

APPENDIX INTERCONNECTION TRUNKING REQUIREMENTS (ITR)

1. INTRODUCTION

- 1.1 The Interconnection of CLEC and SBC MISSOURI networks shall be designed to promote network efficiency.
- 1.2 This Appendix Interconnection Trunking Requirements (ITR) to Attachment 11: Network Interconnection Architecture provides descriptions of the trunking requirements for CLEC to interconnect any CLEC provided switching facility with SBC MISSOURI facilities. All references to incoming and outgoing trunk groups are from the perspective of CLEC.
- 1.3 If either Party changes the methods by which it trunks and routes traffic within its network, it will afford the other Party the opportunity to trunk and route its traffic in the same manner for purposes of interconnection. The Parties agree to offer and provide to each other B8ZS Extended Superframe and/or 64 Kbps clear channel where it is currently deployed at the time of the request.
- *1,21.4 SBC MISSOURI will allow CLEC to use the same physical facilities (e.g., dedicated transport access facilities, dedicated transport UNE facilities) to provision one-way or two-way trunk groups two-way Local Interconnection Trunk Groups, CLEC shall have administrative and order control (e.g., determination of trunk group size) of the trunk group to the extent that it does not require SBC MISSOURI to redesign its network configuration.
- 1.5 Intentionally left blank

2. TRUNK GROUP CONFIGURATIONS:

- *3*4*5*6*7*82.1 Where traffic from CLEC switch to an SBC MISSOURI End Office is sufficient a Local Interconnection Trunk Group shall also be established to the SBC MISSOURI End Office.
- *9*10*112.1.1 SBC MISSOURI will not impose any restrictions on a CLEC that are not imposed on its own traffic with respect to trunking and routing options afforded the CLEC.
- *132.1.2 CLEC Terminating (SBC MISSOURI to CLEC):

For CLEC Terminating traffic (SBC MISSOURI to CLEC), where SBC MISSOURI has a Local/IntraLATA or Local/Access Tandem Switch SBC MISSOURI will combine the Section 251(b)(5) Traffic, ISP-Bound Traffic and 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 over a single two-way trunk group.

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When SBC MISSOURI has Access Tandem Switches that serve a Local Exchange Area separate from Local Tandem-Switches in a Local Exchange Area, SBC MISSOURI shall deliver Section 251(b)(5) Traffic and ISP-Bound traffic from the Local Tandem Switch to CLEC over the two-way trunk group SBC MISSOURI shall deliver IntraLATA Toll Traffic from the Access Tandem Switch to CLEC over the two-way trunk groups , As noted in Section 2.1.1 above, direct trunk group(s) between CLEC and SBC MISSOURI End Offices will be provisioned as two-way and used as two-way. Trunks will utilize Signaling System 7 (SS7) protocol signaling when such capabilities exist within the SBC MISSOURI network. Multifrequency (MF) signaling will be utilized in cases where SBC MISSOURI switching platforms do not support SS7.

2.2 Meet Point Traffic:

Meet Point Traffic will be transported between the SBC MISSOURI Access Tandem Switch and CLEC over a "meet point" trunk group separate from Local Interconnection Trunk Groups. This trunk group will be established for the transmission and routing of Exchange Access traffic and IntraLATA Toll Traffic routed via an IXC between CLEC's end users and interexchange carriers via a SBC MISSOURI Access Tandem Switch. When SBC MISSOURI has more than one Access Tandem Switch within a Local Exchange Area, CLEC may utilize a single "meet point" trunk group to one SBC MISSOURI Access Tandem Switch within the Local Exchange Area in which CLEC homes its NPA/NXXs. This trunk group will be provisioned as two-way and will utilize SS7 protocol signaling. Traffic destined to and from multiple interexchange carriers (IXCs) can be combined on this trunk group.

2.3 Direct End Office Trunking:

The Parties shall establish a two-way Direct End Office Trunk Group (DEOT) when actual or forecasted End Office traffic exceeds 24 DS0s at peak over three consecutive months or when no Local Only, Local/IntraLATA or Local/Access Tandem Switch is present in the Local Exchange Area.

Trunking to an SBC MISSOURI End Office shall afford CLEC access only to the NXXs served by that individual End Office.

2.4 E911 Emergency Traffic:

A segregated trunk group will be required to each appropriate E911 tandem within an Local Exchange Area in which CLEC offers Exchange Service. This trunk group will be set up as a one-way outgoing only and will utilize SS7 protocol signaling unless SS7 protocol signaling is not yet available, then CAMA/ANI MF signaling will be utilized.

