

CBTS TECHNOLOGY SOLUTIONS LLC

TARIFF PUCO NO. 2

Title Page

ACCESS SERVICE

CBTS TECHNOLOGY SOLUTIONS LLC

(T)

TARIFF PUCO NO. 2

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
EXPLANATION OF SYMBOLS	8
1. <u>APPLICATION OF TARIFF</u>	8
2. <u>GENERAL REGULATIONS</u>	
2.1 <u>Undertaking of the Company</u>	
2.1.1 Scope	9
2.1.2 Limitations	10
2.1.3 Liability	11
2.1.4 Provision of Services	14
2.1.5 Maintenance of Services	14
2.1.6 Changes and Substitutions	15
2.1.7 Refusal and Discontinuance of Service	16
2.2 <u>Use</u>	
2.2.1 Unlawful Use	17
2.3 <u>Obligations of the Customer</u>	
2.3.1 Damages	17
2.3.2 Ownership of Facilities and Theft	18
2.3.3 Equipment Space and Power	18
2.3.4 Availability for Testing	18
2.3.5 Design of Customer Services	18
2.3.6 References to the Company	19
2.3.7 Claims and Demands for Damages	19
2.4 <u>Payment Arrangements and Credit Allowances</u>	
2.4.1 Payment of Rates, Charges and Deposits	21
2.4.2 Minimum Periods	23
2.4.3 Credit Allowance for Service Interruptions	24

 Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
2.5 <u>Definitions</u>	
Access Code	26
Access Minutes	26
Access Tandem	26
Access tandem trunk Port	26
Aggregator	26
Answer/Disconnect Supervision	27
Asynchronous Transfer Mode	27
Attenuation Distortion	27
Automatic Number Identification (ANI)	27
Balance (100 Type) Test Line	27
Bit	27
Cable Vault	28
Call	28
Call Gapping	28
Carrier or Common Carrier	28
Carrier Identification Parameter	28
Central Office	28
Central Office Prefix	28
Centralized Automatic Reporting on Trunks Testing	29
Channel(s)	29
Channel Service Unit	29
Channelize	29
C-Message Noise	29
C-Notched Noise	29
Committed Information Rate	30
Committed Burst Size	30
Common Channel Signaling	30
Common Channel Signaling Access Capability	30
Common Channel Signaling Access Capability Signaling Link	30
Common Line	31
Communications System	31
Conventional Signaling	31
Customer(s)	32

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
2. <u>GENERAL REGULATIONS</u> (Cont'd)	
2.5 <u>Definitions</u> (Cont'd)	
Data Base Query	32
Data Transmission (107 Type) Test Line	32
Decibel	32
Decibel Reference Noise C-Message Referenced to 0	32
Decibel Reference Noise C-Message Weighting	32
Demarcation Point	32
Design and Construction Work	33
Detail Billing	33
Direct-Trunked Transport	33
Echo Control	33
Echo Path Loss	34
Echo Return Loss	34
Effective 2-Wire	34
Effective 4-Wire	34
800 Access Service	35
Emulated LANs	35
End Office Switch	35
End User	35
End User Port Charge	35
Entrance Facility	35
Envelope Delay Distortion	36
Equal Level Echo Path Loss	36
Ethernet LAN	36
Excess Burst Size	36
Exchange	36
Expected Measured Loss	36
Exit Message	36
First Point of Switching	37
Flexible Automatic Number Identification (Flex ANI)	37
Frame	37
Frequency Shift	37
Grandfathered	37
Host Computer	37
Host Office	37
Hundred Call Seconds	38
Immediately Available Funds	38
Impedance Balance	38
Impulse Noise	38
Individual Case Basis	38
Initial Address Message	39
Inserted Connection Loss	39
Interconnector Charge	39
Interexchange Carrier (IC) or Interexchange Common Carrier	39
Intermodulation Distortion	39
Interstate Communications	30
Intrastate Communications	40

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
2. <u>GENERAL REGULATIONS</u> (Cont'd)	
2.5 <u>Definitions</u> (Cont'd)	
Letter of Authorization (LOA)	40
Line-Side Connection	40
Local Access and Transport Area	40
Local Switching Common Trunk Port	40
Local Switching Dedicated Trunk Port	40
Local Tandem Switch	40
Loop Around Test Line	41
Loss Deviation	41
Major Fraction Thereof	41
Manhole	41
Metropolitan Area Network (MAN)	41
Native Mode	41
LAN Advantage	41
Network Control Signaling	42
Network Management Control	42
North American Numbering Plan	42
Off-Hook	42
On-Hook	42
Open Circuit Test Line	42
Originating Direction	42
Overlap Outpulsing	43
Peaked Service	43
Periodic Inspection	43
Phase Jitter	43
Point of Termination	43
Power, D.C.	43
Premises	44
Primary IC (PIC)	44
Prime Service Vendor	44
Protected Ports	44
Remote Switching Modules and/or Remote Switching Systems	44
Return Loss	44
Registered Equipment	44

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
2. <u>GENERAL REGULATIONS</u> (Cont'd)	
2.5 <u>Definitions</u> (Cont'd)	
Service Switching Point	45
Serving Wire Center	45
Seven Digit Manual Test Line	45
Short Circuit Test Line	45
Signal-To-C-Notched Noise Ratio	45
Signaling Transfer Point	45
Signaling Transfer Point Port Termination	46
Signaling Point of Interconnection	46
Signaling System 7	46
Singing Return Loss	46
Subcontractor	46
Switching Systems	46
Synchronous Optical Network (SONET)	47
Synchronous Transport signal (STS-1)	47
Tandem-Switched Transmission Charge	47
Tandem-Switching Charge	47
Terminating Direction	47
Transmission Measuring (105 Type) Test Line/Responder	48
Transmission Path	48
Trunk	48
Trunk Access Limitation	48
Trunk Group	48
Trunk Side Connection	48
Two-Wire to Four-Wire Conversion	49
Unauthorized PIC Change	49
Unbundled Network Elements	49
V and H Coordinates Method	49
Virtual LAN (VLAN)	49
VLAN Tagging	49

 Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

TABLE OF CONTENTS3. SWITCHED ACCESS SERVICE3.1 General

3.1.1	Switched Access Arrangements and Manner of Provision	50
3.1.2	Rate Categories	52
3.1.3	Design Layout Report	61
3.1.4	Acceptance Testing	62
3.1.5	Ordering Options and Conditions	62
3.1.6	CCSAC Testing Requirements	62

3.2 Local Switching

3.2.1	Common Switching Optional Features	63
-------	------------------------------------	----

3.3 Obligations of the Company

3.3.1	Network Management	70
3.3.2	Design and Traffic Routing of Switched Access Service	71
3.3.3	Determination of Number of Transmission Paths	71
3.3.4	Determination of Number of End Office Transport Terminations	71

3.4 Obligations of the Customer

3.4.1	Supervisory Signaling	73
3.4.2	Trunk Group Measurement Reports	73
3.4.3	Design of Switched Access Services	73

3.5 Rate Regulations

3.5.1	Description of Rates and Charges	74
3.5.2	Minimum Periods	80
3.5.3	Minimum Monthly Charge	80
3.5.4	Moves	81
3.5.5	Measuring Access Minutes	81
3.5.6	Network Blocking Charge for Feature Group D	85
3.5.7	Mileage Measurement	86
3.5.8	Shared Use	89
3.5.9	Data Base Query	90

3.6 Ordering Service

3.6.1	Contact Information	90
-------	---------------------	----

3.7 Rates and Changes

3.7.1	Switched Transport	91
3.7.2	Local Switching	95

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
4. <u>SPECIAL ACCESS SERVICE</u>	
4.1 <u>General</u>	
4.1.1 Rate Categories	96
4.2 <u>Service Descriptions</u>	
4.2.1 High Capacity Service	97
4.3 <u>Ordering Service</u>	
4.3.1 Contact Information	97
4.4 <u>Rates and Charges</u>	
4.4.1 High Capacity Service	98

ACCESS SERVICE

EXPLANATION OF SYMBOLS

- (C) - To signify changed regulation
- (D) - To signify discontinued rate or regulation
- (I) - To signify increase
- (M) - To signify matter relocated without change
- (N) - To signify new rate or regulation
- (R) - To signify reduction
- (S) - To signify reissued matter
- (T) - To signify a change in text but no change in rate or regulation
- (Z) - To signify a correction

PRINCIPAL OFFICE

CBTS TECHNOLOGY SOLUTIONS LLC's principal office is located at 221 East Fourth Street, Cincinnati, Ohio 45202. This tariff is available for public inspection at the above address during regular business hours.

APPLICATION OF TARIFF

1. This tariff applies to Two Point Long Distance Service within the State of Ohio with the exception of the following Counties:

Butler, Clarke, Clermont, Clinton, Hamilton, Greene, Miami, Montgomery, Preble, Warren

ACCESS SERVICE

2. General Regulations

2.1 Undertaking of the Company

2.1.1 Scope

- (A) The Company shall be responsible only for the installation, operation, and maintenance of the services it provides.
- (B) The Company will, for maintenance purposes, test its services only to the extent necessary to detect and/or clear troubles.
- (C) Services are provided 24 hours daily, seven days per week, where available, except as set forth in other applicable sections of this tariff.
- (D) The Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.2 Limitations

- (A) The customer may not assign or transfer the use of services provided under this tariff except as provided herein. Where there is no interruption of use or relocation of the services, such assignment or transfer may be made to:
- (1) another customer, whether an individual, partnership, association, or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or
 - (2) a court-appointed receiver, trustee, or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation, or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any.

In all cases of assignment or transfer, the written acknowledgment of the Company is required prior to such assignment or transfer which acknowledgment shall be made within 15 days from the receipt of notification. All regulations and conditions contained in this tariff shall apply to such assignee or transferee.

The assignment or transfer of services does not relieve or discharge the assignor or transferor from remaining jointly or severally liable with the assignee or transferee for any obligations existing at the time of the assignment or transfer.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.2 Limitations (Cont'd)

- (B) Services offered herein will be provided to customers on a first-come, first-served basis.

First-come first-served shall be based upon the received time and date stamped by the Company on complete and accurate customer orders which allow the Company to initiate its ordering process. The customer shall not be penalized for any delay in the Company review process beyond 1 working day of receipt. To the extent the order does not allow the Company to initiate the ordering process, the Company will attempt to complete the ordering process verbally with the customer. Once having been advised of the errors and/or omissions, any delay in correction on the part of the customer shall be added to the received time.

2.1.3 Liability

- (A) The Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by a customer or by any others, for damages associated with the installation, provision, preemption, termination, maintenance, repair, or restoration of service, and subject to the provisions of (B) through (H) following, the Company's liability, if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.
- (B) The Company shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall the for its own act or omission hold liable any other carrier or customer providing a portion of a service.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.3 Liability (Cont'd)

- (C) The Company is not liable for damages to the customer premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Company's negligence.
- (D) The Company shall be indemnified, defended and held harmless by the end user against any claim, loss, or damage arising from the end user's use of services offered under this tariff, involving:
 - (1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;
 - (2) Claims for patent infringement arising from the end user's acts combining or using the service furnished by the Company in connection with facilities or equipment furnished by the end user or IC or;
 - (3) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this tariff.
- (E) The Company shall be indemnified, defended and held harmless by the IC against any claim, loss or damage arising from the IC's use of services offered under this tariff, involving:
 - (1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the IC's own communications;

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.3 Liability (Cont'd)

(E) (Cont'd)

(2) Claims for patent infringement arising from the IC's acts combining or using the service furnished by the Company in connection with facilities or equipment furnished by the end user or IC or;

(3) All other claims arising out of any act or omission of the IC in the course of using services provided pursuant to this tariff.

