



February 29, 2012  
Via Overnight Delivery

Ms. Betty McCauley, Commission Secretary  
Ohio Public Utilities Commission  
180 East Broad Street  
Columbus, OH 43215

**RE: tw telecom of ohio llc  
P.U.C.O. Tariff No. 13 – Access Revision – Final Tariff Pages**

Dear Ms. McCauley:

Attached for filing, per Staff's February 29, 2012 email, are the approved final access tariff pages under Case No. 12-433-TP-ATA, Docket No. 90-9011-CT-ATA. The following tariff pages are included with this filing:

1 <sup>st</sup> Revised Page 1	Updates Check Sheet
1 <sup>st</sup> Revised Page 3	Updates Subject Index
1 <sup>st</sup> Revised Pages 8, 11, 14	Revises and adds definitions
1 <sup>st</sup> Revised Page 35	Revises text
1 <sup>st</sup> Revised Page 36	Introduces provisions for VoIP-PSTN Traffic, revises, relocates text
Original Pages 36.1 – 36.2	Introduces provisions for VoIP-PSTN Traffic
Original Page 36.3	Introduces provisions for VoIP-PSTN Traffic, revises, relocates text
1 <sup>st</sup> Revised Page 37	Revises text
Original Page 37.1	Introduces provisions for VoIP-PSTN Traffic
Original Page 45.1	Introduces application of access charges to Toll VoIP-PSTN Traffic

Please acknowledge receipt of this filing by date-stamping the extra copy of this cover letter and returning it to me in the self-addressed, stamped envelope provided for that purpose.

Any questions you may have regarding this filing should be directed to my attention at 407-740-3002 or via email to [cwightman@tminc.com](mailto:cwightman@tminc.com). Thank you for your assistance in this matter.

Sincerely,

Connie Wightman  
Consultant

cc: Tammy Chatfield - tw telecom  
file: tw telecom - Ohio - Access  
tms: OHa1201c

Enclosures  
CW/bc

## SWITCHED ACCESS SERVICE

## CHECK SHEET

Pages of this tariff, as indicated below, are effective as of the date shown at the bottom of the respective pages. Original and revised pages, as named below, comprise all changes from the original tariff and are currently in effect as of the date on the bottom of this page.

PAGE	REVISION		PAGE	REVISION		PAGE	REVISION
Title	Original		28	Original		51	Original
1	1 <sup>st</sup> Revised	*	29	Original		52	Original
2	Original		30	Original		53	Original
3	1 <sup>st</sup> Revised	*	31	Original		54	Original
4	Original		32	Original		55	Original
5	Original		33	Original		56	Original
6	Original		34	Original		57	Original
7	Original		35	1 <sup>st</sup> Revised	*	58	Original
8	1 <sup>st</sup> Revised	*	36	1 <sup>st</sup> Revised	*	59	Original
9	Original		36.1	Original	*	60	Original
10	Original		36.2	Original	*	61	Original
11	1 <sup>st</sup> Revised	*	36.3	Original	*	62	Original
12	Original		37	1 <sup>st</sup> Revised	*	63	Original
13	Original		37.1	Original	*	64	Original
14	1 <sup>st</sup> Revised	*	38	Original		65	Original
15	Original		39	Original			
16	Original		40	Original			
17	Original		41	Original			
18	Original		42	Original			
19	Original		43	Original			
20	Original		44	Original			
21	Original		45	Original			
22	Original		45.1	Original	*		
23	Original		46	Original			
24	Original		47	Original			
25	Original		48	Original			
26	Original		49	Original			
27	Original		50	Original			

\* - indicates those pages included with this filing

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

SWITCHED ACCESS SERVICE

---

SUBJECT INDEX

	<u>Page</u>	
Abbreviations and Definitions	7	
Assignment or Transfer of Service	16	
Billing and Payments	24	
Cancellation of Application for Service	22	
Claims and Disputes	26	
Discontinuance and Restoration of Service	20	
Explanation of Symbols	4	
Interconnection	29	
Inspection, Testing and Adjustment	28	
Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic	35	(T)
Liability of the Company	29	
Liability of the Customer	31	
Limitation on Service	15	
Minimum Period	22	
Obligations of the Customer	38	
Payment of Deposits	27	
Rate Categories	46	
Rates and Charges	54	
Switched Access Service	40	
Tariff Format	5	
Taxes and Surcharges	33	
Telecommunications Services Priority (TSP)	61	
Terms and Conditions	15	
Term Agreements	23	
Undertaking of the Company	15	
Use of Service	16	

---

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

SWITCHED ACCESS SERVICE

---

SECTION 1 - ABBREVIATIONS AND DEFINITIONS, (CONT'D.)

