

XO Communications Services, Inc.  
ACCESS SERVICES TARIFF

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CHECK SHEET

The Title Page through Page 12 inclusive of this tariff are effective on the date shown. Original and revised pages as named below contain all changes from the original tariff that are in effect on the date shown.

<u>Page</u>	<u>Revision</u>	<u>Date</u>
Title	Original	December 31, 2004
1	4th Revised*	February 7, 2012
2	Original	December 31, 2004
3	Original	December 31, 2004
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5	2nd Revised	January 1, 2008
6	1st Revised*	February 7, 2012
7	Original	December 31, 2004
8	Original	December 31, 2004
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9.1	Original*	February 7, 2012
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9.4	Original*	February 7, 2012
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XO Communications Services, Inc.  
ACCESS SERVICES TARIFF

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1. Definitions

Please refer to Company's Local Exchange Services Tariff, for applicable Definitions in addition to the ones provided.

**Automatic Number Identification (ANI)** - The Multi-Frequency (MF) signaling parameter that identifies the billing number of the calling party.

**Calling Party Number (CPN)** - The SS7 signaling parameter that identifies the subscriber line number or directory number of the calling party.

**Charge Number (CN)** - The SS7 signaling parameter that identifies the billing telephone number of the calling party.

**Customer** - The person, firm, corporation, government entity, or other entity, which subscribes to or uses, and is therefore responsible for the payment of charges and compliance with the Company's regulations, the services offered under this tariff, including but not limited to, Interexchange Carriers (IXCs), End Users, and other carriers or providers that originate or terminate Toll VoIP-PSTN Traffic, or otherwise exchange Toll VoIP-PSTN Traffic with the Company.

**Internet Protocol (IP) Signaling** - A packet data-oriented protocol used for communications call signaling information.

**Multi-Frequency (MF) Signaling** - An in-band signaling method in the which call signaling information is transmitted between network switches using the same voice band channel used for voice.

**Toll VoIP-PSTN Traffic** -Interexchange voice traffic that (1) is exchanged with the Company in Time Division Multiplexing ("TDM") format over Public Switched Telephone Network ("PSTN") facilities and (2) originates and/or terminates in IP format when it originates from and/or terminates to an end user of a service that requires IP-compatible customer premises equipment.

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3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic

A. Scope

1. Toll VoIP-PSTN Traffic is a Customer's interexchange voice traffic that (1) is exchanged with the Company in Time Division Multiplexing ("TDM") format over Public Switched Telephone Network ("PSTN") facilities and (2) originates and/or terminates in Internet Protocol (IP) format. Toll VoIP-PSTN Traffic originates and/or terminates in IP format when it originates from and/or terminates to an end user of a service that requires IP-compatible customer premises equipment.
2. In the absence of an agreement between the Company and the Customer specifying the treatment of Toll VoIP-PSTN Traffic, this section governs the treatment of Toll VoIP-PSTN Traffic pursuant to the Federal Communications Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-08, adopted October 27, 2011 and released November 18, 2011 ("FCC 11-161")
3. This section will be applied to identify intrastate Toll VoIP-PSTN Traffic exchanged with a Customer that is a local exchange carrier only to the extent that the Customer has also implemented billing for intrastate Toll VoIP-PSTN Traffic in accordance with FCC 11-161.

B. Rating of Toll VoIP-PSTN Traffic

As of December 29, 2011, all interstate Toll VoIP-PSTN Traffic and any intrastate Toll VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Company's interstate switched access rates as provided in sections 5 and 6 of Tariff FCC No. 1.

C. Calculation and Application of Percent-VoIP-Usage Factor

The Company will determine the number of intrastate Toll VoIP-PSTN Traffic minutes of use ("MOU") to which interstate switched access rates will be applied under section 2.3.4.B, above, by applying a Percent VoIP Usage ("PVU") factor to the total terminating intrastate access MOU received by the Company from the Customer. The PVU will be derived and applied as follows:

3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic (Cont'd)

C. Calculation and Application of Percent-VoIP-Usage Factor (Cont'd)

1. The Customer will calculate and furnish to the Company a factor (the "PVU-C") representing the percentage of the total intrastate and interstate switched access MOU that the Customer terminates to the Company in the state, that (a) is sent to the Company and that originated in IP format; or (b) is received from the Company and terminated in IP format. This PVU-C shall be based on information such as the number of the Customer's retail VoIP subscriptions in the state (e.g., as reported on FCC Form 477), traffic studies, actual call detail, or other relevant and verifiable information.
2. The Company will, likewise, calculate a factor (the "PVU-X") representing the percentage of the Company's total intrastate and interstate access MOU in the state that the Company originates or terminates on its network in IP format. This PVU-X shall be based on information, such as the number of the Company's retail VoIP subscriptions in the state (e.g., as reported on FCC Form 477), traffic studies, actual call detail, or other relevant and verifiable information.
3. The Company will use the PVU-C and PVU-X factors to calculate a PVU factor that represents the percentage of total intrastate and interstate access MOU exchanged between the Company and the Customer that is originated or terminated in IP format, whether at the Company's end, at the Customer's end, or at both ends. The PVU factor will be calculated as the sum of: (A) the PVU-C factor and (B) the PVU-X factor times (1.0 minus the PVU-C factor).
4. The Company will apply the PVU factor to the total intrastate access MOU received from the Customer in order to determine the number of intrastate Toll VoIP-PSTN Traffic MOU.