2.5 Mass Calling (Public Response Choke Network):

A segregated trunk group will be required to the designated Public Response Choke Network tandem in each serving area in which CLEC provides service pursuant to this Agreement. This trunk group will be one-way outgoing only and will utilize MF signaling. It is anticipated that this group will be sized as follows, subject to adjustments from time to time as circumstances require:

< 15001 access Lines (AC)	2 trunks (min)
15001 to 25000 AC	3 trunks

25001 to 50000 AC	4 trunks
50001 to 75000 AC	5 trunks
> 75000 AC	6 trunks (max)

^{*14}^{*15}At the time that CLEC establishes a Public Response Choke Network NXX and tandem, SBC MISSOURI will establish reciprocal mass calling trunks to CLEC subject to the requirements set forth in this Section.

2.6 Operator Services

2.6.1 Inward Assistance Inward Operator Assistance (Call Code 121) - CLEC may choose from two interconnection options for Inward Operator Assistance.

2.6.2 Option 1 - Interexchange Carrier (IXC)

CLEC may utilize the Interexchange Carrier Network. CLEC will route its calls requiring inward operator assistance through its designated IXC POP to SBC MISSOURI's TOPS tandem. SBC MISSOURI will route its calls requiring inward operator assistance to CLEC's Designated Operator Switch (TTC) through the designated IXC POP.

CLEC will use the same OSPS platform to provide local and IXC operator services. Where appropriate, CLEC will utilize existing trunks to the SBC MISSOURI TOPS platform that are currently used for existing IXC inward operator services.

2.6.3 Option 2 - CLEC Operator Switch

CLEC will identify a switch as the Designated Operator Switch (TTC) for its NPA-NXXs. SBC MISSOURI will route CLEC's calls requiring inward operator assistance to this switch. This option requires a segregated one-way (with MF signaling) trunk group from SBC MISSOURI' Access Tandem to the CLEC switch. CLEC calls requiring inward operator assistance will be routed to SBC MISSOURI' operator over an IXC network.

3. TRUNK DESIGN BLOCKING CRITERIA

^{*16}Trunk forecasting and servicing for the Section 251(b)(5), ISP-Bound Traffic and intraLATA toll trunk groups will be based on the industry standard objective of 2% overall time consistent average busy season busy hour loads 1% from the End Office to the Tandem and 1% from tandem to End Office based on Neal Wilkinson B.01M [Medium Day-to-Day Variation] until traffic data is available. Listed below are the trunk group types and their objectives:

<u>Trunk Group Type</u>	<u>Blocking Objective (Neal Wilkinson B.01M)</u>
Local Tandem	1%
Local Direct	2%
IntraLATA Interexchange Direct	1 %
IntraLATA Interexchange Tandem	0.5%
911	1 %

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Operator Services (DA/DACC)	1 %
Operator Services (0+, 0-)	0.5%
InterLATA Tandem	0.5%

4. FORECASTING/SERVICING RESPONSIBILITIES

- 4.1 CLEC agrees to provide an initial trunk forecast for establishing the initial trunk groups. SBC MISSOURI shall review this forecast and if SBC MISSOURI has any additional information that will change the forecast, SBC-MISSOURI shall provide this information to CLEC. Subsequent forecasts will be provided on a quarterly or semi-annual basis, at CLEC's election. Two of the quarterly forecasts, or one of the semi-annual forecasts, will be provided concurrent with the publication of the SBC MISSOURI General Trunk Forecast. The forecast will include yearly forecasted trunk quantities for all trunk groups described in this Appendix for a minimum of three years and the use of Common Language Location Identifier (CLLI-MSG) which is described in Telcordia Technologies documents BR795-100-100 and BR795-400-100. Trunk servicing will be performed on a monthly basis at a minimum.
- 4.2 The Parties agree to review CLEC's trunk capacity in accordance with CLEC's forecasts, including quarterly forecasts, if so elected and submitted by CLEC.
- 4.3 Such forecasts shall include, subject to adjustments from time to time as circumstances require:
 - *174.3.1 Yearly forecasted trunk quantities will be for all trunk groups referenced in this appendix for a minimum of three (current and plus-1 and plus-2) years; and
 - 4.3.2 A description of major network projects anticipated for the following six months. Major network projects include the introduction of a new switch, trunking or network rearrangements, orders greater than 4 DS1s or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period.
 - 4.3.3 Parties shall make all reasonable efforts and cooperate in good faith to develop alternative solutions to accommodate orders when facilities are not available.
- 4.4 CLEC shall be responsible for forecasting two-way trunk groups. SBC MISSOURI shall be responsible for forecasting and servicing any one way trunk groups terminating to CLEC and CLEC shall be responsible for forecasting and servicing any one way trunk groups terminating to SBC MISSOURI, unless otherwise specified in this Appendix. Standard trunk traffic engineering methods will be used as described in TELCORDIA TECHNOLOGIES document SR-TAP-000191, Trunk Traffic Engineering Concepts and Applications or as otherwise mutually agreed to by the Parties.
- 4.5 If forecast quantities are in dispute, the Parties shall meet to reconcile the differences.
- 4.6 Each Party shall provide a specified point of contact for planning, forecasting and trunk servicing purposes.