(F) The Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Company shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.

(G) No license under patents (other than the limited license to use) is granted by the Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

(H) The Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Company, and other circumstances beyond the Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.3 following.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Company (Cont'd)

2.1.4 Provision of Services

The Company, to the extent that such services are or can be made available with reasonable effort, and after provision has been made for the Company's Telephone Exchange Services, will provide to the customer upon reasonable notice services offered in other applicable sections of this tariff at rates and charges specified therein.

2.1.5 Maintenance of Services

The services provided under this tariff shall be maintained by the Company. The customer or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by the Company, other than by connection or disconnection to any interface means used, except with the written consent of the Company.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.6 Changes and Substitutions

Except as provided for equipment and systems subject to FCC Part 68 Regulations at 47 C.F.R. Section 68.110 (b), the Company may, where such action is reasonably required in the operation of its business, (A) substitute, change or rearrange any facilities used in providing service under this tariff, including but not limited to substitution of carrier or derived facilities for wire facilities used to provide services (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of the Company.

The Company shall not be responsible if any such substitution, change or rearrangement renders any customer furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the Company will provide reasonable notification to the customer in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics. The Company will work cooperatively with the customer to determine reasonable notification requirements.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.7 Refusal and Discontinuance of Service

- (A) When the customer's account is thirty (30) days past due, and the customer fails to comply with the provisions of Section 2, the Telephone Company may send a written notice to the customer regarding such noncompliance. The Telephone Company will send this delinquency notice via overnight Certified U.S. Mail or other commercial courier to the person the customer has designated to receive such notices of noncompliance. If the customer has not designated a person to whom notices should be sent, the Telephone Company will send the notice to the address where it sends invoices to the customer. The Telephone Company will give the customer fifteen (15) days from the day the Telephone Company mails the notice to comply and bring its applicable account current. If the customer does not bring its applicable account current and into compliance by the end of that 15-day period (when the account is 45-days past due), the Telephone Company may refuse additional applications for service, or may refuse to complete pending orders for service, or both. The Telephone Company may process additional applications for service and/or complete orders during the fifteen (15) days. However, nothing contained herein shall preclude the Telephone Company's right to refuse additional applications for service and/or to refuse to complete pending orders for the non-complying customer after this 15-day period without further notice to the customer.
- (B) When the account is forty-five (45) days past due, and the customer has not complied and its applicable account is not current, the Telephone Company may send a disconnect notice to the customer. This notice shall give the customer an additional fifteen (15) days from the day the Telephone Company mails the disconnect notice to bring its applicable account current and into compliance. If the customer does not bring its applicable account current and into compliance by the end of this second 15-day period (when the account is 60-days past due), the Telephone Company may discontinue existing services in addition to exercising its rights described above in Part (A). If the Telephone Company does not disconnect the existing services, nothing contained herein shall preclude the Telephone Company's right to disconnect existing services to the non-complying customer without further notice to the customer.

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Company (Cont'd)2.1.7 Refusal and Discontinuance of Service (Cont'd)

(C) When access service is provided by more than one company, the Companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Company (Companies) affected by the nonpayment is (are) incapable of effecting discontinuance of service without cooperation from the other joint provider(s) of Switched Access Service, such other Company (Companies) will, if technically feasible, assist in denying the joint service to the customer. Service denial for such joint service will only include calls which originate or terminate within, or transit, the operating territory of the Company (Companies) initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Company shall apply for joint service discontinuance.

2.2 Use2.2.1 Unlawful Use

The service provided under this tariff shall not be used for an unlawful purpose.

2.3 Obligation of the Customer2.3.1 Damages

The customer shall reimburse the Company for damages to Company facilities utilized to provide services under this tariff caused by the negligence or willful act of the customer or resulting from the customer's improper use of the Company facilities, or due to malfunction of any facilities or equipment provided by other than the Company. Nothing in the foregoing provision shall be interpreted to hold one customer liable for another customer's actions. The Company will, upon reimbursement for damages, cooperate with the customer in prosecuting a claim against the person causing such damage and the customer shall be subrogated to the right of recovery by the Company for the damages to the extent of such payment.

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Company to provide service under the provisions of this tariff shall remain the property of the Company. Such facilities shall be returned to the Company by the customer, whenever requested, within a reasonable period following the request in as good condition as reasonable wear will permit.

2.3.3 Equipment Space and Power

The customer shall furnish or arrange to have furnished to the Company, at no charge, equipment space with suitable environmental characteristics and electrical power required by the Company to provide services under this tariff at the points of termination of such services. The selection of ac or dc power shall be mutually agreed to by the customer and the Company. The customer shall also make necessary arrangements in order that the Company will have access to such spaces at reasonable times for installing, testing, testing, repairing or removing Company services.

2.3.4 Availability for Testing

The services provided under this tariff shall be available to the Company at times mutually agreed upon in order to permit the Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be completed within a reasonable time. No credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Design of Customer Services

The customer shall be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Company, minimum protection criteria or operating or maintenance characteristics of the facilities.

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.6 References to the Company

The customer may advise End Users that certain services are provided by the Company in connection with the service the customer furnishes to End Users; however, the customer shall not represent that the Company jointly participates in the customer's services

2.3.7 Claims and Demands for Damages

- (A) With respect to claims of patent infringement made by third persons, the customer shall defend, indemnify, protect and save harmless the Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the customer.
- (B) The customer shall defend, indemnify and save harmless the Company from and against any suits, claims, losses or damages, and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the customer's circuits, facilities, or equipment connected to the Company's services provided under this tariff, including, without limitation, Workmen's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the customer's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the customer to obtain or maintain in effect any necessary certificates, permits,

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.7 Claims and Demands for Damages (Cont'd)

(B) (Cont'd)

licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification shall not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims, or demands are based on the tortious conduct of the customer, its officers, agents or employees.

(C) The customer shall defend, indemnify and save harmless the Company from and against any suits, claims, losses or damages, including court costs by the customer or third parties arising out of any act or omission of the customer in the course of using services provided under this tariff.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances2.4.1 Payment of Rates, Charges and Deposits

- (A) The Telephone Company will, in order to safeguard its interests, require a customer which has a proven history of late payments to the Telephone Company or does not have established credit, to make an advance payment, or make a deposit (prior to or at any time after the provision of a service to the customer) to be held by the Telephone Company as a guarantee of the payment of rates and charges. No such advance payment, or deposit will be required of a customer which is a successor of a company which has established credit and has no history of late payments to the Telephone Company. Such advance payment or deposit may not exceed the actual or estimated rates and charges for the service for a two-month period. The fact that a deposit has been made in no way relieves the customer from complying with the Telephone Company's regulations as to the prompt payment of bills. At such time as the provision of the service to the customer is terminated, the remaining amount of the advance payment or deposit will be credited to the customer's account and any credit balance which may remain will be refunded.

A deposit may be refunded or credited the account when the customer has established credit or, in any event, after the customer has established a one-year prompt payment record at any time prior to the termination of the provision of the service to the customer. In case of a cash deposit, for the period the deposit is held by the Telephone Company, the customer will receive interest at the same percentage rate as that set forth in (B) (3) (b) (I) or in (B) (3) (b) (II), whichever is lower. The calculation will be based on the number of days from the date the customer deposit is received by the Telephone Company to and including the date such deposit is credited to the customer's account or the date the deposit is refunded by the Telephone Company. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the customer's account. Advance payments of a customer's account will not receive interest.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(B) The Telephone Company shall bill on a current basis all charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Telephone Company shall bill in advance charges for all services to be provided during the ensuing billing period. The bill day (i.e., the billing date of a bill for a customer for Access Service under this tariff), the period of service each bill covers and the payment date will be as follows:

- (1) The Telephone Company will establish a bill day each month for each customer account.
- (2) Amounts not paid within 31 days of invoice will be considered past due. Interest at a rate of 1.5% per month may be applied to any unpaid amount commencing 31 days after the statement date.
- 3) A check return charge will be assessed for checks with insufficient funds or non-existing accounts.

Check Return Charge \$20.00

(C) Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period set forth for services in other sections of this tariff will be prorated to the number of days or major fraction of days based on a 30 day month. Company will, upon request and if available, furnish such detailed information as may reasonably be required for verification of any bill.

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except as noted otherwise.

When a service is discontinued prior to the expiration of the Minimum period, a one month charge will apply at the rate level in effect at the time service is discontinued.

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.3 Credit Allowance for Service Interruptions(A) General

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company, and ends when the service is operative.

(B) When a Credit Allowance Applies

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the customer, shall be as follows:

- (1) For DS1 and DS3 service, no credit shall be allowed for an interruption of less than thirty (30) minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues.

The monthly charges used to determine the credit shall be as follows:

- (a) For DS1 and DS3 services, the monthly charge shall be the total of all the monthly rate element charges associated with the service.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.3 Credit Allowance for Service Interruptions (Cont'd)(C) When A Credit Allowance Does Not Apply

No credit allowance will be made for:

- (1) Interruptions caused by the negligence of the customer.
- (2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others.
- (3) Interruptions of a service during any period in which the Company is not afforded access to the premises where the service is terminated.
- (4) Interruptions of a service when the customer has released that service to the Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service. Thereafter, a credit allowance as set forth in (B) preceding applies.
- (5) Periods when the customer elects not to release the service for testing and/or repair and continues to use it on an impaired basis.
- (6) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar.

(D) Temporary Surrender of a Service

In certain instances, the customer may be requested by the Company to surrender a service for purposes other than maintenance, testing or activity relating to a service order. If the customer consents, a credit allowance will be granted. The credit allowance will be 1/1440 of the monthly rate for each period of 30 minutes or fraction thereof that the service is surrendered. In no case will the credit allowance exceed the monthly rate for the service surrendered in any one monthly billing period.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions

Certain terms used herein are defined as follows:

Access Code

The term "Access Code" denotes a uniform five or seven digit code assigned by the Company to an individual customer. The five digit code has the form 10XXX, and the seven digit code has the form 101XXXX and 950-XXXX.

Access Minutes

The term "Access Minutes" denotes that usage of exchange facilities in interstate or foreign service for the purpose of calculating chargeable usage. On the originating end of an interstate or foreign call, usage is measured from the time the originating end user's call is delivered by the Company to and acknowledged as received by the customer's facilities connected with the originating exchange. On the terminating end of an interstate or foreign call, usage is measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both originating and terminating ends of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

Access Tandem

The term "Access Tandem" denotes a Company switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer's premises.

Access Tandem Trunk Port

The Access Tandem Trunk Port is a port for each dedicated trunk on the serving Wire Center side of the access tandem.

Aggregator

The term "Aggregator" denotes any person that, in the ordinary course of operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services as defined under Part 64.708(b) of the FCC Rules and Regulations. Further included in this definition are universities, hospitals, hotels, and other entities which provide services to the general public for users of its premises for interstate calls.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Answer/Disconnect Supervision

The term "Answer/Disconnect Supervision" denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer's point of termination as an indication that the called party has answered or disconnected.

Asynchronous Transfer Mode

Asynchronous Transfer Mode means a high-speed, cell-based, connection-oriented, packet transmission protocol for handling data with varying bursts and bit rates.

Attenuation Distortion

The term "Attenuation Distortion" denotes the difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified.

Automatic Number Identification (ANI)

The term "Automatic Number Identification (ANI)" denotes the provision of automatic transmission of a seven or ten digit number and information digits to the customer's premises for calls originating in the LATA, to identify the calling station. Also see "Flexible Automatic Number Identification".

Balance (100 Type) Test Line

The term "Balance (100 Type) Test Line" denotes an arrangement in an end office which provides for balance and noise testing.

Bit

The term "Bit" denotes the smallest unit of information in the binary system of notation.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Cable Vault

A space designated by the Company which serves as the cable entrance to the Serving Wire Center.

Call

The term "Call" denotes a customer attempt for which the complete address code (e.g., 0-, 911, or 10 digits) is provided to the serving dial tone office.

Call Gapping

The term "Call Gapping" denotes the routing of originating calls to all transmission paths in a trunk group at a prescribed rate of flow, e.g., one call every five seconds, in order to limit (choke) the completion of such traffic. Calls which are denied access, i.e., the choked calls, would be routed to a no-circuit announcement.

Carrier or Common Carrier

See Interexchange Carrier.

Carrier Identification Parameter

A feature allowing the CCS/SS7 call setup protocol to carry the Carrier Identification Code (CIC) through interconnected networks.

Central Office

The term "Central Office" denotes a local Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks.

Central Office Prefix

The term "Central Office Prefix" denotes the first three digits (NXX) of the seven digit telephone number assigned to a customer's Telephone Exchange Service when dialed on a local basis.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Centralized Automatic Reporting on Trunks Testing

The term "Centralized Automatic Reporting on Trunks Testing" denotes a type of testing which includes the capacity for measuring operational and transmission parameters.

Channel(s)

The term "Channel(s)" denotes an electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two or more points of termination.

Channel Service Unit

The term "Channel Service Unit" denotes equipment which performs one or more of the following functions: termination of a digital facility, regeneration of digital signals, detection and/or correction of signal format errors and remote loop back.

Channelize

The term "Channelize" denotes the process of multiplexing-demultiplexing wider bandwidth or higher speed channels into narrower bandwidth or lower speed channels.

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

C-Notched Noise

The term "C-Notched Noise" denotes the C-message frequency weighted noise on a voice channel with a holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Committed Information Rate (CIR)

The user's throughput that the network commits to support under normal network conditions. This is measured in bits per second.

Committed Burst Size (CBS)

The maximum amount of user data that the network agrees to transfer, under normal conditions, during one second. This is equal to the special access circuit interface speed.

Common Channel Signaling

The term "Common Channel Signaling" (CCS) denotes a high speed packet switched communications network which is separate (out of band) from the public packet switched and message networks. Its purpose is to carry addressed signaling messages for individual trunk circuits and/or database related services between Signaling Points in the CCS network.

Common Channel Signaling Access Capability

The term "Common Channel Signaling Access Capability" (CCSAC) denotes option which allows customers access to the CCS signaling network to transmit/receive signals for call set-up out of band. The Signaling links established between the signaling point of interconnection and the signaling transfer points and the Signaling Transfer Point Port Terminations are requirements of the capability.

Common Channel Signaling Access Capability Signaling Link

The "Common Channel Signaling Access Capability (CCSAC) Signaling Link" provides a 56 kbps Facility dedicated to a single customer which originates at the customer's signaling point of interface in a LATA and terminates at the Company's Signaling Transfer Point (STP). This facility connects the customer to the STP and is a requirement with the CCSAC option.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Common Line

The term "Common Line" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Company, terminated on a central office switch. A common line-residence is a line or trunk provided under the regulations of the general and/or local exchange service tariffs for a residence Class of Service. A common line-business is a line provided under the regulations of the general and/or local exchange service tariffs for a nonresidence Class of Service. For purposes of this tariff, any reference to "business" is considered to reference "nonresidence".

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment.

Conventional Signaling

The inter-machine signaling system which has been traditionally used in North America for the purpose of transmitting the called number's address digits from the originating end office to the switching machine which will terminate the call. In this system, all of the dialed digits are received by the originating switching machine, a path is selected, and the sequence of supervisory signals and outpulsed digits is initiated. No overlap outpulsing, ten-digit ANI, ANI information digits, or acknowledgement wink are included in this signaling sequence.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Customer(s)

The term "Customer(s)" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the services offered under this tariff, including, but not limited to, Interexchange Carriers (ICs), End Users, and Enhanced Service Providers (ESPs).

Data Base Query

The term "Data Base Query" denotes a Signaling System 7 (SS7) message launched from a Service Switching Point (SSP) requesting processing instructions or service data contained in a centralized data base.

Data Transmission (107 Type) Test Line

The term "Data Transmission (107 Type) Test Line" denotes an arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

Decibel

The term "Decibel" denotes a unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

Decibel Reference Noise C-Message Referenced to 0

The term "Decibel Reference Noise C-Message Referenced to 0" denotes noise power in "Decibel Reference Noise C-Message Weighting" referred to or measured at a zero transmission level point.

Decibel Reference Noise C-Message Weighting

The term "Decibel Reference Noise C-Message Weighting" denotes noise power measurements with C-Message Weighting in decibels relative to a reference 1000 Hz tone of 90 dB below 1 milliwatt.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Demarcation Point

Demarcation Point means the point of physical separation of CBT's network, and associated responsibilities, from Customer's network and associated responsibilities. The location of the Demarcation Point shall be the physical interface for IAN Advantage service presented by CBT to Customer.

Design and Construction Work

All work by the Company, including but not limited to, space design and preparation, the rearrangement of existing facilities, design and placement of required support structure or any other activity required to accommodate the installation of an Interconnector's facilities in the Company's space(s) covered under this tariff. Similar work required or requested by Interconnector after initial installation solely because of the existence of the Interconnector's facilities shall be referred to as "Additional Design and Construction", and shall be at Interconnector's expense.

Detail Billing

The term "Detail Billing" denotes the listing of each message and/or rate element for which charges to a customer are due on a bill prepared by the Company.

Direct - Trunked Transport Facility

The term "Direct-Trunked Transport Facility" denotes a Switched Transport facility between a customer's premises serving wire center and an end office or between a customer's serving wire center and an access tandem that provides a customer with dedicated switched access transport.

Echo Control

The term "Echo Control" denotes the control of reflected signals in a telephone transmission path.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of termination without regard to the send and receive Transmission Level Point.

Echo Return Loss

The term "Echo Return Loss" denotes a frequency weighted measure of return loss over the middle of the voiceband (approximately 500 to 2500 Hz), where talker echo is most annoying.

Effective 2-Wire

The term "Effective 2-Wire" denotes a condition which permits the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

Effective 4-Wire

The term "Effective 4-Wire" denotes a condition which permits the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective 4-wire transmission is at the discretion of the Company (physical, time domain, frequency-domain separation or echo cancellation techniques). Effective 4-wire channels may be terminated with a 2-wire interface at the customer's premises. However, when terminated 2-wire, simultaneous independent transmission cannot be supported because the two wire interface combines the transmission path into a single path.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)800 Access Service

800 Access Service denotes a service which provides 10-digit screening as an originating switched access service. This 10-digit screening determines the Interexchange Carrier to which a call is routed.

End Office Switch

The term "End Office Switch" denotes a local Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to trunks. Included are Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

End User

The term "End User" denotes any customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier other than a Company shall be deemed to be an "end user" when such carrier uses a telecommunications service for administrative purposes and a person or entity that offers telecommunications services exclusively as a reseller shall be deemed to be an "end user" if all resale transmissions offered by such reseller originate on the premises of such reseller.

End User Port Charge

The End Use Port charge applies to ISDN lines only.

Entrance Facility

The term "Entrance Facility" denotes a Switched Transport dedicated facility between a customer premises and a customer's premises serving wire center that provides a customer with switched access transport between the customer's premises and its serving wire center.

Envelope Delay Distortion

The term "Envelope Delay Distortion" denotes a measure of the linearity of the phase shift versus frequency of a channel.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Equal Level Echo Path Loss

The term "Equal Level Echo Path Loss" (ELEPL) denotes the measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP). [ELEPL = EPL - TLP (send) + TLP (receive)]

Ethernet LAN

Ethernet LAN means a type of LAN whereby a workstation on the LAN, prior to sending a message to another workstation on the LAN, "listens" to determine if any other workstation is sending a message. If the first workstation "hears" no other messages being sent, it is permitted to send a message. If two or more workstations begin sending messages simultaneously, then each workstation ceases sending the message and a pre-set amount of time must elapse before either workstation may attempt to send again. Ethernet LAN meets IEEE standards 802.3 and 802.3u and operates at a variety of speeds.

Excess Burst Size (EBS)

The maximum amount of uncommitted data exceeding the CBS that the network will attempt to deliver during one second.

Exchange

The term "Exchange" denotes a unit generally smaller than a Local Access and Transport Area, established by the Company for the administration of communications service in a specified area which usually embraces a city, town or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area. One or more designated exchanges comprise a given Local Access and Transport Area.

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-end 1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

Exit Message

The term "Exit Message" denotes a SS7 message sent to an end office by the Company's tandem switch to mark the Carrier Connect Time when the Company's tandem switch sends an Initial Address Message to an Interexchange customer.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)First Point of Switching

The term "First Point of Switching" denotes the first Company location at which switching occurs on the terminating path of a call proceeding from the customer premises to the terminating end office and, at the same time, the last Company location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer premises.

Flexible Automatic Number Identification (Flex ANI)

The term "Flexible Automatic Number Identification" denotes the provision of additional values for the information indicator digits available with the Automatic Number Identification feature on originating calls. The additional information digits are used to identify the class or type of service from which the call originated.

Frame

In Frame Relay Service, the term "Frame" denotes a group of data bits in a specific format, which enables network equipment to recognize the meaning and purpose of the specific bits.

Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.

Grandfathered

The term "Grandfathered" denotes Terminal Equipment, Multiline Terminating Systems and Protective Circuitry directly connected to the facilities utilized to provide services under the provisions of this tariff, and which are considered grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.

Host Computer

The term "Host Computer" denotes one or more processor(s) and its (their) associated software and peripheral equipment which together form an intelligent processor or device connected to a network that satisfies the needs of remote users connected to such processor or device.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Host Office

The term "Host Office" denotes an electronic switching system which provides call processing capabilities for one or more Remote Switching Modules or Remote Switching Systems.

Hundred Call Seconds

A standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

Immediately Available Funds

The term "Immediately Available Funds" denotes a corporate or personal check drawn on a bank account and funds which are available for use by the receiving party on the same day on which they are received and include U.S. Federal Reserve bank wire transfers, U.S. Federal Reserve Notes (paper cash), U.S. coins, U.S. Postal Money Orders and New York Certificates of Deposit.

Impedance Balance

The term "Impedance Balance" denotes the method of expressing Echo Return Loss and Singing Return Loss at a 4-wire interface whereby the gains and/or loss of the 4-wire portion of the transmission path, including the hybrid, are not included in the specification.

Impulse Noise

The term "Impulse Noise" denotes any momentary occurrence of noise on a channel over a specified threshold level. It is evaluated by counting the number of occurrences which exceed the threshold.

Individual Case Basis

The term "Individual Case Basis" denotes a condition in which the regulations, if applicable, rates and charges for an offering under the provision of this tariff are developed based on the circumstances in each case.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Initial Address Message

The term "Initial Address Message" denotes a SS7 message sent in the forward direction to initiate trunk set up with the busying of an outgoing trunk which carries the information about that trunk along with other information relating to the routing and handling of the call to the next switch.

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the power at the originating end and the power reaching the terminating end through the inserted connection.

Interconnection Charge

The Interconnection Charge recovers the costs associated with Switched Transport that are not recovered by the Entrance Facilities, Direct-Trunked Transport, Tandem-Switched Transport, Multiplexing, or CCSAC rates. The Interconnection Charge applies to all access minutes of use (i.e., both Tandem-Switched and Direct Trunked).