Example 1: The PVU-C is 40% and the PVU-X is 10%. The PVU factor is equal to  $40\% + (10\% \times 60\%) = 46\%$ . The Company will bill 46% of the Customer's intrastate access MOU at the Company's tariffed interstate switched access rates.

Example 2: The PVU-C is 0% and the PVU-X is 10%. The PVU factor is equal to  $0\% + (10\% \times 100\%) = 10\%$ . The Company will bill 10% of the Customer's intrastate access MOU at the Company's tariffed interstate switched access rates.

Example 3: The PVU-C is 100%. No matter what the PVU-X factor is, the PVU is 100%. The Company will bill 100% of the Customer's intrastate access MOU at the Company's tariffed interstate switched access rates.

3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic (Cont'd)

C. Calculation and Application of Percent-VoIP-Usage Factor (Cont'd)

5. The Customer shall not modify its reported PIU factor to account for Toll VoIP-PSTN Traffic.
6. The Customer shall retain any call detail, work papers and information used to develop the PVU-C factor for a minimum of one year.
7. If the Customer does not furnish the Company with a PVU-C pursuant to section 2.3.4.C.1, above, the Company will utilize a PVU-C equal to zero.

D. Initial PVU factor

1. If the PVU factor cannot be implemented in the Company's billing systems by December 29, 2011, once the factor can be implemented, the Company will adjust the Customer's bills to reflect the PVU factor retroactively to December 29, 2011. In calculating the initial PVU, the Company will take the Customer-specified PVU-C into account retroactively to December 29, 2011, provided that the Customer provides the PVU-C factor to the Company no later than April 15, 2012; otherwise, the Company will set the initial PVU-C equal to zero and calculate the PVU accordingly.
2. The Company may choose to provide credits based on the PVU-C and PVU-X factors on a quarterly basis until such time as billing system modifications can be implemented.

E. PVU Factor Updates

1. The Customer may update the PVU-C factor quarterly using the method set forth in section 2.3.4.C.1, above. If the Customer chooses to submit such updates, it shall provide to the Company, no later than 15 days after the first day of January, April, July and/or October of each year, a revised PVU-C factor based on data for the prior three months, ending the last day of December, March, June, and September, respectively.
2. The Company may, likewise, update the PVU-X factor quarterly based on data for the prior three months.
3. The Company will use any revised PVU-C and/or PVU-X factors to calculate a revised PVU that will apply prospectively and serve as the basis for subsequent billing until superseded by a new PVU. No prorating or backbilling will be done based on the updated PVU-C or PVU-X factors.

3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic (Cont'd)

F. PVU Factor Verification

1. Not more than twice in any year, the Company may request from the Customer an overview of the process used to determine the PVU-C factor, the call detail records, description of the method for determining how the end user originates or terminates calls in IP format, and other information used to determine the Customer's PVU-C factors furnished to the Company in order to validate the PVU-C factor supplied. The Customer shall supply the requested data and information within 15 days of the Company's request.
2. The Company may dispute the Customer's PVU-C factor based upon:
  - (a) A review of the requested data and information provided by the Customer.
  - (b) The Company's review of other market information, FCC reports on VoIP lines, such as FCC Form 477 or state level results based on FCC Local Competition Report or other relevant data.
  - (c) A change in the reported PVU-C factor by more than five percentage points from the preceding quarter.
3. If, after review of the data and information, the Customer and the Company agree upon a revised PVU-C factor, the Customer and the Company will begin using that revised PVU-C factor with the next bill period.

3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic (Cont'd)

F. PVU Factor Verification (Cont'd)

4. If the dispute is unresolved, the Company may initiate an audit. The Company shall limit audits of the Customer's PVU-C factor to no more than two times per year. The Customer may request that the audit be conducted by an independent auditor. In such cases, the associated auditing expenses will be paid by the Customer.
  - (a) In the event that the Customer fails to provide adequate records to enable the Company or an independent auditor to conduct an audit verifying the Customer's PVU-C factor, the Company will bill the usage for all contested periods using the most recent undisputed PVU-C factors reported by the Customer. This PVU-C factor will remain in effect until the audit can be completed.
  - (b) The Company will adjust the Customer's PVU-C factor based on the results of the audit and implement the revised PVU-C in the next billing period or quarterly report date, whichever is first. The revised PVU-C factor will apply for the next two quarters before new factors can be submitted by the Customer.
  - (c) If the audit supports the disputed PVU-C factor submitted by the Customer, the usage for the contested periods will be adjusted to reflect such PVU-C factor.

3.0 JURISDICTIONAL REPORTING (Cont'd)

3.2 Identification and Rating of Toll VoIP-PSTN Traffic (Cont'd)

3.3 Call Signaling

Depending on the signaling system used by the Customer in its network, the Customer's facilities shall transmit the following call signaling information to the Company on traffic the Customer's end users originate which is handed off for termination on the Company's network.

A. Signaling System 7 (SS7) Signaling

When the Customer uses SS7 signaling, it will transmit the Calling Party Number (CPN) or, if different from the CPN, the Charge Number (CN) information in the SS7 signaling stream.

B. Multi-Frequency (MF) Signaling

When the Customer uses MF signaling, it will transmit the number of the calling party or, if different from the number of the calling party, the Charge Number (CN) information in the MF Automatic Number Identification (ANI) field.

C. Internet Protocol (IP) Signaling

When the Customer uses IP signaling, it will transmit the telephone number of the calling party or, if different from the telephone number, the billing number of the calling party.