5. SERVICING OBJECTIVE/DATA EXCHANGE

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- 5.1 Each Party agrees to service trunk groups to the blocking criteria listed in Section 3.0 above. Each party will attempt to service trunk groups in a timely manner when they have sufficient data to determine that the service objectives in Section 3.0 are not being met.
- 5.2 Each Party will make trunk group blockage information available to the other party by mechanized procedures. The existing exchange of data for Access Trunk Groups will be extended to provide data on all joint trunk groups.
- 5.3 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by using an Access Service Request (ASR). CLEC will have administrative and order control for the purpose of issuing ASR's on two-way trunk groups.
- 5.4 Both Parties will jointly manage the capacity of Local Interconnection Trunk Groups. CLEC may send an ASR to trigger changes to the Local Interconnection Trunk Groups based on capacity assessment and to meet end user demand. SBC MISSOURI shall send a Trunk Group Service Request (TGSR) to CLEC to trigger changes to the Local Interconnection Trunk Groups which exceed 65% capacity based on capacity assessment. The TGSR is a standard industry support interface developed by the Ordering and Billing Forum of the Carrier liaison Committee of the Alliance for Telecommunications Solutions (ATIS) organization. TELCORDIA TECHNOLOGIES Special Report STS000316 describes the format and use of the TGSR. The Party receiving a complete and accurate ASR will issue a Firm Order Confirmation (FOC) within five (5) business days and, if requested on the ASR, a Design Layout Record (DLR) to the ordering Party within five (5) business days issuance of the FOC.
- 5.5 In a Blocking Situation:
 - 5.5.1 In a blocking situation, a TGSR will be issued by SBC MISSOURI when additional capacity is required to reduce measured blocking to objective design blocking levels based upon analysis of trunk group data. SBC MISSOURI will note "Service Affecting" on the TGSR. CLEC, upon receipt and review of a TGSR, in a blocking situation, will issue an ASR to SBC MISSOURI within three (3) business days after receipt of the TGSR. CLEC will note "Service Affecting" on the ASR. These orders will be expedited.
 - 5.5.2 When facilities are not available, the Parties shall make all reasonable efforts to cooperate in good faith to resolve the blocking situation.

6. TRUNK UNDERUTILIZATION

- 6.1 Underutilization of Local Interconnection Trunk Groups or Meet Point Trunk Groups exists when provisioned capacity is greater than the current need. The parties agree that this over provisioning is an inefficient deployment and use of network resources and results in unnecessary costs. Those situations where more capacity exists than actual usage requires will be handled in the following manner: This is talking about trunk underutilization not facilities.
 - 6.1.1 If a trunk group is sixty-five percent (65%) of CCS capacity on a monthly average basis, for each month of any three (3) consecutive months period, either Party may request the issuance of an order to resize the trunk group, which shall be left with not less than thirty-five percent (35%) excess capacity. In all cases grade of service objectives shall be maintained.