Channel(s) - An electrical or, in the case of fiber optic-based transmission systems, a photonic communications path between two or more points of termination.

Commercial Mobile Radio Service (CMRS) - A wireless provider of telecommunications services.

Common Channel Signaling (CCS) - A high speed packet switched communications network which is separate (out of band) from the public packet switched and message networks. It is used to carry addressed signaling messages for individual trunk circuits and/or database related services between signaling points in the CCS network.

Communications System - Denotes channels and other facilities which are capable of communications between terminal equipment provided by an entity other than the Company.

Commission –Public Utilities Commission of Ohio.

Company - **tw telecom of ohio llc**, the issuer of this tariff.

Constructive Order - Delivery of calls to or acceptance of calls from the Company’s end user locations over Company-switched local exchange services constitutes a Constructive Order by the Customer to purchase access services as described herein. Similarly the selection by a Company’s end user of the Customer as the presubscribed IXC constitutes a Constructive Order of switched access by the Customer.

Customer - The person, firm, corporation or other entity which orders the Company’s service or receives the Company’s service, including but not limited to an Interexchange Carrier, other telecommunications carrier, or provider originating or terminating Toll VoIP-PSTN traffic. (T)  
|  
(T)

Customer Agreement - The mutual agreement between the Company and the Customer for the provision of the Company’s service.

SWITCHED ACCESS SERVICE

---

SECTION 1 - ABBREVIATIONS AND DEFINITIONS, (CONT'D.)

Internet Protocol (IP) - The method by which data is sent from one computer to another on the Internet. (N)

Internet Protocol (IP) Signaling - A packet data-oriented protocol used for communicating call signaling information. | (N)

Interstate - For purposes of this tariff, the term Interstate applies to the regulatory jurisdiction of services used for communications between locations located in different states within the United States or between one or more location in the United States and one or more international locations.

IntraMTA (Major Trading Areas) - For purposes of this tariff, IntraMTA refers to telecommunications traffic exchanged between a LEC or IXC and a CMRS, PCS or Wireless provider that originates or terminates within the same Major Trading Area as used by the FCC to define coverage for certain services.

Intrastate - For purposes of this tariff, the term Intrastate applies to the regulatory jurisdiction of services for communications between locations within the same state or services which are not jurisdictionally interstate.

Joint User - A person, firm or corporation designated by the Customer as a user of access facilities furnished to the Customer by the Company, and to whom a portion of the charges for such facilities are billed under a joint use arrangement.

LATA (Local Access and Transport Area) - A geographic area established pursuant to the Modification of Final Judgment entered by the United States District Court for the District of Columbia in Civil Action No. 82-0192 for the provision and administration of communications services.

Local Calling Area - A geographical area as defined in the Company's local or general exchange service tariff (s) in which an end user may complete a call without incurring toll usage charges.

Local Switching Center - The switching center where telephone exchange service Customer station channels are terminated for purposes of interconnection to each other and to interoffice trunks.

Message - A message is a Call as defined above.

---

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

SWITCHED ACCESS SERVICE

SECTION 1 - ABBREVIATIONS AND DEFINITIONS, (CONT'D.)

Signaling Transfer Point Access - Allows the Customer to access a specialized switch which provides SS7 network access and performs SS7 messaging routing and screening.

Term Agreement - A method of purchasing the Company's services whereby the Customer agrees to purchase service between specific locations for a specified and mutually agreed upon length of time.

Terminal Equipment - Telecommunications devices, apparatus and associated wiring on the Customer-designated premises.

Terminating Direction - The use of Access Service for the completion of calls from an IXC or Carrier premises to an end user or Customer premises.

Time Division Multiplexing (TDM) – A method of transmitting and receiving voice signals over the Public Switched Telephone Network (PSTN).

(N)  
|  
|  
|  
|  
|  
(N)

Toll VoIP-PSTN Traffic – The Customer interexchange traffic exchanged in time division multiplexing (“TDM”) format that originates and/or terminates in Internet Protocol (“IP”) format. Traffic originates and/or terminates in IP format if it originates from and/or terminates to an end user customer of a service that requires Internet Protocol compatible customer premises equipment.

Transmission Path - An electrical path capable of transmitting signals within the range of the service offering. A transmission path is comprised of physical or derived facilities consisting of any form or configuration of plant used in the telecommunications industry.

Trunk - A communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

Trunk Group - A set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

VoIP Service – Transmission of communication by aid of wire, cable, radio, or other like connection using Voice Over Internet Protocol that is originated or terminated in Internet Protocol (IP) format. VoIP Services are those services that require the use of IP compatible customer premises equipment.

(N)  
|  
(N)

Wire Center - A physical location in which one or more central offices, used for the provision of exchange services, are located.

---

**SWITCHED ACCESS SERVICE**

---

**SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)****2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic (T)****2.17.1 Switched Access Services**

For purposes of determining the jurisdiction of Switched Access Services (e.g., originating toll free, terminating toll traffic and Toll VoIP-PSTN traffic), to the extent the Company receives sufficient call detail to permit it to determine the jurisdiction of some or all originating and terminating access minutes of use, the Company will use that call detail to render bills for those minutes. To the extent call detail is not available, the jurisdictional reporting requirements specified below will apply. (T)

When a Customer orders Access Services, its projected Percent Interstate Usage (PIU) must be provided to the Company. Except to the extent the Company has sufficient call detail to determine the jurisdiction of the call, these percentages will be used by the Company to apportion the usage and/or charges between interstate and intrastate until a revised report is received as set forth herein. (T)

To the extent that sufficient call detail is unavailable and the Customer has failed to provide its projected PIU, the Company shall allocate unidentifiable minutes subject to the PIU as 50 percent interstate traffic and 50 percent intrastate traffic.

Based on distribution of traffic (identifiable, Customer based PIU, Default PIU), the Company may derive an aggregated factor.

**2.17.2 IntraLATA Toll Usage**

For purposes of determining the jurisdiction of IntraLATA Toll Usage termination, to the extent the Company receives sufficient call detail to permit it to determine the jurisdiction of some or all originating and terminating IntraLATA Toll minutes of use, the Company will use that call detail to render bills for those minutes. To the extent call detail is not available, the jurisdictional reporting requirements specified below will apply.

When a Customer terminates IntraLATA Toll Usage, its projected Percent Local Usage (PLU) must be provided to the Company. Except to the extent the Company has sufficient call detail to determine the jurisdiction of the call, these percentages will be used by the Company to apportion the usage and/or charges between IntraLATA Toll and local until a revised report is received as set forth herein.

---

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

SWITCHED ACCESS SERVICE

SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)

2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.) (T)

2.17.2 IntraLATA Toll Usage, (Cont'd.)

To the extent that sufficient call detail is unavailable and the Customer has failed to provide its projected PLU, the Company shall allocate unidentifiable minutes subject to the PLU as 50 percent IntraLATA Toll Usage traffic and 50 percent local traffic.

Based on distribution of traffic (identifiable, Customer based PLU, Default PLU), the Company may derive an aggregated factor.

2.17.3 Identification of Toll VoIP-PSTN Traffic

This section governs the identification of Toll VoIP-PSTN Traffic that is required by the F.C.C. in its Report and Order in WC Dockets Nos. 10-90, etc., F.C.C. No. 11-161 (November 18, 2011) (F.C.C. Order) to be compensated at interstate access rates, unless the parties have agreed otherwise. Specifically, this section establishes the method of separating Toll VoIP-PSTN Traffic from the Customer's traditional intrastate access traffic, so that Toll VoIP-PSTN Traffic can be billed in accordance with the F.C.C. Order.

This section does not preclude carriers from negotiating different rates, terms and conditions governing compensation for Toll VoIP-PSTN traffic.

This tariff does not supersede rates, term and conditions governing compensation for Toll VoIP-PSTN traffic in existing interconnection agreements.

Rates, term and conditions governing compensation for Toll VoIP-PSTN traffic in this tariff applies prospectively, however application of this tariff retrospectively is allowable with mutual consent with the Customer.

A. Calculation and Application of Percent-VoIP-PSTN-Usage Factors

The Company will determine the number of Toll VoIP-PSTN Traffic minutes of use ("MOU") to which interstate rates will be applied under Section 3.1.4, by applying a Percent VoIP Usage ("PVU") factor to the total intrastate access MOU (however determined – either based on call detail information, access lines or PIU) exchanged between the Company and the Customer. The PVU will be derived and applied as follows:

(M) – Certain material previously found on this page is now located on Page 36.3.

