

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE**

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Effective November 30, 2018, Customized Switched Metro Ethernet (CSME) Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for CSME Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing CSME term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

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**A. Basic Service Description**

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Customized Switched Metro Ethernet Service (CSME Service) is a switched Layer 2 Ethernet network allowing for basic metropolitan Ethernet connectivity. CSME Service allows businesses to interconnect multiple customer locations within a LATA as if they were segments on the same LAN using packet-based switching technologies. Connections at the customer premises are made using Native Ethernet interfaces and traverse the MAN over fiber facilities. CSME Service provides bandwidth of either 10 Mbps, 100 Mbps or 1 Gbps<sup>/1/</sup>.

Customers connect to CSME Service via one of the following standard connections, as requested by the customer:

- 10/100 Base T (10 Mbps or 100 Mbps)
- Gigabit Ethernet (1000 Base SX, 1000 Base LX/LH or 1000 Base ZX)

Customers may connect multiple locations together, as long as they are in the same LATA or MAN and the service is available. This service acts as an Ethernet bridge supporting LAN-to-LAN connections.

CSME Service includes the connection from the customer's premise to the Ethernet network, a port on the Ethernet network and the bandwidth that will be used across the network. An optional feature is the ability to segregate customer traffic, as deemed necessary by the customer. This traffic segregation is accomplished using Ethernet Virtual Connections (EVCs), at an additional charge.

/1/ Bandwidth is inclusive of allowances for overhead within the Ethernet network. If a customer orders 1 Gbps of bandwidth on a single port, the Company reserves the right to use up to 10 % of the bandwidth for traffic management.

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/2/ Material formerly appeared in Part 6, Section 9, Sheet 16.

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**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**B. Regulations**

In addition to the regulations contained in this Guidebook, the following regulations apply to CSME Service:

1. CSME Service is provided at the option of the Company where equipment and facilities permit. If appropriate facilities are not available, Special Construction charges may apply.
2. The customer provided equipment (CPE) must deliver the data signal for the CSME transport within the industry specification for the subscribed data service. See *Technical References* following.
3. CSME Service supports full duplex communication.
4. If a customer connects to the CSME network using a bridge or switch for Layer 2 connectivity, only 150 MAC addresses can be used per Layer 2 device, per port. Any additional addresses over the first 150 will be assessed an additional charge, with a limit of 200 MAC addresses total per port. An additional charge will be assessed per block of 151-200 addresses. See *Rates and Charges* following.
5. CSME Service is distance limited, based on circuit configuration as determined by the Company. A repeater may be used to extend the transmission of CSME Service. See Repeater under *Service Components* following for further definition. See *Rates and Charges* following.
6. Should the customer wish to segregate traffic, a total of 8 Ethernet Virtual Connections (EVCs) may be configured per 10/100 Base T connection. A total of 64 EVCs may be configured per 1 Gbps connection. Should the customer request more than 64 EVCs on a 1 Gbps connection, a technical review will need to be conducted to determine whether the network will support more than 64 EVCs.
7. If a customer desires that service be provided on a due date less than the standard interval, the customer may request that service be provided on an expedited basis. If the Company determines that service can be provided on the requested expedited date and spare facilities are available, the Expedite Order Charge (per port, per location) will apply. See *Rates and Charges* following.

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 17.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**B. Regulations (cont'd)**

8. If the customer cancels service prior to installation being completed, a Service Order Cancellation charge (per port, per location) will apply. See *Rates and Charges* following. The customer's intent to cancel service must be made in writing.
9. CSME Service may be available in a meet-point billing arrangement involving another Incumbent Local Exchange Carrier (ILEC) (sometimes also referred to as an Independent Company or ICO), where suitable facilities exist and where appropriate procedures for such arrangements have been put in place between the Company and the other ILEC. When the Company and another ILEC jointly provision CSME Service with the other ILEC's service, the ILEC involved shall bill the customer at that ILEC's applicable rates for their portion of the service located in their operating territory. Ordering and provisioning procedures may vary, and therefore Meet-Point rate elements and charges may not be applicable, when the other ILEC involved in the Meet-Point arrangement is an AT&T ILEC.
10. Service Level Agreements are not offered with this service. However, Credit Allowances are applicable.
11. If the 10 Mbps or 100 Mbps connection is ordered, it will only be provisioned using the 10/100 Base T connection.
12. The responsibility of the Company shall be limited to furnishing the CSME network. Subject to this responsibility, the Company shall not be responsible for the through transmission of signals generated by CPE or for the quality of, or defects in, such transmission or the rejection of signal by CPE. The Company shall not be responsible for installation, operation, maintenance or adapting CSME to the technological requirements of specific CPE. In addition, the Company shall not be responsible to the customer if changes in any of the equipment, operations or procedures of the Company used in the provisioning of CSME render any facilities provided by the customer obsolete; or require modification or alteration of such equipment or system; or otherwise affect its use or performance, provided the Company has met all applicable information disclosure requirements otherwise required by law.
13. Customers will be permitted to move from a 10 Mbps or 100 Mbps Connection to a 1 Gbps Connection, however, the Nonrecurring Charge associated with the new 1 Gbps Connection will apply. See *Rates and Charges* following.
14. The company will use controls to limit the amount of multicast and broadcast traffic to protect the CSME network against traffic storms. The maximum throughput of multicast traffic will be set at 1 Mbps per customer port, while the maximum throughput of broadcast traffic will be set at 200 packets per second per port. The Company recommends that customers enable controls for multicast, broadcast and unknown unicast traffic within the customer network(s).

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 18.

/2/ Material formerly appeared in Part 6, Section 9, Sheet 19.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**B. Regulations (cont'd)**

15. Allowance for Interruption

In case of an interruption to service, allowance for the period of interruption, if not due to the negligence of the customer or the customer's end user, shall be as follows: no credit shall be allowed for an interruption of less than 10 seconds. The customer shall be credited for an interruption of 10 seconds or more as follows: the credit shall be at the rate of 10/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues. The credit allowance(s) for service interruptions shall not exceed 100% of the applicable monthly rates.

The Company will be excluded from providing an Allowance for Interruption should any of the following conditions occur:

- Force majeure events such as, but not limited to, an earthquake, hurricane, flood, fire, storms, tornadoes, explosion, lightning, power surges or failure, fiber cuts, strikes or labor disputes, acts of war, civil disturbances, acts of civil or military authorities or public enemy, governmental orders, civil commotion, criminal actions taken against the Company, acts of God and other circumstances beyond the Company's reasonable control.
- The failures of any components beyond the local facility including the Network Interface (NI), the CSU/DSU/Channel band/Extended Demarcation are excluded from the service outage calculation.
- Data loss during the Company's scheduled maintenance window.
- Failures attributed to facilities or equipment provided by customer or its contractors, equipment vendors, another local exchange carrier or inter-exchange carrier.

**C. Technical References**

Technical specifications for CSME Service are described in the following technical references:

Ethernet Standards	SBC TP-76412
Network Equipment Design Requirements	SBC TP-76200MP

These publications may be obtained from:

APEX Support Team  
734-523-7348

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 20.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**D. Service Components**

1. There is one standard (or required) rate element which applies for CSME Service: Usage, Port, Transport and Interface.

Usage, Port, Transport and Interface

Provides for the physical connection between the customer's premise and the serving wire center, as well as the bandwidth that will be used by the customer at each location. Several interface protocols are available: 10/100 Base T and Gigabit Ethernet (1000 Base SX, 1000 Base LX/LH or 1000 Base ZX).

2. In addition, there are optional rate elements which may apply to CSME, depending on the customer's configuration:

Additional MAC Addresses

Media Access Control (MAC) Addresses denote a data link layer protocol used for Layer 2 connectivity. If a customer connects to the CSME network using a bridge or switch for Layer 2 connectivity, only 150 MAC addresses can be used per Layer 2 device, per port. Any additional addresses over the first 150 will be assessed an additional charge, with a limit of 200 MAC addresses total per port. An additional charge will be assessed per block of 151-200 addresses.