- 6.1.2 SBC MISSOURI may send a Trunk Group Service Request (TGSR) to CLEC to trigger changes to the Local Interconnection Trunk Groups or Meet Point Trunk Groups based on the capacity assessment. Upon receipt of a TGSR, CLEC will issue an Access Service Request (ASR) to SBC MISSOURI within ten (10) business days after receipt of the TGSR subject to the following sections.
- 6.1.3 Upon review of the TGSR, if CLEC does not agree with the resizing, the Parties will schedule a joint planning discussion within twenty (20) business days. The Parties will meet to resolve and mutually agree to the disposition of the TGSR.
- 6.1.4 If SBC MISSOURI does not receive an ASR, or if CLEC does not respond to the TGSR by scheduling a joint discussion within the twenty (20) business day period, SBC MISSOURI will attempt to contact the CLEC to schedule a joint planning discussion. If the CLEC will not agree to meet within an additional ten (10) business days and present adequate reason for keeping trunks operational, SBC MISSOURI will issue an ASR to resize the Local Interconnection Trunks Groups or Meet Point Trunk Groups.
- 6.2 CLEC will issue a complete and accurate ASR to SBC MISSOURI
 - 6.2.1 Within ten (10) business days after receipt and review of the TGSR; or
 - 6.2.2 At any time as a result of either Party's own capacity management assessment, in order to begin the provisioning process .
 - *196.2.3 In a blocking situation, when either Party requests an expedited order, every effort will be made to accommodate the request.
- 6.3 Projects require the coordination and execution of multiple orders or related activities between and among SBC MISSOURI and CLEC work groups, including but not limited to the initial establishment of Local Interconnection or Meet Point Trunk Groups and service in an area, the introduction of a new switch or central offices, NXX code moves, re-homes, facility grooming, or network rearrangements.
 - 6.3.1 Orders that comprise a project, shall be jointly planned and coordinated.
- 6.4 CLEC will be responsible for engineering its network on its side of the Point of Interconnection (POI). SBC MISSOURI will be responsible for engineering its network on its side of the POI.
- *206.5 If one of the Parties is unable to or not ready to perform Acceptance Tests, or is unable to accept the Local Interconnection and Meet Point Trunk Groups by the due date, the Party will provide a requested revised service due date. If CLEC requests a service due date change which exceeds the 31 calendar days after the original due date, the ASR must be cancelled by the CLEC. Should the CLEC fail to cancel such an ASR, SBC MISSOURI shall treat the ASR as if it were cancelled.
- 6.6 Trunk servicing responsibilities for OPERATOR SERVICES trunks used for stand-alone Operator Service or Directory Assistance are the sole responsibility of CLEC.

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- 6.7 In the event that a Party requires trunk servicing within shorter time intervals than those provided for in this Appendix due to end user demand, such Party may designate its ASR as an "Expedite" and the other Party shall use best efforts to issue its FOC and DLR and install service within the requested interval.

7. SERVICING OBJECTIVE/DATA EXCHANGE

- 7.1 Each Party agrees to service trunk groups in a timely manner to the Trunk Design Blocking Criteria as necessary to meet customer demand.
- 7.2 Exchange of traffic data enables each Party to make accurate and independent assessments of trunk group service levels and requirements. Parties agree to exchange this data and to work cooperatively to implement an exchange of traffic data utilizing FTP computer to computer file transfer process.

8. INSTALLATION, MAINTENANCE, TESTING AND REPAIR

- 8.1 Where available and at the request of either Party, each Party shall cooperate to ensure that its trunk groups are configured utilizing the B8ZS ESF protocol for 64 kbps Clear Channel Capability (64CCC) transmission to allow for ISDN interoperability between the Parties' respective networks where it is currently deployed at the time of the request. Trunk groups configured for 64CCC and carrying Circuit Switched Data (CSD) ISDN calls shall carry the appropriate Trunk Type Modifier in the CLCI-Message code. Trunk groups configured for 64CCC and not used to carry CSD ISDN calls shall carry a different code that is appropriate for the Trunk Type Modifier in the CLCI-Message code.
- *218.2 SBC MISSOURI will engineer all interconnection trunks between SBC MISSOURI and CLEC to a 6dB of digital pad configuration. Further, as of the date of the execution of this Agreement, SBC MISSOURI and CLEC will cooperatively work to identify and convert all existing Local Interconnection Trunk Groups to a 6dB of digital pad configuration.
- 8.3 Each Party will provide to the other test-line numbers (i.e., switch milliwatt numbers) and access to test lines.
- *228.3.1 Each Party will cooperatively plan and implement coordinated testing and repair procedures, which may include industry standard 105 and 108 tests, for the meet point and interconnection trunk groups and facilities to ensure trouble reports are resolved in a timely and appropriate manner.

9. NETWORK MANAGEMENT

- 9.1 Restrictive Controls

Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps set at appropriate levels on traffic toward each other's network, when required, to protect the public switched network from congestion due to facility failures, switch congestion, or failure or focused overload. CLEC and SBC MISSOURI will immediately notify each other of any protective control action planned or executed.

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9.2 Expansive Controls

Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Expansive controls will only be used when mutually agreed to by the Parties.

9.3 Mass Calling

CLEC and SBC MISSOURI shall cooperate and share pre-planning information regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes.