network facilities at a minimum of one CLEC designated Point of Interconnection (POI) within SBC MISSOURI’s network in the LATA where CLEC Offers Service.
- 2.2.1 A “Single POI” is a single point of interconnection within a LATA on SBC MISSOURI’s network that is established to interconnect SBC MISSOURI’s network and CLEC’s network for the exchange of Section 251(b)(5)/IntraLATA Toll Traffic.
- 2.2.2 The Parties agree that CLEC has the right to choose a single POI or multiple POIs.
- 2.2.3 When CLEC has established a Single POI (or multiple POIs) in a LATA, CLEC agrees to establish

an additional POI(s):

- (i) \*in any SBC MISSOURI'S TSA separate from any existing POI arrangement when traffic to/from that SBC MISSOURI'S TSA exceeds an OC12 at peak over three (3) consecutive months, or
- (ii) at an SBC MISSOURI'S End Office in a local calling area not served by an SBC MISSOURI'S tandem for Section 251(b)(5)/IntraLATA Toll Traffic when traffic to/from that local calling area exceeds an OC12 at peak over three (3) consecutive months.

\*2.2.4 The additional POI(s) will be established within 90 days of notification that the threshold has been met.

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\*2.4 POIs shall be established at any technically feasible point inside the geographical areas in which SBC MISSOURI is the franchised Incumbent LEC and within SBC MISSOURI's network.

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2.7 POI(s) will be identified by street address and Vertical and Horizontal (V & H) Coordinates.

2.8 \*Each Party will be responsible for providing the necessary equipment and facilities on its side of the POI.

### 3. TRUNKING REQUIREMENTS PER LCA

3.1.1 \*2At such time as CLEC Offers Service for the exchange of Section 251(b)(5)/IntraLATA Toll Traffic in an LCA that is not an MCA, CLEC shall establish the necessary Local Interconnection Trunk Groups (in accordance with Appendix ITR) to:

3.1.1 Each SBC MISSOURI Local Tandem in the LCA where CLEC Offers Service when there are SBC MISSOURI Local Tandem(s) in the LCA where CLEC Offers Service.

3.1.2 Each SBC MISSOURI End Office in the LCA where CLEC Offers Service when there is no SBC Local Tandem in the LCA where CLEC Offers Service.

\*3.1.3 At such time as CLEC offers service for the exchange of Section 251(b)(5)/IntraLATA Toll Traffic in an LCA that is also an MCA, CLEC shall establish a POI at a Local Tandem or Host End-Office if the MCA does not have a local tandem. When CLEC establishes such POI, CLEC may, at its option, deliver to SBC at that POI all traffic that originates and terminates within that MCA, until such time as traffic volumes between CLEC and a particular end-office within that MCA justify deployment of direct trunking.

3.2 When CLEC Offers Service in an LCA that has at least one SBC MISSOURI Local Tandem, and the Section 251(b)(5)/IntraLATA Toll Traffic between CLEC and an SBC MISSOURI End Office which subtends an SBC MISSOURI Local Tandem in the LCA exceeds 24 DS0s at peak over a period of three consecutive months ,

CLEC shall establish a Direct End Office Trunk Group (Local Interconnection Trunk Group that terminates to a SBC MISSOURI End Office also known as a “DEOT” group) to that SBC MISSOURI End Office.

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3.5 When the LCA in which CLEC Offers Service for the exchange of Section 251(b)(5)/IntraLATA Toll Traffic is served only by an SBC MISSOURI Remote End Office Switch, CLEC shall DEOT to the appropriate SBC MISSOURI Host End Office Switch.

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\*4.5 DEOT group(s) to SBC MISSOURI End Offices shall be provisioned as one-way or two-way trunks and used as one-way or two-way trunks.

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#### **8. PROVISION OF INFORMATION**

8.1 In order to establish or designate any POI and associated trunks and transport facilities under this Agreement, CLEC shall provide all applicable network information on forms acceptable to SBC MISSOURI (as set forth in SBC MISSOURI’s CLEC Handbook, published on the CLEC website.)

#### **9. ASR CONTROL FOR TWO-WAY TRUNK GROUPS**

9.1 CLEC shall have administrative and order control (e.g., determination of trunk group size) of all two-way trunk groups provisioned between CLEC and SBC MISSOURI.

9.2 This only applies to the extent that it does not require SBC MISSOURI to redesign its network configuration.

9.3 SBC MISSOURI reserves the right to issue an ASR on CLEC’s behalf in the event CLEC is non-responsive to a TGSR for underutilized trunk groups as outlined in Appendix ITR. At no other time shall SBC MISSOURI be allowed to issue ASRs on CLEC’s behalf.

#### **10. ANCILLARY SERVICES**

- 10.1 Where CLEC requires ancillary services (e.g., Directory Assistance, Operator Services, E911), additional POIs may be required for interconnection to such ancillary services.
- 10.2 CLEC is solely responsible for the facilities that carry OS/DA, 911, mass calling and Meet-Point trunk groups. The trunking requirements for these are specified in Appendix ITR.

## **11. SIGNALING**

- 11.1 Trunks will utilize Signaling System 7 (SS7) protocol signaling when such capabilities exist within the SBC MISSOURI network.
- 11.2 Multifrequency (MF) signaling will be utilized in cases where SBC MISSOURI switching platforms do not support SS7.

## **12. INTERCONNECTION METHODS**

- 12.1 Where CLEC seeks to interconnect with SBC MISSOURI for the purpose of mutually exchanging Section 251(b)(5)/IntraLATA Toll Traffic between networks, CLEC may use any of the following methods of obtaining interconnection detailed in Appendix Network Interconnection Methods (NIM) attached hereto and incorporated herein. Such methods include but are not limited to:
  - 12.1.1 Physical Collocation
  - 12.1.2 Virtual Collocation
  - 12.1.3 SONET Based
  - 12.1.4 Fiber Meet Point
  - 12.1.5 Leasing of facilities from a third party
  - 12.1.6 CLEC self-buildout
  - 12.1.7 Any other mutually agreeable methods of obtaining interconnection.

13. In addition, the Parties agree to the interconnection and trunking requirements listed in Appendix Interconnection Trunking Requirements (ITR), which is attached hereto and made a part hereof.