Interexchange Carrier (IC) or Interexchange Common Carrier

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denote any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communications by wire or radio, between two or more exchanges.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the non-linearity of a channel. It is measured using four tones, and evaluating the ratios (in dB) of the transmitted composite four-tone signal power to the second-order products of the tones (R2), and the third-order products of the tones (R3).

Interstate Communications

The term "Interstate Communications" denotes both interstate and foreign communications.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Intrastate Communications

The term "Intrastate Communications" denotes any communications within a state subject to oversight by a state regulatory commission as provided by the laws of the state involved.

Letter of Authorization (LOA)

The term "Letter of Authorization" (LOA) denotes the signed authorization form from a customer designating the primary IC (PIC) for interLATA access.

Line-Side Connection

The term "Line-Side Connection" denotes a connection of a transmission path to the line side of a local exchange switching system.

Local Access and Transport Area

The term "Local Access and Transport Area" denotes a geographic area established for the purpose of defining the area within which the Company will offer its telecommunications services

Local Switching Dedicated Trunk Port

The Local Switching Dedicated Trunk Port provides for termination of a dedicated trunk in the end office port.

Local Switching Common Trunk Port

The Local Switching Shared Trunk Port provides for the use of the shared end office trunk ports for terminating of common transport trunks for tandem switched traffic.

Local Tandem Switch

The term "Local Tandem Switch" denotes a local Telephone Company switching unit by which local or access telephonic communications are switched to and from an End Office Switch.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Loop Around Test Line

The term "Loop Around Test Line" denotes an arrangement utilizing a Company central office to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two central office terminations, each reached by means of separate telephone numbers and does not require any specific customer premises equipment. Equipment subject to this test arrangement is at the discretion of the customer.

Loss Deviation

The term "Loss Deviation" denotes the variation of the actual loss from the designed value.

Major Fraction Thereof

The term "Major Fraction Thereof" is any period of time in excess of 1/2 of the stated amount of time. As an example, in considering a period of 24 hours, a major fraction thereof would be any period of time in excess of 12 hours exactly. Therefore, if a given service is interrupted for a period of thirty six hours and fifteen minutes, the customer would be given a credit allowance for two twenty-four hour periods for a total of forty eight hours.

Manhole

An underground enclosure where the feeder route conduit system terminates and which provides ready access to the Conduit Space.

Metropolitan Area Network (MAN)

Metropolitan Area Network (MAN) means a network connecting computers and other peripheral equipment for data communications over a larger geographical area than a LAN, usually within a city or region.

Native Mode

"Native Mode" of a LAN means the operating speed of the communication on the originating or terminating LAN.

LAN Advantage

"LAN Advantage" means the engineering, configuration, installation, maintenance and repair services provided by CBT to Customer necessary to interconnect multiple LANs to form a MAN for data transmission.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Network Control Signaling

The term "Network Control Signaling" denotes the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status, and charge signals), address signaling (e.g., dialing), calling and called number identifications, rate of flow, service selection error control and audible tone signals (call progress signals indicating re-order or busy conditions, alerting, coin denominations, coin collect and, coin return tones) to control the operation of the telecommunications system.

Network Management Control

The term "Network Management Control" denotes the type of control that the Company may need to implement when a substantial number of calls are expected during a short period of time.

North American Numbering Plan

The term "North American Numbering Plan" denotes a three-digit area (Numbering Plan Area) code and a seven-digit telephone number made up of a three-digit Central Office code plus a four-digit station number.

Off-hook

The term "Off-hook" denotes the active state of a Switched Access or a Telephone Exchange Service line.

On-hook

The term "On-hook" denotes the idle state of a Switched Access or a Telephone Exchange Service line.

Open Circuit Test Line

The term "Open Circuit Test Line" denotes an arrangement in an end Office which provides termination of a trunk or line by means of an inductor of several Henries. The impedance is so high as to be virtually an open circuit to alternating current at the frequencies used in voice communications.

Originating Direction

The term "Originating Direction" denotes the use of Access Service for the origination of calls from an end users premises to an IC premises.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Overlap Outpulsing

The feature of the equal access signaling system which permits initiation of pulsing to the customer's premises before the calling subscriber has completed dialing an originating call.

Peaked Service

The term "Peaked Service" denotes a service that will produce a substantial call volume during a short period of time, e.g., media stimulated events, that may cause excessive network congestion.

Periodic Inspection

Work activities performed by the Company at irregular intervals to determine that the Interconnector's Facilities are authorized and are installed and maintained in conformance with the Company's required standards. The Company will notify the Interconnector by phone, with confirmation in writing, five (5) business days in advance of such inspections and the Interconnector shall have the right to be present at the time of inspection.

Phase Jitter

The term "Phase Jitter" denotes the unwanted phase variations of a signal.

Point of Termination

The term "Point of Termination" denotes the point of demarcation within a customer-designated premises at which the Telephone Company's responsibility for the provision of Access Service ends.

Power, D.C.

Nominal 48-volt power derived from the Company's rectifier and battery DC plant voltage with generator backup. D.C. Power can vary between 54.00 volts (high voltage shutdown) and 44.64 volts (5E shutdown). Normal plant float voltage is 52.08 volts.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Premises

The term "Premises" denotes a building or a portion of a building in a multi-tenant building, or buildings on continuous property (except railroad right-of-way, etc.) not separated by a public highway.

Primary IC (PIC)

The term "Primary IC" (PIC) denotes a customer designated Interexchange Carrier (IC). The PIC is designated by the customer on a signed Letter of Authorization (LOA) or verbally through the Business Service Center. The PIC allows a customer to access interLATA calls without dialing an access code.

Prime Service Vendor

The term "Prime Service Vendor" denotes the status of the Telephone Company when contracting directly with the user of TSP service.

Protected Ports

Protected Ports" provides customers with a primary and secondary port in both the central office and at the customer's location, which enables traffic to recover to a secondary route automatically in the event of a primary route failure, therefore protecting all of the customer's data.

Remote Switching Modules and/or Remote Switching Systems

The term "Remote Switching Modules and/or Remote Switching Systems" denotes remotely controlled electronic end office switches which obtain their call processing capability from an ESS-type Host Office. The Remote Switching Modules and/or Remote Switching Systems cannot accommodate direct trunks to a customer.

Return Loss

The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the greater the similarity.

Registered Equipment

The term "Registered Equipment" denotes the customer's premises equipment which complies with and has been approved within the Registration Provisions of Part 68 of the F.C.C.'s Rules and Regulations.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Service Switching Point

The term "Service Switching Point" (SSP) denotes a switch in the Company's Common Channel Signaling (CCS) network equipped with the functionality to interact with a data base using Signaling System 7 (SS7) messages to obtain call routing information.

Serving Wire Center

The term "Serving Wire Center" denotes the wire center from which the customer designated premises would normally obtain dial tone from the Company.

Seven Digit Manual Test Line

The term "Seven Digit Manual Test Line" denotes an arrangement which allows the customer to select balance, milliwatt and synchronous test lines by manually dialing a seven digit number over the associated access connection.

Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides termination of a trunk or line by means of a capacitor of at least four microfarads. The impedance is so low as to be virtually a short circuit to alternating current at the frequencies used in voice communications.

Signal-to-C Notched Noise Ratio

The term "Signal-to-C Notched Noise Ratio" denotes the ratio in dB of a test signal to the corresponding C-Notched Noise, i.e., the level in dB by which the signal exceeds the noise.

Signaling Transfer Point

The term "Signaling Transfer Point" denotes a specialized switch which provides CCS network access and performs SS7 message screening, routing, and/or transferring of such signaling information through the common channel signaling network.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Signaling Transfer Point Port Termination

The "Signaling Transfer Point Port Termination" provides a customer dedicated point of interface at the Company's STP for each of the customer's CCSAC Signaling Links.

Signaling Point of Interconnection

The term "Signaling Point of Interconnection" denotes the customer designated location where SS7 signaling information is exchanged between the Company and the Customer.

Signaling System 7

The term "Signaling System 7" denotes common channel out of band signaling using the SS7 protocol developed by the Consultative Committee for International Telephone and Telegraph (CCITT) and the American National Standards Institute (ANSI).

Singing Return Loss

The term "Singing Return Loss" denotes the frequency weighted measure of return loss at the edges of the voiceband (200 to 500 Hz and 2500 to 3200 Hz), where singing (instability) problems are most likely to occur.

Subcontractor

The term "Subcontractor" denotes the status of the Company when contracting directly with a Prime Service Vendor to provide TSP to a service user.

Switching Systems

The term "Switching System" denotes the hardware and/or software utilized by the Company for the establishment and maintenance of a given central office.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Synchronous Optical Network (SONET)

A set of international standards for fiber optic-based transmission systems. SONET defines standard optical carrier transmission rates and utilizes a modular multiplexing approach based on the application of Synchronous Transport Signals (STS).

Synchronous Test Line

The term "Synchronous Test Line" denotes an arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

Synchronous Transport Signal (STS-1)- a 51.84 Mbps signal within a SONET optical carrier signal. The STS-1 signal consists of overhead and synchronous payload envelope (SPE). The overhead part of the signal is used for controlling, framing and maintaining the signal. The SPE is used to transport the customer's data.

Tandem-Switched Transmission Charge

The Tandem-Switched Transmission charge is a mileage sensitive, per minute of use rate which applies to the transmission of the customer's traffic from the customer's serving wire center, through the Company's Access Tandem, to the customer designated Company end office(s), or from the Access Tandem to the end office(s).

Tandem-Switching Charge

The Tandem-Switching charge is a per minute of use rate element which applies to the switching used to move a customer's traffic through the Access Tandem to the Company's end office(s).

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from a customer premises to an end user premises.

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Transmission Measuring (105 Type) Test Line/Responder

The term "Transmission Measuring (105 Type) Test Line/Responder" denotes an arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

Transmission Path

The term "Transmission Path" denotes an electrical path capable of transmitting signals within the range of the service offering, e.g., a voice grade transmission path is capable of transmitting voice frequencies within the approximate range of 300 to 3000 Hz. A transmission path is comprised of physical or derived channels consisting of any form or configuration of facilities typically used in the telecommunications industry.

Trunk

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

Trunk Access Limitation

The term "Trunk Access Limitation" denotes the routing of originating calls to a specified number of transmission paths in a trunk group in order to limit (choke) the completion of such traffic. Calls which could not be completed over the subset of transmission paths in the trunk group, i.e., the choked calls, would be routed to reorder tone.

Trunk Group

The term "Trunk Group" denotes 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.

Trunk-Side Connection

The term "Trunk-Side Connection" denotes the connection of a Transmission path to the trunk side of a local exchange switching system

ACCESS SERVICE

2. General Regulations (Cont'd)2.5 Definitions (Cont'd)Two-Wire to Four-Wire Conversion

The term "Two-Wire to Four-Wire Conversion" denotes an arrangement which converts a four-wire transmission path to a two-wire transmission path to allow a four-wire facility to terminate in a two-way entity (e.g., a central office switch).

Unauthorized PIC Change

The term "Unauthorized PIC Change" denotes a customer whose selected PIC was changed and the IC is unable to produce the signed Letter of Authorization (LOA) or other form of valid authorization to the Company for the resolution of the PIC dispute.

V and H Coordinates Method

The term "V and H Coordinates Method" denotes a method of computing airline miles between two points by utilizing an established formula which is based on the vertical and horizontal coordinates of the two points.

Virtual LAN (VLAN)

The term Virtual LAN (VLAN) denotes a static logical connection used for point-to-multipoint, and multipoint-to-multipoint. VLANs support long-term ongoing connections between data terminal equipment. Permanent Logical paths are assigned exclusively to each VLAN in the network.

VLAN Tagging

The Term VLAN tagging denotes a way to label different traffic types so they may be differentiated from one another. VLAN Tagging can allow for different service levels for different traffic types.

ACCESS SERVICE

3. Switched Access Service3.1 General

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point electrical communications path between a customer's premises and an end user's premises. It provides for the use of common terminating, switching and trunking facilities and common subscriber plant of the Company. Switched Access Service provides for the ability to originate calls from an end user's premises to a customer's premises, and to terminate calls from a customer's premises to an end user's premises in the LATA where it is provided. Specific references to material describing the elements of Switched Access Service are provided in 3.1.1 and 3.1.2 following.

3.1.1 Switched Access Service Arrangements and Manner of Provision

Switched Access Services are differentiated by their technical characteristics, e.g., line side vs. trunk side connection at the Company entry switch, and the manner in which an end user accesses them in originating calling, e.g., with or without an access code. Following is a brief description of each type of service arrangement.

(A) Feature Group D (FGD)

FGD Access, which is available to all customers, provides Trunk side access to Company end office switches with an associated uniform 10XXX or 10XXXX access code for the customer's use in originating and terminating communications.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.1 Switched Access Service Arrangements and Manner of Provision(Cont'd)(B) 800 Access Service

800 Access Service, which is available to all customers, is an originating offering utilizing FGD Switched Access Service. The service provides a customer identification function based on the dialed 800 Series number. The 800 Series includes 800, 888, 877, 866, 855, 844, 833, 822. This customer identification function could include additional call handling and destination features, such as; alternate carrier(s) and/or alternate destination(s), time-of-day, day-of-week, specific dates, originating NPA-NXX-XXXX, percent allocation, routing to a single carrier and destination from an area of service which is smaller than an area defined by an NPA-NXX.

When a 1 + 800 Series + NXX + XXXX call is originated by an end user, the Company will perform the customer identification function based on the dialed 1 + 800 Series + NXX + XXXX (ten digit screening) to determine the customer location to which the call is to be routed. Where 800 Series prefixes are not part of ten digit screening, the customer identification function will be performed based on the 800 Series + NXX digits only (e.g., Canada). If an 800 Series call originates from an end office not equipped to provide the SSP Data Base Query function, the call will be routed to an office at which the function is available. The SSP Data Base Query function will be available at the tandem and select end offices. Once customer identification has been established, the call will be routed to the customer.

Unless prohibited by technical limitations (e.g., different dialing plans), the customer's 800 Access Service traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-800 Access Service traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for 800 Access Service.

When 800 Access Service traffic is combined in the same trunk group arrangement with other traffic, usage for the 800 Access Service traffic may be aggregated with or shown separately from the other traffic for billing purposes. When separate trunk groups are provided for 800 Access Service, usage will be billed separately.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories

The rate categories which apply to Switched Access Service are:

- Switched Transport (described in 3.1.2(A) following)
- Local Switching (described in 3.1.2(B) following)

(A) Switched Transport

The Switched Transport rate category establishes the charges related to the transmission and tandem facilities between the customer's premises and the end office switch(es) which may be a Remote Switching Module, where the customer's traffic is switched to originate or terminate the customer's communications. Mileage measurement rules are set forth in 3.5.7 following.

Switched Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user's end office switch to the customer's premises) and in the terminating direction (from the customer's premises to the end office switch), but not simultaneously. The voice frequency transmission path may comprise any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through the Company's access tandem switch or a TSP's access tandem switch, (2) the type of Direct-Trunked Transport and whether it will overflow to the Company's or a TSP's access tandem switch when service is directly routed to an end office, (3) the type of Entrance Facility, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided.

October 31, 2017

Effective: November 30, 2017

Issued:

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)

Additionally, when service is to be routed through an access tandem switch, the customer must specify whether the facility between the serving wire center and the tandem is to be provided as Direct-Trunked Transport or Tandem-Switched Transport.

Switched Transport is provided at the rates and charges set forth in 3.7.1 following. The description of these rates with respect to the different types of service is as set forth in 3.1.2 following.

(1) Switched Transport Facilities(a) Entrance Facility

An Entrance Facility provides the communication path between a customer's premises and the Company's serving wire center for that premises. The Entrance Facility is provided to a single customer and is available for use with all line side and trunk side Switched Access services. An Entrance Facility is provided even if the customer's premises and the serving wire center are located in the same building

(b) Direct-Trunked Transport Facility

A Direct-Trunked Transport facility provides the communications path between the serving wire center of a customer's premises and an end office, between the serving wire center of a customer's premises and the Company's Access tandem. Direct-Trunked Transport facilities are provided to a single customer. Direct-Trunked Transport facilities are available for use with all line side and trunk side Switched Access services.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)(1) Switched Transport Facilities (Cont'd)(c) Tandem-Switched Transport Facility

The Tandem-Switched Transport facility provides the communications path between the customer's serving wire center and the end office or between the tandem and the end office on circuits that are switched at an access tandem. Tandem-Switched Transport facilities are available for use with all trunk side Switched Access Services.

Tandem-Switched Transport charges consist of a Tandem-Switched Transmission charge (fixed and per mile minute of use charges) and a Tandem-Switching charge (per minute charge) where elements may apply independently of one another as described herein. For originating minutes, these charges apply to non-8YY minutes only (C)
(C)

(d) Access Tandem Trunk Port

The Access Tandem Trunk Port is a monthly per port rate that provides a port for each dedicated trunk on the Serving Wire Center side of the access tandem.

Issued: June 1, 2021

Effective: July 1, 2021

In Accordance with Case No. 21-0624-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)(2) Switched Transport Connections (Cont'd)

Switched Transport is comprised of specific connection types. These connections may be either analog or digital. Analog connections are differentiated by spectrum and bandwidth; digital connections are differentiated by bit rate. Depending on the spectrum, bandwidth or bit rate selected by the customer, multiplexing, as described in 3.7.1(D), may also be required to allow interconnection with other Switched Transport facilities or to a Company switch.

With one exception, the customer may choose the Switched Transport connection comprising the Switched Transport facility. For the tandem to end office portion of Tandem-Switched Transport, the Company will determine the type of connection used.

Each type of connection is composed of specific channels which are provided for use with a Switched Access service. Each channel in a Switched Transport following types of connections are available for all Switched Transport facilities.

(a) Mercury 1.544 (DS1)

A Mercury 1.544 (DS1) provides 24 channels for the transmission of nominal 64.0 kbps or 1.544 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)(b) Mercury 45 (DS3)

Mercury 45 (DS3) provides 28 Mercury 1.544s (DS1) or 672 DSO channels and provides for transmission of nominal 44.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer. With Mercury 45 (DS3), customers may request to have an electrical interface installed at their customer premises. For DS3 connections utilizing an electrical interface, the customer will receive an electrical signal with a transmission speed of 44.736 Mbps per channel

(3) Multiplexing

Multiplexing provides the capability of converting the capacity or bandwidth of a Switched Transport facility from a higher level to a lower level or from a lower level to a higher level. Multiplexing is required when the customer requests to interconnect Entrance facilities, or Direct - Trunked Transport facilities of different capacities or bandwidths, i.e., DS1 to Voice Grade or DS3 to DS1.

When customers request to interconnect DS3 facilities with Company switches, DS3 to DS1 multiplexing is required at appropriately equipped end offices. Locations where multiplexing is available are specified in the NECA Tariff F.C.C. No. 4.

Customers ordering Tandem Switched Transport will incur a multiplexing charge for multiplexing on the Serving Wire Center side of the Access Tandem and a multiplexing charge for multiplexing on the End Office side of the Access Tandem.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)

(3) Multiplexing

Rates and charges for multiplexing are set forth in 3.7.1. For each of the multiplexing options listed below, the multiplexer is associated with the Switched Transport facility with the higher capacity or bandwidth (e.g., a DS3 to DS1 multiplexer is associated with the facility DS3 connection).

(a) Mercury 45 (DS3) to Mercury 1.544 (DS1)

Available with all Switched Transport facilities using DS3 connections. Provides an arrangement that converts a DS3 signal to or from 28 DS1 channels. Conversion is accomplished using digital time division multiplexing.

(b) Mercury 1.544 (DS1) to Voice Grade

Available with all Switched Transport facilities using DS1 connections. Provides an arrangement that converts a DS1 connection to or from 24 voice grade channels. Conversion is accomplished using digital time division multiplexing.

(c) Common Multiplexing

Common Multiplexing is provided on a usage sensitive basis in conjunction with Tandem Switched Transport. Switched Access facilities are connected to the Tandem as DS1 circuits. Multiplexing is required to connect common switched facilities from DS3 to DS1.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)

(4) Chargeable Optional Features

(a) Common Channel Signaling Access Capability (CCSAC)

This option allows the customer to receive signals for call setup out-of-band. This option is only available with Feature Group D.

The Company will provide the CCSAC option in accordance with the technical specifications set forth in Technical Reference TR-TSV-000905 from properly equipped signaling elements in the Telephone Company CCS network.

This option requires the establishment of the required number of CCSAC signaling links between the customer's signaling point of interconnection and each of the Telephone Company's designated Signaling Transfer Points (STPs) and STP Port Terminations. The STP locations are set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4. The customer will have the option of ordering a Signaling Link provisioned over a dedicated Mercury 1.544 (DS1) Facility or over a 56 Kbps DDS channel.

(b) Carrier Identification Parameter (CIP)

The CIP Optional Feature provides for the delivery of the Carrier Identification Code (CIC) within the Initial Address Message (IAM) SS7 call setup protocol. CIP is available with originating Feature Group D Switched Access Service from certain end offices and from the access tandem. Customers should contact the Company

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)

(4) Chargeable Optional Features

(b) Carrier Identification Parameter (CIP) (Cont'd)

to determine where CIP is available. This feature requires the customer to purchase or use already established CCSAC signaling links between the customer's signaling point of interconnection and each of the Company's designated STPs and STP Port Terminations, as described in Section 3.7.1(G). The rates for the CIP Optional Feature are described in Section 3.7.1(I).

(c) Signaling for Tandem Switching

This option allows any interested third party, including competitive access providers (CAPS), interexchange carriers (IXCs), and end users, to receive signaling information necessary to provide tandem signaling. Signaling for tandem switching provides the carrier identification code (CIC) and the OZZ code (or the CKTD code for SS7) to the Tandem Switch Provider (TSP). The CIC identifies the IXC to receive the call, and the OZZ identifies the IXC trunk group to which traffic should be routed. This option is available only with Feature Group D (FGD).

The customer may choose to have this option provided with Multifrequency or Common Channel Signaling.

When tandem switching is provided by a TSP, the TSP will be required to order one-way

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(B) Switched Transport (Cont'd)

(4) Chargeable Optional Features

(c) Signaling for Tandem Switching (Cont'd)

direct-trunks between the desired Company end offices and the TSP's access tandem switch. These one-way trunks will be billed as direct-trunks to the TSP.

Either the TSP or the IXC using the TSP as its access tandem provider, may be the customer for the remaining FGD usage charges i.e., carrier common line, local switching, information surcharge and the interconnection charge. The signaling nonrecurring charge, described in Section 3.7.1, will be assessed to the TSP. Any link between the TSP's access tandem switch and an IXC Point of Presence (POP) location may be purchased from the Company's special access section in this tariff.

If an IXC wishes to move their traffic to a TSP's access tandem switch, the TSP must provide the Company with a written letter of authorization (LOA). If a TSP contacts the Company on behalf of an IXC to move the IXC traffic from the Company access tandem switch to a TSP access tandem switch, the IXC must provide the Company an LOA.

If the IXC is the customer of record, for terminating usage, the IXC's TSP of choice is obligated to provide the Telephone Company with all billing detail needed to accurately count and bill usage. The requirements for providing this billing data are described in the following paragraphs.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.1 General (Cont'd)3.1.2 Rate Categories (Cont'd)(C) Local Switching

This rate category provides for (1) local end office switching, i.e., the common switching functions associated with the various Switched Access Service arrangements, (2) the termination of switched transport at end offices, and (3) 800 Data Base Queries. This category includes usage sensitive rates and both chargeable and nonchargeable optional features.

- (a) Local Switching applies on a per minute of use basis, providing local switching functions for FGD, and 800 Access Service. Where end offices are appropriately equipped, international dialing may also be provided a capability of Local Switching, i.e., the capability of switching international calls with service prefix and address codes having more digits than can be switched through a standard FGD end office.
- (b) 800 Access Service, Data Base Query Charge and Routing Options Capability apply on a per query basis and are originating offerings utilizing FGD. These services provide customer identification and additional call handling and destination features (i.e., time of day, day of week, etc.). These services provide for the use of the Tandem Switching, Tandem Termination, and Tandem Transport facilities of the Company. The Company will not charge Carrier Common Line, Local End Office Switching, or End Office Port charges.

(1) Usage Sensitive Rates (Cont'd)

The description of these rates is set forth in 3.7.2 following.

3.1.3 Design Layout Report

At the request of the customer, the Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.1 General (Cont'd)

3.1.4 Acceptance Testing

At no additional charge, the Company will, at the customer's request, cooperatively test, at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling.

At no additional charge, the Company will, at the time of installation of Feature Group D with the 64CCC Local Transport option trunks, perform the Digital Trunk Acceptance Tests described in TR-TSV-000905.

3.1.5 Ordering Options and Conditions

To order Switched Access, customers should contact the Company as described in Section 3.6 following. Rate elements for Switched Access Services are defined in 3.7.

3.1.6 CCSAC Testing Requirements

When Feature Group D with CCSAC option is ordered, network compatibility and other operational tests will be performed cooperatively by the Company and the customer. These tests are as specified in Technical Reference TR-TSV-000905.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching3.2.1 Common Switching Optional features(A) Call Denial on Line or Hunt Group

This option allows for the screening of terminating calls within the LATA, and for the completion only of calls to 611, 911, 800, 555-1212, and a Telephone Company specified set of NXXs within the Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided. All other "toll" calls are routed to a reorder tone or recorded announcement.

(B) Uniform Call Distribution Arrangement

This option provides a type of multiline hunting arrangement which provides for an even distribution of calls among the available lines in a hunt group. Where available, this feature is provided in Company electronic end offices only.

(C) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement

This option provides an arrangement for an individual line within a multiline hunt or uniform call distribution group that provides access to that line within the hunt or uniform call distribution group when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed. Where available, this feature is provided in Company electronic end offices only

(D) Automatic Number Identification (ANI)

This option provides the automatic transmission of a seven or ten digit number and information digits to the customer's premises for calls originating in the LATA, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with (1) all individual transmission paths in a trunk group routed directly between an end office and a customer's premises or, where technically feasible, with (2) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer's premises.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(E) Automatic Number Identification (ANI) (Cont'd)

The ten digit ANI telephone number is only available with Feature Group D with multifrequency address signaling. When the CCSAC optional feature is specified, the customer may obtain an ANI equivalent by ordering the charge number (CN) optional feature as specified in 3.7.1 (G) following. The ten digit ANI telephone number consists of the Numbering Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as ANI failure, in which case only the NPA will be transmitted (in addition to the information digits described below).

Also, ANI Information Indicator (ANI II) digits or Flexible ANI information digits will be provided to the customer along with the ten digit ANI telephone number.

- (1) The ANI Information Indicator (ANI II) digits identify: (1) telephone number is the station billing number - no special treatment required, (2) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner, (3) hotel/motel originated call which requires room number identification, (4) coinless station, hospital, inmate, etc., call which requires special screening or handling by the customer, and (5) Local Exchange Company Coin.

ANI information digits are either 00, 01, 02, 06, 07, 20, or 27.

Customers who subscribe to ANI, may also elect to obtain expanded ANI digits, 52 for WATS, at no additional charge. Expanded ANI digits, 52 for WATS was previously provided in this tariff under the name Flexible ANI.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching Optional Features (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(E) Automatic Number Identification (ANI) (Cont'd)

- (2) Flexible Automatic Number Identification (Flex-ANI)
The Flex-ANI feature is an Optional Switching Feature and enhancement to ANI. The feature is available on inband signaling or in the Originating Line Information Parameter in the Basic Initial Address Message (IAM) Delivery optional feature for SS7 signaling. Flex-ANI provides additional values for the Information Indicator (ii) digits that are associated with various classes of service not available with the standard ANI digits. The customer must have ANI in order to have Flex-ANI or may order the features simultaneously.

The following Flex-ANI are currently available:

- 29 Confinement/Detention Facility
- 70 Private Pay stations

All ii codes will be delivered to the customer when Flex ANI is ordered.

Flexible ANI information digits must be ordered per Carrier Identification Code (CIC), per End Office and must be provisioned in conjunction with the ANI optional feature.

(F) Cut-Through

This option allows end users of the customer to reach the customer's premises by using the end of dialing digit (#). This option provides for connection of the call to the premises of the customer indicated by the 10XXX or 10XXXX code upon receipt of the end of dialing digit (#). The Company will not record any other dialed digits for these calls. This option is available with Feature Group D.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching Optional Features (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(G) 900/976 Call Blocking

This option, where available, allows for the screening of terminating calls within the LATA for the purpose of blocking 900/976 or "dial-it" type calls only. 900/976 calls are routed to a reorder tone or to a recorded announcement. This option is available with Feature Group A. 900/976 Call Blocking, Call Denial and Service Code Denial are mutually exclusive.

(H) Calling Party Number (CPN)

This option provides for the automatic transmission of the calling party's ten digit telephone number to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "Privacy Indicator" for delivery to the called end user. The specific protocol for CPN is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when the CCSAC option is specified.

(I) Charge Number (CN)

This option provides for the automatic transmission of the ten digit billing number of the calling station number and originating line information. The specific protocol for CN is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when CCSAC is specified.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching Optional Features (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(J) Carrier Selection Parameter (CSP)

This option provides for the automatic transmission of a signaling indicator which signifies to the customer whether the call being processed originated from a presubscribed end user of that customer. The specific protocol for CSP is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when CCSAC is specified.

(K) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or service access code (e.g., 800). It is provided in suitably equipped end office or access tandem switches and is available with Feature Group D.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(L) Alternate Traffic Routing(1) Multiple Customer Premises Alternate Routing

This option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. It is provided in suitably equipped end office or access tandem switches and is available with Feature Group D.

(2) End Office Alternate Routing

This option provides an alternate routing arrangement for customers who have access for a particular Feature Group to an end office via two routes: one route via an access tandem and one direct route. The feature allows the customers originating traffic from the end office to be offered first to the direct trunk group and then overflow to the access tandem group or to a TSP's access tandem group. It is provided in suitably equipped end offices and is available with Feature Group D.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.2 Local Switching (Cont'd)3.2.1 Common Switching Optional Features (Cont'd)(M) Originating Line Number Screening Service (OLNS)

OLNS Service provides information concerning the nature of the subscriber's line from which a call originates. OLNS service sends a two digit code with the Automatic Number Identification (ANI) at the beginning of a call to the Interexchange Carrier (IXC) and Operator Service Provider (OSP). When an IXC or OSP receives a call, it can use the information about the nature of the originating location (i.e., whether prison inmate or private payphone) to determine whether to allow the call to be billed to the originating line or require another form of payment, such as a calling card.

The two digits sent are either Automatic Number Identification Information Indicators (ANI II) or Flexible Automatic Number Identification (Flex-ANI). The charge for OLNS is recovered from the IXC and OSP through the Flex-ANI charge.

(N) International Carrier Option

This option allows for Feature Group D end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 10XXX or 10XXXX dialing). This arrangement requires provision of written verification to the Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Company end offices or access tandems equipped for International Direct Distance Dialing. It is available with Feature Group D.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.3 Obligations of the Company

In addition to the obligations of the Company set forth in 2. preceding, the Company has certain other obligations pertaining only to the provision of Switched Access Service. These obligations are as follows:

3.3.1 Network Management

The Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Company's network services. Generally, service levels are considered acceptable only when both end users and customers are able to establish connections with little or no delay encountered within the Company network. The Company maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in 2.4.3 preceding.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.3 Obligations of the Company (Cont'd)3.3.2 Design and Traffic Routing of Switched Access Service

For Switched Access Service, ordered on a per line or per trunk basis, the customer desired line or trunk directionality and/or traffic routing of the Switched Access Service between the customer's premises and the entry switch are specified on the customer's order for service. Also, the customer must specify the Switched Transport facilities to be used (i.e., Entrance Facility, or Electronic Cross-Connect, Direct-Trunked Transport facility, and Tandem-Switched Transport facility). When specifying the Switched Transport facilities to be used, the customer must indicate if the facilities are existing or new.

The Company will be responsible for selection of facilities from the interface to any switching point and to the end offices where capacity is ordered.

3.3.3 Determination of Number of Transmission Paths

The following applies to switched access voice transmission paths, and does not apply to CCSAC signaling links and STP Port Terminations provided with the CCSAC option. For determination of the number of CCSAC signaling links and STP Port Terminations required to handle its signaling traffic, the customer shall work cooperatively with the Company.

For Switched Access Service which is ordered on a per line or per trunk basis, the customer specifies the number of transmission paths in the order for service. A transmission path is a communication path within the frequency bandwidth of approximately 300 to 3000 Hz or a derived communication path of a frequency bandwidth of approximately 300 Hz to 3000 Hz provided over a high frequency analog facility or a high speed digital facility between a customer's premises and a Company location.

3.3.4 Determination of Number of End Office Transport Terminations

For analog entry switches, a termination will be provided for each feature group line or trunk requested. For digital entry switches, an equivalent termination will be provided for each feature group line or trunk requested.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.4 Obligations of the Customer

In addition to the obligations of the customer set forth in 2. preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

(A) Substantial Call Volume

When a customer offers services for which a substantial call volume is expected during a short period of time (e.g., media stimulated events), the customer must notify the Company of the anticipated demand for each peak period. For events scheduled during weekends or holidays, the Company must be notified no later than 5:00 p.m. local time the second prior business day. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the NPA NXX line number(s) to be used.

On the basis of the information provided, the Company may invoke network management controls if required to reduce the probability of excessive network congestion. The Company will work cooperatively with the customer to determine the appropriate level of such control.

Failure to provide prescribed notification may result in customer caused network congestion, which could result in discontinuation of service under section 2.2 and/or damages under paragraph 2.3.1.

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.4 Obligations of the Customer (Cont'd)

3.4.1 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

3.4.2 Trunk Group Measurement Reports

With the agreement of the customer, trunk group data in the form of usage in hundred call seconds, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

3.4.3 Design of Switched Access Services

When a customer orders Switched Access Service on a per line or per trunk basis, it is the customer's responsibility to assure that sufficient access services have been ordered to handle its traffic.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulation (cont'd)

This section contains the specific regulations governing the rates and charges that apply for Switched Access Service.

