

APPENDIX NIM (NETWORK INTERCONNECTION METHODS)

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APPENDIX NIM (NETWORK INTERCONNECTION METHODS)

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 Competitive Local Exchange Carrier (CLEC). 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 End Users of the Parties pursuant to Section 251(c) (2) of the Act; provided, however, interconnection may not be used solely for the purpose of originating a Party's own interexchange traffic.
- 1.2 **SBC Communications Inc. (SBC)** means the holding company which directly or indirectly owns the following ILECs: Illinois Bell Telephone Company d/b/a SBC Illinois, Indiana Bell Telephone Company Incorporated d/b/a SBC Indiana, Michigan Bell Telephone Company d/b/a SBC Michigan, Nevada Bell Telephone Company d/b/a SBC Nevada, The Ohio Bell Telephone Company d/b/a SBC Ohio, Pacific Bell Telephone Company d/b/a SBC California, The Southern New England Telephone Company, Southwestern Bell Telephone, L.P. d/b/a SBC Arkansas, SBC Kansas, SBC Missouri, SBC Oklahoma and/or SBC Texas and/or Wisconsin Bell, Inc. d/b/a SBC Wisconsin.
- 1.3 **SBC WISCONSIN** as used herein, **SBC WISCONSIN** means the above listed ILEC doing business in Wisconsin.
- 1.4 Network Interconnection Methods (NIMs) include, but are not limited to, Physical Collocation, Virtual Collocation, facilities leased from a third party, Fiber Meet Point; and other methods as mutually agreed to by the Parties. One or more of these methods may be used to effect the Interconnection pursuant to Section 251(c) (2) of the Act.
- 1.4.1 Trunking requirements associated with Interconnection are contained in Appendix ITR.
- 1.5 **SBC WISCONSIN** shall provide, for the facilities and equipment of CLEC, interconnection for the transmission and routing of telephone Exchange Service and Exchange Access, at a level of quality that is equal to that which **SBC WISCONSIN** provides itself, a subsidiary, an affiliate, or any other party to which **SBC WISCONSIN** provides Interconnection and on rates, terms and conditions that are just, reasonable and non-discriminatory.
- 1.6 The Parties shall effect an Interconnection that is efficient, fair and equitable with each party being financially responsible for approximately half of the Interconnection facilities or in any other manner that is mutually agreeable to the Parties.

2. NETWORK INTERCONNECTION ARCHITECTURE PLAN

- 2.1 **SBC WISCONSIN**'s network is partly comprised of End Office Switches, Local Only Tandem Switches, Local/IntraLATA Tandem Switches, Local/Access Tandem Switches, and Access Tandem Switches. **SBC WISCONSIN**'s network architecture in any given LATA can vary markedly from another LATA. Using one or more of the NIMs herein, the Parties will agree to a physical architecture plan for a specific interconnection area. **SBC WISCONSIN** requires a Point of Interconnection (POI) at all Tandems in a LATA. CLEC and **SBC WISCONSIN** agree to interconnect their networks through existing and/or new interconnection facilities. A physical architecture plan will, at a minimum, include the location of CLEC's Switch(es) and **SBC WISCONSIN** End Office Switch(es) and/or Tandem Switch(es) to be interconnected, the facilities

that will connect the two networks and which Party will provide (be financially responsible for) the interconnection facilities. 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 to the physical architecture plan.

- 2.2 Points of Interconnection (POIs): A Point of Interconnection (POI) is a point on the **SBC-WISCONSIN** network (End Office or Tandem building) where the Parties deliver Section 251(b)(5)/IntraLATA Toll Traffic to each other, and also serves as a demarcation point between the facilities that each Party is responsible to provide. In many cases, multiple POI(s) will be necessary to balance the facilities investment and provide the best technical implementation of Interconnection requirements to each Tandem within an exchange area and/or LATA. Both parties shall negotiate the architecture in each location that will seek to mutually minimize and equalize investment.
- 2.3 The Parties agree to meet as often as necessary to negotiate the selection of new POIs. The overall goal of POI selection will be to achieve a balance in the provision of facilities that is fair to both Parties. Criteria to be used in determining POIs for each geography (LATA, tandem area, etc.) include existing facility capacity, location of existing POIs, traffic volumes, relative costs, future capacity needs, etc. Agreement to the location of POIs is based on the network architecture existing at the time the POI(s) is/are negotiated. In the event either Party makes subsequent changes to its network architecture, including but not limited to trunking changes or adding new Switches, then the Parties will negotiate new POIs. The mutually agreed to POIs will be documented and distributed to both Parties.
- 2.4 Each Party is responsible for the facilities to its side of the negotiated 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 trunk groups required in Appendix ITR for the exchange of traffic between CLEC and **SBC WISCONSIN**.
- 2.5 Either Party must provide thirty (30) days written notice of any intent to change to the physical architecture plan.
- 2.6 CLEC is solely responsible for the facilities that carry OS/DA, E911, Mass Calling and MeetPoint Trunk Groups as specified in Appendix ITR.
- 2.7 If CLEC has established Collocation in an **SBC WISCONSIN** End Office, the facility for the Direct End Office Trunks (DEOTS) to that End Office shall be the financial responsibility of CLEC.
- 2.8 Technical Interfaces
- 2.8.1 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.
- 2.8.2 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 WISCONSIN** will provide any multiplexing required for DS1 facilities or trunking at their end and CLEC will provide any DS1 multiplexing required for facilities or trunking at their end.
- 2.8.3 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

3.1.1 When CLEC provides its own facilities or uses the facilities of a third party to an **SBC WISCONSIN** Tandem or End Office Switch and wishes to place its own transport terminating equipment at that location, CLEC may Interconnect using the provisions of Physical Collocation as set forth in Appendix Physical Collocation.

3.2 Virtual Collocation

3.2.1 When CLEC provides its own facilities or uses the facilities of a third party to an **SBC WISCONSIN** Tandem or End Office building and wishes for **SBC WISCONSIN** to place transport terminating equipment at that location on CLEC's behalf, CLEC may interconnect using the provisions of Virtual Collocation as set forth in Appendix Virtual Collocation. Virtual Collocation allows CLEC to choose the equipment vendor and does not require that CLEC be Physically Collocated.

3.3 Intentionally Left Blank

3.4 Fiber Meet Point

3.4.1 Fiber Meet between **SBC WISCONSIN** and CLEC can occur at any mutually agreeable and technically feasible point at an **SBC WISCONSIN** Tandem or End Office building within each LATA.

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. Only Local Interconnection Trunk Groups shall be provisioned over this jointly provided facility.

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.

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 for the Local Interconnection Trunk Groups.

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 CLEC will provide fiber cable to the last entrance or **SBC WISCONSIN** designated manhole at the **SBC WISCONSIN** Tandem or End Office building. **SBC WISCONSIN** shall make all necessary preparations to receive and to allow and enable CLEC to deliver fiber optic facilities into that manhole. CLEC will provide a sufficient length of Fiber cable for **SBC WISCONSIN** to pull through to the **SBC WISCONSIN** cable vault. CLEC shall deliver and maintain such strands wholly at its own expense up to the POI. **SBC WISCONSIN** shall take the fiber from the manhole and terminate it inside **SBC WISCONSIN**'s Tandem or End office building at the cable vault at **SBC WISCONSIN**'s expense. In this case the POI shall be at the **SBC WISCONSIN** designated manhole location.

- 3.4.8 **SBC WISCONSIN** and CLEC 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 the Local Interconnection Trunk Groups prescribed by Appendix ITR.
 - 3.4.9 Each Party shall provide its own source for the synchronized timing of its FOT equipment.
 - 3.4.10 CLEC and **SBC WISCONSIN** 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 Local Interconnection within an **SBC WISCONSIN** area, CLEC shall provide written notice to **SBC WISCONSIN** of the need to establish interconnection in each LATA. CLEC shall provide all applicable network information on forms acceptable to **SBC WISCONSIN** (as set forth in SBC's CLEC Handbook, published on the CLEC website).
- 4.2 Upon receipt of CLEC's notice to interconnect, the Parties shall schedule a meeting to negotiate and mutually agree on the network architecture (including trunking) to be documented as discussed in Section 2.1. The interconnection activation date for an interconnection shall be established based on then-existing force and load, the scope and complexity of the requested Interconnection and other relevant factors.
- 4.3 Either Party may add or remove additional Switches. The Parties shall provide 120 days written notice to establish such Interconnection; and the terms and conditions of this agreement will apply to such Interconnection.
- 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.