Ethernet Virtual Connections (EVCs)

An Ethernet Virtual Connection is a logical point-to-point connection between two customer locations, and goes from the customer demarcation point at one location through the network to terminate at the demarcation point at the second customer location. Customers use EVCs if they desire traffic segregation, but EVCs will not provide for traffic prioritization. EVCs may be ordered to establish additional virtual connections over the same physical connection. When EVCs are ordered, the customer must designate the amount of bandwidth to be assigned to each EVC. EVCs can be set in 1 Mbps increments from 5 Mbps to 1 Gbps.

Repeater

For those customers who are located outside normal transmission parameters, service can be provided using a repeater to be placed in Company wire centers. An engineering study will be completed to ensure transmission parameters can be met using a repeater, and the Company will determine when Repeaters are necessary. Additional charges will apply. Provisioning of CSME Service is subject to the availability and operational limitations of the equipment and associated facilities.

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 21.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**D. Service Components (cont'd)**

2. In addition, there are optional rate elements ... (cont'd)

Meet-Point Billing Options

Meet-Point is available in two configurations:

*Direct LEC Connection* is provisioned using a standard CSME Connection, plus Mileage. The mileage is measured in airline miles from the CSME switch location to the ILEC (ICO) meet-point location.

*GigE ICO Trunking Arrangement* applies an ICO Trunk Connection Charge between the CSME switch location and the ICO meet-point location that is shared with the ILEC (ICO) Ethernet switch. The ICO Trunk Connection Charge is applied to each customer Ethernet Virtual Connection (EVC) that is transported on the GigE trunk backbone to the ICO meet-point. The ICO Trunk Mileage charge is applicable to each customer Ethernet Virtual Connection (EVC) transported across the GigE trunk when mileage exceeds 10 miles. Mileage is calculated from the CSME switch location to the ICO meet-point location.

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 21.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**E. Rates and Charges**

<u>Description /USOC/</u>	<u>Nonrecurring Charge</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
		<u>36 Months</u>	<u>60 Months<sup>2/</sup></u>	
<i>Standard Charges</i>				
<b>Usage, Port, Transport, Interface, each customer location</b>				
10 Mbps Connection /P9FYX/	\$1,600.00	\$1,170.00	\$1,100.00	\$1,550.00
- Subsequent 10 Mbps Connection <sup>1/</sup> /P9FZX/	1,150.00	950.00	800.00	1,200.00
100 Mbps Connection /P9FKX/	1,925.00	1,665.00	1,600.00	2,500.00
- Subsequent 100 Mbps Connection <sup>1/</sup> /P9FPX/	1,200.00	1,200.00	1,025.00	1,560.00
1 Gbps Connection /P9FLX/	2,500.00	3,220.00	3,080.00	3,900.00
<i>Optional Charges</i>				
Repeater				
- each /VU4/	250.00	400.00	375.00	475.00

/1/ Subsequent 10 Mbps or 100 Mbps Connections must terminate at the same locations as the original 10 Mbps or 100 Mbps Connections.

/2/ Effective November 15, 2013, customers may not establish new term plans greater than 36 months for CSME Service, and existing term plans greater than 36 months may not be renewed or extended for a term greater than 36 months.

/3/ Material formerly appeared in Part 6, Section 9, Sheet 22.

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**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

**E. Rates and Charges (cont'd)**

<u>Description /USOC/</u>	<u>Nonrecurring Charge</u>	<u>Monthly Price</u>
<i>Optional Charges (cont'd)</i>		
Ethernet Virtual Connection (EVC) - per connection /EVNDE/	\$70.00	\$25.00
Additional MAC Addresses - 151-200 MAC addresses /M2CAX/	70.00	5.00
Service Order Cancellation - per location /OCGEO/	200.00	--
Expedite Order Charge - per location /EODEO/	300.00	--
Service Order Change Charge - applies to Bandwidth Usage Changes, EVC Changes and Configuration Changes for pending, initial service orders, per location /NHCEO/	75.00	--
Miscellaneous Change Charge - applies to Bandwidth Usage Changes, EVC Changes and Configuration Changes for subsequent changes to existing service, per location /NHCEN/	100.00	--

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 23.



