APPENDIX NIM
(NETWORK INTERCONNECTION METHODS)

TABLE OF CONTENTS

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1. INTRODUCTION

1.1 This Appendix sets forth the terms and conditions that Network Interconnection Methods (NIM) is provided by the applicable SBC Communications Inc. (SBC) owned Incumbent Local Exchange Carrier (ILEC) and **LEVEL 3**. This Appendix describes the physical architecture for Interconnection of the Parties' facilities and equipment for the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic between the respective Customers of the Parties pursuant to Section 251(c)(2) of the Act; provided, however, Interconnection may not be used solely for ***the*** purpose**s *prohibited* not permitted** under the Act. ***including, but not limited to, solely for the purpose of originating a Party's own interexchange traffic***.

1.2 Network Interconnection Methods (NIMs) include, but are not limited to, Physical Collocation Interconnection; Virtual Collocation Interconnection; Leased Facilities Interconnection; Fiber Meet Interconnection; and other methods as mutually agreed to by the Parties. One or more of these methods may be used to effect the Interconnection.

2. NETWORK INTERCONNECTION ARCHITECTURE PLAN

2.1 LEVEL 3 and SBC-13STATE agree to Interconnect their networks according to the requirements of the Act, including but not limited to Section 251(c)(2) of the Act. Accordingly, the parties agree to interconnect their networks at a single location per LATA or greater sized area considering that SBC is no longer restricted from carrying traffic across LATA boundaries. The parties also agree that distance is irrelevant to cost. Therefore connecting at a single point per LATA, state or region represents a balanced and fair method of interconnection. The physical architecture plan will, therefore specify the location of LEVEL 3's switch(es) and SBC-13STATE's Tandem switch(es) to be interconnected. Each party agrees that it is solely responsible for the costs of establishing points of interconnection and each is solely responsible for bringing its traffic to those sole points of interconnection. Accordingly, neither party will bill the other party any non-recurring or recurring costs for establishing points of interconnection because both parties recognize that doing so is simply unfairly shifting costs in contravention of the five federal circuit courts of appeal that have ruled on this issue.

2.1.1 A "Tandem Serving Area" or "TSA" is an SBC 13-STATE area defined by the sum of all SBC 13-STATE End Office Switch(es) that subtend an SBC 13-STATE tandem as defined in the LERG.

2.1.2 A "TSA POI" is a point of interconnection on SBC 13-STATE 's network that is established to serve the TSA in which the POI is located. This TSA POI may also be used to serve an SBC 13-STATE Local Tandem Switch(es) and/or SBC 13-STATE End Office Switch(es) in adjacent TSAs where the V&H coordinates of the SBC 13-STATE Local Tandem Switch(es) and/or SBC 13-STATE End Office Switch(es) are less than or equal to fifteen (15) miles from the V&H coordinate of the POI.

The TSA POI is within the TSA or less than or equal to fifteen (15) miles from the V&H coordinate of the POI to the V&H coordinate of an SBC 13-STATE tandem building or SBC designated facility hub (SBC building/location that SBC designates as a hubbing point for facilities) in the served TSA.

2.1.3 A "Distant POI" is a point of interconnection on SBC 13-STATE 's network that is established to serve a TSA ("Served TSA") that is more than fifteen (15) from the V&H coordinate of the POI to the V&H coordinate of an SBC 13-STATE tandem building or designated facility hub in the Served TSA.

2.1.4 A "Single POI" is a single point of interconnection on SBC 13-STATE network established to interconnect SBC 13-STATE's network and LEVEL 3's network for the exchange of Section 251 (b) (5)/IntraLATA Traffic which may serve one or more TSAs within that LATA.

2.1.5 An "End Office POI" is a point of interconnection where an SBC 13-STATE's End Office Switch does not subtend an SBC 13-STATE Local Tandem Switch within the LATA.

2.1.6 LEVEL 3 may elect to establish one or more of the POIs described above. A POI may be a "Distant POI" and/or "Single POI" to one Tandem Serving Area at the same time that it is a "TSA POI" to another Tandem Serving Area. If LEVEL 3 establishes a Single POI or Distant POI(s) in a LATA, LEVEL 3 agrees to compensate SBC 13-STATE at the appropriate tariffed Intrastate Switched Exchange Access rate for the transport portion of call delivery on SBC 13-STATE's side of the POI, that is outside of the TSA, less the fifteen (15) miles that is designated as being within a TSA. This additional financial responsibility is for interconnection facilities only, and will be determined using the V&H coordinates of the SBC 13-STATE Access Tandem Switch(es) and/or SBC 13-STATE End Office Switch(es) and the V&H coordinate of the POI, less fifteen (15) miles. These charges apply to the transport facility without regard to the direction of the traffic.

2.1.7 An End Office POI will only be used to originate and/or terminate traffic in the End Office where the End Office POI is located.

2.1.8 Establishment of Additional POIs. If LEVEL 3 elects to establish additional POIs, the Parties shall negotiate and agree on the intervals for establishing such new POI(s) and the location of such POI(s).

2.1.9 SBC 13-STATE's network is partly comprised of End Office switches, Tandem switches that serve Section 251(b)(5)/IntraLATA traffic, Tandem switches that serve IntraLATA and InterLATA traffic, and Tandem switches that serve a combination of Section 251(b)(5)/IntraLATA Traffic, and IntraLATA and InterLATA Traffic carried by an IXC. Using one or more of the NIMs herein, the Parties will agree to a physical architecture plan in each LATA where LEVEL 3 offers service. At the time of implementation in a given LATA, the plan will be documented and signed by appropriate representatives of the Parties, indicating their mutual agreement with the physical architecture plan.

2.1.10 Except as noted in 2.1.6 above, each Party is responsible for the facilities on its side of the POI(s) and may utilize any method of Interconnection described in this Appendix. Each Party is responsible for the appropriate sizing, operation and maintenance of the transport facility to the POI(s). The Parties agree to provide sufficient facilities for the Interconnection trunk groups required for the exchange of traffic between LEVEL 3 and SBC 13-STATE.

2.2 Each Party, at its own expense, shall provide transport facilities to the technically feasible point(s) of interconnection on SBC-13STATE's network in a LATA selected by LEVEL 3. Notwithstanding any other language contained in this Agreement, including schedules and attachments hereto, this Section 2.2 shall be interpreted to permit LEVEL 3 the sole right to select and maintain one or more technically feasible points of interconnection on SBC-13STATE's network, including preexisting LEVEL 3 points of interconnection. In the event of a network rearrangement by SBC-13STATE, including a tandem rehoming, the point of interconnection shall not change unless LEVEL 3 so requests. In the event of such a network rearrangement by SBC-13STATE, this Section 2.2 shall be interpreted to require SBC-13STATE to continue to provide transport from the existing point of interconnection and LEVEL 3 shall pay SBC-13STATE no more than the reciprocal compensation rate that it paid before the network rearrangement occurred. LEVEL 3 shall have the right to designate additional points of interconnection in its sole discretion and subject to technical feasibility. In the event of a conflict between this Section 2.2 and any other provision of or amendment to this Agreement, this Section 2.2 shall govern.

2.3 Points of Interconnection (POIs): A Point of Interconnection (POI) is a point in the network where the Parties deliver Interconnection traffic to each other, and ***except when LEVEL 3 selects an expensive form of interconnection, the POI*** also serves as a **legal, technical, and financial** demarcation point between the facilities that each Party is responsible to provide**.**

2.4 The Parties agree to meet as often as necessary to negotiate the selection of new POIs. In the event either Party makes changes to its network architecture including, but not limited to trunking changes or adding new switches, then the Parties will negotiate the establishment of such new POIs as may be necessary subject to Section 2.1 above. The new POIs will be documented and distributed to both Parties.

2.5 Each Party is responsible for the appropriate sizing, operation, and maintenance of the transport facility to the POI(s). The parties agree to provide sufficient facilities for the ***Local Interconnection Trunk Groups*** **trunk groups** required for the exchange of traffic between **LEVEL 3** and **SBC-13STATE**.

2.6 In the event that either Party is going to make a change to its physical architecture which may or will impact the other Party, the changing Party will provide written notice to the other Party so as to allow both Parties to properly coordinate the activities required between them.

2.7 **LEVEL 3** is financially responsible for the facilities that carry OS/DA, BLVI, 911, mass calling and Meet Point trunk groups, which trunk groups are described and defined in Appendix ITR, **however, for the facilities that carry mass calling and Meet-Point trunk groups, the Parties shall be responsible in accordance with their obligations to bring traffic to the single POI.**

2.8 Unless **LEVEL 3** has established a POI at the collocation, in an **SBC-13STATE** End Office, the facility for the Direct End Office Trunks (DEOTS) to that End Office shall be the financial responsibility of **LEVEL 3** consistent with the treatment of the financial responsibility for the POI in this Agreement**.**

2.9 Technical Interfaces

2.9.1 The Interconnection facilities provided by each Party shall be formatted using either Alternate Mark Inversion (AMI) line code with Superframe format framing or Bipolar 8 Zero Signaling (B8ZS) with Extended Superframe format framing or any mutually agreeable line coding and framing.

2.9.2 Electrical handoffs at the POI(s) will be at the DS1 or DS3 level. When a DS3 handoff is agreed to by the Parties, **SBC-13STATE** will provide any multiplexing required for DS1 facilities or trunking at their end and **LEVEL 3** will provide any DS1 multiplexing required for facilities or trunking at their end.

2.9.3 When the Parties demonstrate the need for Optical handoffs at the OC-n level, the parties will meet to negotiate specific Optical handoff needs**.**

3. METHODS OF INTERCONNECTION

3.1 Physical Collocation Interconnection

3.1.1 When **LEVEL 3** provides its own facilities or uses the facilities of a 3rd party to a **SBC-13STATE** Tandem or End Office and requests to place its own transport terminating equipment at that location, **LEVEL 3** may Interconnect using the provisions of Physical Collocation as set forth in Appendix Physical Collocation, applicable state tariff **or according to Applicable Law**.

3.2 Virtual Collocation Interconnection

3.2.1 When **LEVEL 3** provides its own facilities or uses the facilities of a 3rd party to a **SBC-13STATE** Tandem or End Office and requests that **SBC-13STATE** place transport terminating equipment at that location on **LEVEL 3's** behalf, **LEVEL 3** may Interconnect using the provisions of Virtual Collocation as set forth in Appendix Virtual Collocation or applicable state tariff **or according to Applicable Law**. Virtual Collocation allows **LEVEL 3** to choose the equipment vendor and does not require that **LEVEL 3** be Physically Collocated.

3.3 Leased Facility Interconnection ("LFI")

3.3.1 **Where facilities are available, LEVEL 3 may lease facilities from SBC-13STATE on terms and conditions no less favorable than SBC-13STATE provides to itself or any other LEVEL 3, IXC or any other regulated carrier, whether such terms and conditions are subject to Title 2 of the Act, as defined in Section 5 of this Appendix. LEVEL 3** may lease facilities from a third party.

3.4 Fiber Meet Interconnection

3.4.1 Reserved for future use.

3.4.2 When the Parties agree to interconnect their networks pursuant to the Fiber Meet, a single point-to-point linear chain SONET system must be utilized, unless the parties agree otherwise.

3.4.3 Neither Party will be allowed to access the Data Communications Channel ("DCC") of the other Party's Fiber Optic Terminal (FOT). The Fiber Meet will be designed so that each Party may, as far as is technically feasible, independently select the transmission, multiplexing, and fiber terminating equipment to be used on its side of the POI(s). The Parties will work cooperatively to achieve equipment and vendor compatibility of the FOT equipment.

3.4.4 Requirements for such Interconnection specifications will be defined in joint engineering planning sessions between the Parties. The Parties may share the investment of the fiber as mutually agreed.