3.5.1 Description of Rates and Charges

There are four types of rates and charges that apply to Switched Access Service. These are monthly recurring rates, Usage rates, nonrecurring charges, and payment plans for Mercury 1.544 (DS1) service. These rates and charges are applied differently to the various rate elements as set forth following.

(A) Monthly Rates

Monthly rates are flat recurring rates that apply each month or fraction thereof that a specific rate element is provided. For billing purposes, each month is considered to have 30 days.

(B) Usage Rates

Usage rates are rates that apply only when a specific rate element is used. These are applied on a per occurrence (e.g., query, access minute, access minute fixed and per mile basis. Usage rate charges are accumulated over a monthly period.

(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, service rearrangements, and Signaling for Tandem Switching

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulation (cont'd)3.5.1 Description of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(1) Installation of Service

Nonrecurring charges apply to each Switched Access Service installed as follows:

- Per Line or Per Trunk
- Per Entrance Facility (DS1 or DS3)
- Per Multiplexer ordered

(D) Payment Plans for Mercury 1.544 (DS1) Service

The Optional Payment Plan (OPP) is a provision that allows a customer to pay a fixed rate for specific Mercury 1.544 (DS1) Service over a 36 or 60 month payment period. During the effective term, monthly rates for services installed under this arrangement will not be subject to Company initiated rate changes.

Mercury 1.544 (DS1) rates and charges for which the OPP is available are listed in 3.7.1 following.

During a customer's OPP term, the customer shall pay current rates provided they do not exceed the original rate contracted for by the customer, and conversion may be made to a new OPP term of the same or different length. If the expiration date for the new service or OPP term is beyond the end of the original OPP term, the remaining OPP charges for the original term will not apply.

At the expiration of the OPP term and if the customer wishes to continue Mercury 1.544 (DS1) Service the customer may elect:

- Prevailing month-to-month tariff rates
- A new OPP at the prevailing OPP rate, if available

The customer continues to receive the OPP rate on a month-to-month basis for a period of up to six months following the completion of the term. After the six months, the rates will automatically revert to the month-to-month rates.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulation (cont'd)3.5.1 Description and Application of Rates and Charges (Cont'd)(D) Payment Plan for Mercury 1.544 (DS1s) Service (Cont'd)

During an OPP term, a customer may move one Entrance Facility service to another location while keeping the OPP in force, provided the customer and customer's end user remain the same and no lapse in service occurs.

The Minimum Period for service provided under an OPP is the same as the OPP term selected by the customer (i.e. 36 or 60 month payment period). The Minimum Period for service provided under the month-to-month payment arrangement is 1 month for Mercury 1.544 (DS1).

Customers requesting termination of service prior to the expiration date of the Minimum Period will be liable for payment of a Minimum Period Charge. The Minimum Period Charge for all OPP terms will be calculated as follows:

- The service that is in place less than 12 months the customer would pay the monthly rate for the service.
- The dollar difference between (a) the current OPP rate for the OPP term that could have been completed during the time the service was actually in service, and (b) the customer's current OPP rate for each month the service was provided.

For example, a customer subscribed to a 60 month OPP term and disconnected service during the 39th month. This customer's minimum period charge would be:

$[36 \text{ month OPP rate} - 60 \text{ month OPP rate}] \times 39 = \text{Minimum Period Charge.}$

The 36 month OPP term could have been completed during the months the service was actually in service.

All minimum period charges will be based on the OPP rates in effect at the time of termination.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.1 Description of Rates and Charges (Cont'd)(E) Nonrecurring Charges (Cont'd)(1) Service Rearrangements

Service rearrangements are changes to existing services installed which do not result in either a change in the minimum period requirements as set forth in 2.4.2 preceding or a change in the physical location of the point of termination at a customer's premises or a customer's end user's premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in 3.5.4 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves an actual physical change to the service.

Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Access Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for the Access Service). Administrative changes are as follows:

- Change of customer name (i.e., the customer of record does not change but rather the customer of record changes its name.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.1 Description of Rates and Charges (Cont'd)(E) Nonrecurring Charges (Cont'd)(2) Service Rearrangements (Cont'd)

- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

All other service rearrangements will be charged for as follows:

- If, due to technical limitations of the Company, a customer could not combine its 800 Access Service traffic with its other trunk side Switched Access Service, no charge will apply to combine these trunk groups when it becomes technically possible.
- For all other changes, including the addition of, or modifications to, optional features a charge equal to the Switched Transport nonrecurring (i.e., installation) charge will apply. When an optional feature is not required on each transmission path, but rather for an entire transmission path group,

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
issued by the Public Utilities Commission of Ohio
Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.1 Description of Rates and Charges (Cont'd)(E) Nonrecurring Charges (Cont'd)(1) Service Rearrangements (Cont'd)

an end office or an access tandem switch, only one such charge will apply (i.e., it will not apply per transmission path). When the CCSAC option is elected, the customer may add Calling Party Number (CPN), Charge Number (CN), and Carrier Selection Parameter (CSP) at no additional charge if these features are specified at the time the CCSAC option is ordered for existing switched access trunks.

- In compliance with FCC Docket No. 91-213 Report and Order, Adopted September 17, 1992, no Switched Transport nonrecurring charges will apply for service connection when an interexchange carrier converts trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport, or for movement between Voice Grade, DS1 or DS3 facilities. The customer, however, must maintain the same Point of Termination (POT) location to receive the waiver. This waiving of Switched Transport nonrecurring charges remains in effect until six months from the effective date of the Local Transport Restructure tariff.

(2) Signaling for Tandem Switching

A nonrecurring charge as specified in 3.7.1 following applies when a TSP request signaling information for the provision of tandem switching. The nonrecurring signaling charge applies per CIC routed over a TSP's trunk group, by Telephone Company end office.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.1 Description of Rates and Charges (Cont'd)(F) Local Switching Ports

(1) Local Switching Common Port

The Local Switching Common Trunk Port minutes-of-use rate provides for the use of the shared end office trunk ports for termination of common transport trunks for tandem routed traffic.

(2) Local Switching Dedicated Trunk Port

The Local Switching Dedicated Trunk Port monthly rate provides for termination of a dedicated trunk in the end office port. The rate is assessed per trunk for all trunk side services, per analog or digital end office.

3.5.2 Minimum Periods

Switched Access Service is provided for a minimum period of one month.

3.5.3 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge consists of the following elements:

The minimum monthly charge for the Tandem-Switched Transmission and Tandem-Switching rate elements is the sum of the charges set forth in 3.7.1 following for the measured usage for the month.

The minimum monthly charge for Entrance Facilities and Direct-Trunked Transport rate elements is the sum of the charges set forth in 3.7.1 following.

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.5 Rate Regulations (Cont'd)

3.5.4 Moves

A move involves a change in the physical location of one of the following:

- The point of termination at the customer's premises
- The customer's premises

The charges for the move are identical whether the move is to a new location within the same building or to a different building.

All Moves will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued services.

3.5.5 Measuring Access Minutes

Customer traffic to end offices will be measured by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured by the Company to determine the basis for computing chargeable access minutes.

For terminating calls over FGD, where the off-hook supervisory signal is provided by the customer's equipment the measured minutes are the chargeable access minutes.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.5 Measuring Access Minutes (Cont'd)

- Step 1: Obtain recorded originating minutes and messages (measured as set forth in (A) following for FGA where the off-hook supervisory signal is forwarded by the customer's equipment when the called party answers) from the appropriate recording data.
- Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, 800, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgement from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.
- Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt ratio is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and uncompleted attempts. The total NCTA is the time on a completed attempt from customer acknowledgment of receipt of call to called party answer (set up and ringing) plus the time on an uncompleted attempt from customer acknowledgement of call until the access tandem or end office receives a disconnect signal (ring - no answer, busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.
- Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.5 Measuring Access Minutes (Cont'd)

Following is an example which illustrates how the chargeable originating access minutes are derived from the measured originating minutes using this formula.

Where: Measured Minutes (M. Min.) = 7,000
 Measured Messages (M. Mes.) = 1,000
 Completion Ratio (CR) = .75
 NCTA per Attempt = .4

$$(1) \text{ Total Attempts} = \frac{1,000 \text{ (M. Mes.)}}{.75 \text{ (CR)}} = 1,333.33$$

$$(2) \text{ Total NCTA} = .4 \text{ (NCTA per Attempt)} \times 1,333.33 = 533.33$$

$$(3) \text{ Total Chargeable Originating Access Minutes} = 7,000 \text{ (M. Min)} + 533.33 \text{ (NCTA)} = 7,533.33$$

FGD access minutes or fractions thereof are accumulated over the billing period. The exact value of the fraction is a function of the switch technology where the measurement is made. FGD access minutes are accumulated for each end office.

When determining chargeable access minutes the accumulated access minutes or fractions thereof are rounded up to the nearest access minute.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.7 Rate Regulations (Cont'd)3.5.5 Measuring Access Minutes (Cont'd)(A) Feature Group D Usage Measurement

For originating calls over FGD with multifrequency address signaling, usage measurement begins when the originating FGD entry switch receives the first wink supervisory signal forwarded from the customer's point of termination. For originating calls over FGD with CCSAC, usage measurement begins when the last point of switching sends the initial address message to the customer.

The measurement of originating call usage over FGD ends when the originating FGD entry switch receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the entry switch.

For terminating calls over FGD, the measurement of access minutes begins when the terminating FGD entry switch receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered.

The measurement of terminating call usage over FGD ends when the terminating FGD entry switch receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the entry switch.

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.5 Rate Regulations (Cont'd)

3.5.6 Network Blocking Charge for Feature Group D

The customer will be notified by the Company to increase its capacity (quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Company within 15 days of the notification, the Company will bill the customer, at the rate set forth in 3.7.1(F) following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<u>Trunks in Service</u>	<u>1%</u>	<u>1/2%</u>
1-2	.070	.045
3-4	.050	.035
5-6	.040	.025
7 or greater	.030	.020

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.7 Mileage Measurement

The mileage to be used to determine monthly rates for Switched Transport rate elements is calculated on the airline distance between the end office switch where the call carried by Switched Transport originates or terminates and the customer's serving wire center, except as set forth in (A) through (H) following. The V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. NO. 4 for Wire Center Information (V&H coordinates).