(M)  
-----  
(M)  
-----  
(N)



SWITCHED ACCESS SERVICE

---

SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)

2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

(N)

2.17.3 Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

A. Calculation and Application of Percent-VoIP-PSTN-Usage Factors, (Cont'd.)

1. The Customer will calculate and furnish to the Company a factor (the "PVU-A") representing the percentage of the total Customer VoIP lines or intrastate access MOU that the Customer exchanges with the Company in the State, that (a) is sent to the Company and that originates in IP format; or (b) is received from the Company and terminates in IP format. This PVU-A 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. Company will, likewise, calculate a factor (the "PVU-B") representing the percentage of the Company's total Customer VoIP lines or intrastate access MOU that the Customer exchanges with the Company in the State, that (a) is sent to the Company and that originates in IP format; or (b) is received from the Company and terminates in IP format. This PVU-B 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-A and PVU-B factors to calculate an effective PVU factor that represents the percentage of total intrastate access MOU exchanged between the Company and the Customer that is originated and/or terminated in IP format, whether at the Company's end, at the Customer's end, or at both ends. The effective PVU factor will be calculated as the sum of: (A) the PVU-A factor and (B) the PVU-B factor times (1.0 minus the PVU-A factor).

(N)

---

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

## SWITCHED ACCESS SERVICE

## SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)

## 2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

(N)

## 2.17.3 Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

## A. Calculation and Application of Percent-VoIP-PSTN-Usage Factors, (Cont'd.)

4. The Company will apply the effective PVU factor to the total originating and/or terminating intrastate access MOU exchanged with the Customer to determine the number of Toll VoIP-PSTN Traffic MOUs.

Example 1: The PVU-B is 5% and the PVU-A is 10%. The effective PVU factor is equal to  $14.5\% \text{ PVU-A} + (\text{PVU-B} \times (1 - \text{PVU-A})) = \text{PVU}\%$ . The Company will bill 14.5% of the Customer's intrastate access MOU in accordance with the Company's applicable interstate switched access tariff.

Example 2: The PVU-B is 0% and the PVU-A is 10%. The effective PVU factor is  $10\% \text{ PVU-A} + (\text{PVU-B} \times (1 - \text{PVU-A})) = \text{PVU}\%$ . The Company will bill 10% of the Customer's intrastate access MOU in accordance with the Company's applicable interstate switched access tariff.

Example 3: The PVU-A is 100%. No matter what the PVU-B factor is, the effective PVU is 100%. The Company will bill 100% of the Customer's intrastate access MOU in accordance with the Company's applicable interstate switched access tariff.

5. If the Customer does not furnish the Company with a PVU-A pursuant to the preceding paragraph 1, the Company will utilize a PVU equal to the PVU-B. For example, if the PVU-B factor is 0%, the Company will utilize a PVU equal to zero.
6. The Customer shall not modify their reported PIU factor to account for Toll VoIP-PSTN Traffic.
7. The Customer shall retain the call detail, work papers, and information used to develop the PVU factors for a minimum of one year.

(N)

Issued: January 24, 2012

Effective: February 24, 2012

Issued By: Pamela Sherwood, Vice President, Regulatory Affairs  
10475 Park Meadows Drive  
Littleton, CO 80124

OHa1201c

SWITCHED ACCESS SERVICE

SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)

2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

(N)

2.17.3 Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

B. Initial Implementation of PVU Factors

- 1. If the PVU factors cannot be implemented in the Company's billing systems by December 29, 2011, once the factors are available and can be implemented the Company will adjust the Customer's bills to reflect the PVU factors retroactively to December 29, 2011.
- 2. The Company shall provide credits based on the reported PVU factors either monthly or on a quarterly basis until such time as the billing system modifications can be implemented.

C. PVU Factor Updates

The Customer may update the PVU-A factor quarterly. The Company may also update the PVU-B factor quarterly. The revised PVU factor will serve as the basis for future billing and will be effective on the bill date of each such month and shall serve as the basis for subsequent monthly billing until superseded by new PVU factors.

(N)

2.17.4 Jurisdictional Reporting Timelines

(T) (M)

The Customer shall provide to the Company, to be received no later than 15 days after the end of each quarter, a revised report reflecting the aforementioned factors, as applicable, for the past three (3) months, for each service arranged for use, based solely on the traffic originating from or terminating to the Company. The quarterly report will serve as the basis for the next three (3) months billing and will be effective on the bill date for that service. If the Customer does not supply the reports for services where reports are needed, the Company will assume the percentages to be the same as was previously provided in the most recent report(s).

(T)

(M)

(M) – Certain material found on this page was previously located on Page 36.

---

**SWITCHED ACCESS SERVICE**

---

**SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)****2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.) (T)****2.17.5 Jurisdictional Reports Verification (T)**

If a billing dispute arises or a regulatory commission questions any of the factors, the Customer will provide the data issued to determine the applicable factor. The Customer will supply the data within 30 days of the Company request.