3.4.5 In addition to the semi-annual trunk forecast process, discussed in Appendix ITR, discussions to provide relief to existing facilities can be initiated by either party. Actual system augmentations will be initiated only upon mutual agreement. Facilities will be planned for to accommodate the verified and mutually agreed upon trunk forecast.

3.4.6 Both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities prior to facilities exhaust.

3.4.7 **LEVEL 3** will provide fiber cable to the last entrance (or **SBC-13STATE** designated) manhole at the **SBC-13STATE** Tandem or End Office switch. **SBC-13STATE** shall make all necessary preparations to receive and to allow and enable **LEVEL 3** to deliver fiber optic facilities into that manhole. **LEVEL 3** will provide a sufficient length of Fiber cable for **SBC-13STATE** to pull through the **SBC-13STATE** cable vault. **LEVEL 3** shall deliver and maintain such strands wholly at its own expense up to the POI. **SBC-13STATE** shall take the fiber from the manhole and terminate it inside **SBC-13STATE's** office at the cable vault at **SBC-13STATE's** expense. In this case the POI shall be at the **SBC-13STATE** designated manhole location. Additional arrangements may be mutually developed and agreed to by the Parties pursuant to the requirements of this section.

3.4.8 **LEVEL 3** location includes FOTs, multiplexing and fiber required to terminate the optical signal provided from **SBC-13STATE**. This location is **LEVEL 3's** responsibility to provision and maintain.

3.4.9 The **SBC-13STATE** location includes all **SBC-13STATE** FOT, multiplexing and fiber required to terminate the optical signal provided from **LEVEL 3**. This location is **SBC-13STATE**'s responsibility to provision and maintain.

3.4.10 **SBC-13STATE** and **LEVEL 3** shall, solely at their own expense, procure, install, and maintain the agreed-upon FOT equipment in each of their locations where the Parties established a Fiber Meet in capacity sufficient to provision and maintain all trunk groups prescribed by Appendix ITR for the purposes of Interconnection.

3.4.11 Each Party shall provide its own source for the synchronized timing of its FOT equipment.

3.4.12 **LEVEL 3** and **SBC-13STATE** will mutually agree on the capacity of the FOT(s) to be utilized based on equivalent DS1s or DS3s. Each Party will also agree upon the optical frequency and wavelength necessary to implement the

Interconnection. The Parties will develop and agree upon methods for the capacity planning and management for these facilities, terms and conditions for over provisioning facilities, and the necessary processes to implement facilities as indicated in section 4 of this document.

3.5 Other Interconnection Methods

3.5.1 Other Interconnection methods that are technically feasible may be mutually agreed to by the Parties.

4. RESPONSIBILITIES OF THE PARTIES

4.1 For each Interconnection within an **SBC-13STATE** area, **LEVEL 3** shall provide written notice to **SBC-13STATE** of the need to establish Interconnection in accordance with Section 2. The parties agree that they will exchange necessary information on forms (as set forth in SBC's CLEC Handbook, published on the CLEC Online website) and in a manner than ensures that they can quickly and efficiently establish such POIs. **LEVEL 3** shall provide all applicable network information on forms acceptable to **SBC-13STATE** (as set forth in SBC's CLEC Handbook, published on the CLEC Online website.)

4.2 Upon **SBC-13STATE's** receipt from **LEVEL 3** of a notice pursuant to Section 4.1, the Parties shall schedule a meeting within thirty (30) days to negotiate and mutually agree on the particulars of the local Interconnection, to be documented as described in Section 2. The Interconnection activation date for an Interconnect shall be established based on then-existing force and load, the scope and complexity of the requested Interconnection and other relevant factors.

4.3 Reserved for future use

4.4 The Parties recognize that a facility handoff point must be agreed to that establishes the demarcation for maintenance and provisioning responsibilities for each party on their side of the POI.

4.5 Facilities will be planned for in accordance with the trunk forecasts exchanged between the Parties as described in Appendix ITR.

5. RESERVED FOR FUTURE USE

6. OUT OF EXCHANGE TRAFFIC

6.1 Out of Exchange traffic shall be consistent with the Appendix Out of Exchange Traffic attached to this agreement.