Exceptions to the mileage measurement rules are as follows:

- (A) When Switched Transport facilities of different capacities or bandwidths are interconnected by a multiplexer at a location other than the serving wire center, mileage is determined using the V&H coordinates method following:
 - (1) When only one multiplexer is involved, mileage for Direct-Trunked Transport is measured separately from the serving wire center to the hub where multiplexing occurs and then measured from the hub to the end office where the call is switched to originate or terminate.
 - (2) When more than one multiplexer is used, mileage for Direct-Trunked Transport is measured successively from the serving wire center to the first hub, from the first hub to the second hub and then from the second hub to the end office where the call is switched to originate or terminate.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.7 Mileage Measurement (Cont'd)

- (B) When Direct-Trunked Transport is provided to a Host/Remote arrangement, Direct-Trunked Transport rates apply and mileage is calculated using the V & H coordinate method between the customer's serving wire center and the Host office serving the Remote Office. When Tandem-Switched Transport is provided to a Host/Remote arrangement, Tandem-Switching Transmission rates and Tandem-Switched rates apply. Tandem-Switched Transport mileage is calculated using the V & H coordinate method between the customer's serving wire center and the Host office for both Direct-Trunked Transport and Tandem-Switched Transport to a Host/Remote arrangement, the Tandem-Switching Transmission rate will apply separately from the Host office to the Remote office. The Inter-connection charge will apply to both Direct and Tandem access minutes of use. Remote end offices are set forth in the National Exchange Carrier Association Tariff F.C.C. No. 4.
- (C) When Direct-Trunked Transport is provided for line side Switched Access Service both Direct-Trunked Transport and Tandem-Switched Transmission rates apply. Direct-Trunked Transport applies to both originating and terminating usage and mileage is calculated using the V&H Coordinates method between the customer's serving wire center and the end office switch where the dial tone for the line side Switched Access Service is provided. Tandem-Switched Transmission applies only to terminating usage and mileage is calculated using the V&H coordinate method between the dial tone office and the end office where the call is switched to terminate.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.7 Mileage Measurement (Cont'd)

- (D) The Alternate Traffic Routing optional feature is provided with Feature Group D to provide service from an end office to different customer premises locations. For Feature Group D traffic routed via an access tandem, such apportionment be made using standard Company traffic engineering methodology and will be based on the last trunk hundred call seconds desired for the high usage group, as described in 3.5.6 preceding, and the relative capacity ordered to the end office, when the feature is provided at an end office switch, or to the subtending end offices when the feature is provided at an access tandem switch. This apportionment will serve as the basis for the Switched Transport Tandem-Switching Transmission mileage calculation. The customer will be billed accordingly.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.8 Shared Use

Shared use occurs when Switched Access Service and Special Access Service, including CCSAC signaling connections, are provided over the same analog or digital high capacity facility through a common interface.

Shared Use facilities are ordered, provided and rated either as Switched Access or Special Access. Ordering, provisioning and rating of Special Access Shared Use facilities is set forth in Section 4 following. Ordering, provisioning and rating of Switched Access Shared Use facilities is as follows.

- (A) Switched Access facilities are ordered, provided and rated as Switched Access only in cases where the facility is used for Switched Access only. In the event that a Special Access circuit is added to a switched facility, the facility will then be provisioned as a special access facility.
- (B) Then ordered as Switched Access, the nonrecurring charges that apply when the Switched Access Shared Use facility is installed will be the nonrecurring charges associated with the Switched Access Transport being ordered.
- (C) The customer must place an order for each individual Switched or Special Access service using the Shared Use facility and must also specify the channel assignment for each service.
- (D) Then shared Use occurs and the facility becomes a Special Access facility, the monthly recurring rates for Special and Switched Access will be based upon the percentage of channels associated with each.

ACCESS SERVICE

3. Switched Access Service (Cont'd)3.5 Rate Regulations (Cont'd)3.5.8 Shared Use (Cont'd)

(E) When shared use of a facility occurs in a Host/Remote situation, the facility must route to the Host end office. The Company will continue to provide shared use to any end office so long as capabilities exist.

(F) Channels being used in conjunction with CCSAC may be included as Shared Use. However, CCSAC signaling connections nonrecurring charges will not apply to the individual channels of the shared use facility.

3.5.9 Data Base Query

A Data Base Query charge as set forth in 3.7.2(A) (2) applies for each data base query that returns a valid carrier identification code that provides the appropriate routing information even if the call is not completed. The charge is assessed on a per query basis and may include an area of service which may range from a single NPA/MNX to an area consisting of all LATAs and NPAs in the state of Ohio. When additional routing options (i.e., alternate carrier(s) and/or alternate destination(s) identified based on criteria such as; time of day, day-of-week, specific dates, originating NPA-NXX, percent allocation, routing to a single carrier and destination from an area of service smaller than an area defined by an NPA-NXX) are performed, a Routing Options Capability charge as set forth in 3.7.2(A) (2) will also apply per query. The Database Query and Routing Capability Charge provides for the use of the Tandem Switching, Tandem Termination, and Tandem Transport facilities of the Company. The Company will not charge Carrier Common Line, Local End Office Switching, or End Office Port charges.

3.6 Ordering Service3.6.1 Contact Information

To order DS1 Or DS3 service contact the following:

- Senior Director - Telecom Professional Services
513-397-9386
- Director of Operations
513-397-6385

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.7 Rates and Charges

3.7.1 Switched Transport

(A) Entrance Facilities

Recurring Charges-Optional Payment Plan

		<u>USOC</u>	<u>Monthly</u>	\$ 176.00
(1)	Mercury 1.5 (DS1)	EFYB1	<u>36 Month</u>	73.00
			<u>60 Month</u>	70.00
(2)	Mercury 45 (DS3)	<u>USOC</u>	<u>Monthly</u>	\$ 783.00
		EFYC1	<u>Rates</u>	
			<u>Nonrecurring</u>	\$ 1,370.00
			<u>Charges</u>	

(B) Switched Transport

(1) Mercury 1.5 (DS1)

Monthly, Optional
 Payment Plan

<u>Mileage Bands</u>	<u>USOC</u>	<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>

Mileage Bands

0	1YTX1		
Over 0 to 4	1YTX1	\$ 34.24	\$ 13.96
Over 4 to 8	1YTX1	34.24	13.96
Over 8 to 25	1YTX1	34.24	13.96
Over 25	1YTX1		

(2)	Mercury 45 (DS3)		
	1YTX1	\$ 367.00	\$ 57.30

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
 issued by the Public Utilities Commission of Ohio
 Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.7 Rates and Charges

3.7.1 Switched Transport (Cont'd)

(C) Tandem-Switched Transport

Monthly Rates

(1) Tandem-Switched
 Transmission
Per MOU

Note 1

Per MOU, Per Mile

Note 1

(2) Tandem-Switching

Note 1

USOC Monthly Rate

(3) Access Tandem Trunk
 Port Charge, Per Trunk

PT8UX \$ 61.19

(D) Multiplexing (Including Tandem
 Multiplexers-End Office Side of
 Access Tandem)

Monthly Rates

(1) MercNET 1.544 (DS1) to
 Voice Grade

- Per Arrangement MKW11 \$ 225.00

(2) Mercury 45 (DS3) to Mercury 1.5 (DS1)

- Per Arrangement MKW31 \$ 515.00

Rate Per Access Minute

(3) Tandem Multiplexing
 (EO Side of Access Tandem)

Note 1

(E) Installation
 - Per Line or Trunk

Nonrecurring
 Charge
 None

Rate Per Call Blocked

(F) Network Blocking Charge

Note 1

Note 1: CBTS Technology Solution LLC intrastate switched access rates mirror the current switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in AT&T Access Tariff FCC No. 2 and CenturyLink Access Tariff FCC No. 9. (T)

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
 issued by the Public Utilities Commission of Ohio
 Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.7 Rates and Charges

3.7.1 Switched Transport (Continued)

(G) CCSAC Signaling Link and STP Port Termination Charges

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>
1) CCSAC Signaling Link			
a) Channel Termination*			
- per DS1 link		\$ 176.00	NONE
b) Channel Mileage**			
- per DS1 link			
<u>Mileage Band</u>			
0	Fixed	NONE	NONE
	Per Mile	NONE	NONE
Over 0	Fixed	\$ 34.24	NONE
	Per Mile	13.96	NONE

Nonrecurring Charge

* One Channel Termination applies per CGSAC Signaling Link.
 ** Channel Mileage applies between Serving Wire Center and STP, but does not apply when mileage is zero.

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.7 Rates and Charges (Cont'd)

3.7.1 Switched Transport (Cont'd)

(H)	<u>Signaling for Tandem Switching</u>	<u>USOC</u>	<u>Nonrecurring Charge</u>
	per end office, per trunk group, per CIC	CF3TZ	\$ 288.00

(I)	<u>Carrier Identification Parameter (CIP)</u>	<u>USOC</u>	<u>Monthly Rate</u>
	per trunk group	U7CPG	\$ 6.90
			<u>Nonrecurring Charge</u>
			\$ 46.00

3.7.2 Local Switching

(A)	<u>Usage Sensitive Rates</u>		<u>Rate Per Access Minute</u>
(1)	Local Switching		Note 1
	(A) Common Trunk Port, per trunk		Note 1
		<u>USOC</u>	<u>Monthly Rate</u>
(B)	Dedicated Trunk Port, per trunk	PT8GX	Note 1
		<u>USOC</u>	<u>Monthly Rates</u>
	(C) STP Port Termination Non-recurring Charge	PT85X	\$ 380.00 390.00

Note 1: CBTS Technology Solutions LLC intrastate switched access rates mirror the current switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in AT&T Access Tariff FCC No. 2 and CenturyLink Access Tariff FCC No. 9. (T)

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
 issued by the Public Utilities Commission of Ohio
 Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

3. Switched Access Service (Cont'd)

3.7 Rates and Charges (Cont'd)

3.7.2 Local Switching (Cont'd)

(A) Usage Sensitive Rates

	<u>USOC</u>	<u>Rate Per Query</u>
 800 Access Service		
Data Base Query Charge per query	8QRY	Note 1
 Routing Options Capability per query		 Note 1

Note 1: CBTS Technology Solutions LLC intrastate switched access rates mirror the current switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in AT&T Access Tariff FCC No. 2 and CenturyLink Access Tariff FCC No. 9. (T)

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
 issued by the Public Utilities Commission of Ohio
 Assistant Secretary, CBTS Technology Solutions LLC

ACCESS SERVICE

4. Special Access Service4.1 General

Special Access provides a transmission path to connect customer designated premises.

4.1.1 Rate Categories

There are three basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 4.4.1(A) following)
- Channel Mileage (described in 4.4.1(B) following)
- Optional Features and Functions (described in 4.4.1(C) following)

(A) Channel Termination

The Channel Termination rate category provides for the communications path between a Customer-designated premises and the Serving Wire Center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability itself is provided as an optional feature as set forth in (C) following. One Channel Termination charge applies per is terminated. This charge will apply even if the Customer-designated premises and the Serving Wire Center are located in the same Company building.

(B) Channel Mileage

The Channel Mileage rate category provides for the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designed premises and a Telephone Company hubs. There are two rates that apply for each band, i.e., a flat rate per band and a rate per mile.

ACCESS SERVICE

4. Special Access Service (Cont'd)4.1 General (Cont'd)4.1.1 Rate Categories (Cont'd)(C) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charges for as a single rate element.

4.2 Service Descriptions4.2.1 High Capacity Service*

A High Capacity channel is a channel for the transmission of nominal 1.544 or 474.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer.

4.3 Ordering Service4.3.1 Contact Information

To order DS1 Or DS3 service contact the following:

- Senior Director - Telecom Professional Services
513-397-9386
- Director of Operations
513-397-6385

* Where available.

ACCESS SERVICE

4. Special Access Service (Cont'd)

4.4 Rate and Charges (Cont'd)

4.4.1 High Capacity Service*

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
(A) Channel Termination			
- DS1	TZGA1	\$ 335.00	NONE
- DS3	TZGB1	2,575.00	NONE
(B) Mileage			
		<u>Fixed</u>	
- DS1	1YBA1	\$ 115.00	NONE
- DS3	1YBB1	750.00	NONE
		<u>Per Mile</u>	
- DS1	1YBA1	\$ 38.10	NONE
- DS3	1YBB1	237.00	NONE
(C) Optional Features and Functions			
(1) Multiplexing			
DS3 to DS1			
- Per arrangement	QM3X1	\$ 855.00	NONE
(2) Cross-Connection to ILEC Facilities			
- DS1	CX1CX	NONE	\$ 190.00
- DS3	CX3CX	NONE	205.00

* Where available.

Issued: October 31, 2017

Effective: November 30, 2017

In Accordance with Case No. 17-2234-TP-ATA,
 issued by the Public Utilities Commission of Ohio
 Assistant Secretary, CBTS Technology Solutions LLC