The Customer shall keep records of call detail from which the appropriate jurisdiction can be ascertained and, upon request of the Company, shall make the records available for inspection as reasonably necessary for purposes of verification of the percentages. The Company reserves the right to conduct an audit, internally or with an external firm, at any time during the year. The Customer, at its own expense, has the right to retain an independent auditing firm.

In the event that an audit reveals that any Customer reported factor was incorrect, the Company shall apply the audit results to jurisdictionalize the usage, as applicable, affected by the audit. The Customer shall be back-billed or credited, for a period retroactive to the date that the incorrect percentage was reported, but not to exceed 18 months. Back-billed amounts are subject to a late payment penalty and payment shall be made in immediately available funds by the due date printed on the invoice.

Should an audit reveal that the misreported factors resulted in an underpayment of usage charges to the Company of five percent or more of the total usage charges, the Customer shall reimburse the Company for the cost of the audit. Proof of cost shall be the bills, in reasonable detail, submitted to the Company by the auditor.

Within 15 days of completion of the auditor's report, the Company will furnish a copy of the audit results to the person designated by the Customer to receive such results.

SWITCHED ACCESS SERVICE

---

SECTION 2 - TERMS AND CONDITIONS, (CONT'D.)

2.17 Jurisdictional Reporting and Identification of Toll VoIP-PSTN Traffic, (Cont'd.)

2.17.6 Toll VoIP-PSTN Factors Verification

(N)

If a billing dispute arises or a regulatory commission questions any of the factors, the Customer will provide the data issued to determine the applicable factors. The Customer will supply the data within 30 days of the Company request.

The Customer shall keep records of call detail, description of the method for determining how end users originate and terminate calls in IP format, and other information from which the appropriate factors can be ascertained and, upon request of the Company, shall make the records available for inspection as reasonably necessary for purposes of verification of the factors. At its own expense, the Company reserves the right to conduct an audit, internally or with an external firm, at any time during the year. The Customer, at its own expense, has the right to retain an independent auditing firm.

In the event that an audit reveals that any Customer reported factors are incorrect, the Company shall apply the audit results to all usage affected by the audit. The Customer shall be back-billed or credited, for a period retroactive to the date that the incorrect percentage was reported, but not to exceed 12 months (or to December 29, 2011 for PVU factors). Back-billed amounts are subject to a late payment penalty and payment shall be made in immediately available funds by the due date printed on the invoice.

Should an audit reveal that the misreported factors resulted in an underpayment of usage charges to the Company of five percent or more of the total usage charges, the Customer shall reimburse the Company for the cost of the audit. Proof of cost shall be the bills, in reasonable detail, submitted to the Company by the auditor.

Within 15 days of completion of the auditor's report, the Company will furnish a copy of the audit results to the person designated by the Customer to receive such results.

The Customer may verify the Company's PVU-B under the same terms and conditions in this section.

(N)

SWITCHED ACCESS SERVICE

---

SECTION 3 - SWITCHED ACCESS SERVICE, (CONT'D.)

3.1 General, (Cont'd.)

3.1.4 Application of Access Charges to Toll VoIP-PSTN Traffic

(N)

A. Toll VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Company's applicable Interstate Switched Access Tariff rates. Current and pending interstate access rates for the Company located at <http://fjallfoss.fcc.gov/cgi-bin/ws.exe/prod/ccb/etfs/mainmenu.hts>.

B. The Company shall assess and collect switched access rate elements under this tariff for access services, regardless of whether the Company itself delivers such traffic to the called party's premises or delivers the call to the called party's premises via contractual or other arrangements with an affiliated or unaffiliated provider of VoIP service that does not itself seek to collect switched access charges for the same traffic. The Company will not charge for functions not performed by the Company, its affiliated or unaffiliated provider of VoIP service. For purposes of this provision, functions provided by the Company as part of transmitting telecommunications between designated points using, in whole or in part, technology other than TDM transmission in a manner that is comparable to a service offered by a local exchange carrier constitutes the functional equivalent of carrier access service.

(N)

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**2/29/2012 1:00:38 PM**

**in**

**Case No(s). 12-0433-TP-ATA**

Summary: Tariff Final Access Revision Tariff Pages Approved By PUC. Tariff P.U.C. Tariff No. 13 with cover letter. electronically filed by Mrs. Barbara E. del Castillo on behalf of tw telecom of ohio llc