**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**E. Rates and Charges (cont'd)**

<u>Description</u>	<u>Nonrecurring Charge</u>	<u>Monthly Price</u>
<i>Optional Charges (cont'd)</i>		
Meet-Point Billing Options		
- Direct LEC Connection, Mileage		
Above 0 and inclusive of 10 miles	\$1,200.00	\$500.00
Above 10 and inclusive of 25 miles	1,200.00	1,000.00
Above 25 and inclusive of 35 miles	1,200.00	1,500.00
Above 35 and inclusive of 50 miles	1,200.00	2,500.00
	Monthly Payment Term Payment Plans	
	36	60
	<u>Months</u>	<u>Months</u> <sup>/2/</sup>
		<u>Monthly Extension</u>
- GigE ICO Trunking Arrangement		
ICO Trunk Connection Charge, per EVC		
10 Mbps	\$525.00	\$420.00    \$360.00    \$660.00
100 Mbps	800.00	840.00    720.00    1,290.00
1 Gbps	1,100.00	4,830.00    4,100.00    7,360.00

/1/ Nonrecurring charges will be waived for those customers selecting the 36 or 60 month Term Payment Plan (TPP) period for new service.

/2/ Effective November 15, 2013, customers may not establish new term plans greater than 36 months for CSME Service, and existing term plans greater than 36 months may not be renewed or extended for a term greater than 36 months.

/3/ Material formerly appeared in Part 6, Section 9, Sheet 23.1.

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**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**E. Rates and Charges (cont'd)**

<u>Description</u>	<u>Monthly Price</u>
<i>Optional Charges (cont'd)</i>	
Meet-Point Billing Options (cont'd)	
- GigE ICO Trunking Arrangement (cont'd)	
ICO Trunk Mileage, per EVC	
Above 0 and inclusive of 10 miles	N/A
Above 10 and inclusive of 25 miles	
10 Mbps	\$170.00
100 Mbps	375.00
1 Gbps	1,500.00
Above 25 and inclusive of 35 miles	
10 Mbps	270.00
100 Mbps	675.00
1 Gbps	1,750.00
Above 35 and inclusive of 50 miles	
10 Mbps	410.00
100 Mbps	1,100.00
1 Gbps	2,000.00

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 23.2.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**F. Term Pricing Plan**

1. Recurring rates may be applied only over a 36 or 60<sup>/1/</sup> month period under the terms and conditions of the Term Pricing Plan (TPP). Upon completion of a TPP, a customer's service will automatically convert to the Monthly Extension rates unless the customer requests a new TPP. No customer shall purchase CSME Service on a month-to-month basis prior to the completion of a TPP.
2. The TPP provides for 36 or 60<sup>/1/</sup> month rate stabilization. Decreases in term monthly recurring Guidebook rates will be passed on to customers who participate in a TPP. Should the Company increase its rates during the TPP period, the customer would continue to pay the rates in effect at the time the customer elected to establish service under the TPP.
3. The customer may choose to terminate an existing TPP before the end of the 36 or 60<sup>/1/</sup> month period and negotiate a new 36 or 60<sup>/1/</sup> month TPP. The new TPP must be based upon the rates that are currently in effect and available to all customers.
4. The customer must provide the Company with a written notice of intent to renew a TPP no later than 90 days prior to its expiration. If the customer elects not to renew the TPP or does not notify the Company of the customer's intent to renew the TPP, the service will automatically be billed under the Guidebook monthly extension rates in effect at the time that TPP expires. Subsequently, customers under the Guidebook monthly extension rates may convert their existing service to either a 36 or 60<sup>/1/</sup> month TPP. Nonrecurring charges will be waived at the time of conversion.
5. Any Special Construction charges incurred for services billed under a TPP will be applicable.
6. If the customer terminates the TPP agreement prior to the expiration of the service term, the customer shall pay a termination charge. Payment of the termination charge does not release the customer from other previous amounts owed to the Company. In addition to any unpaid Special Construction or nonrecurring charges (excluding any waived charges), Termination Charges will be equal to:
  - Fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

/1/ Effective November 15, 2013, customers may not establish new term plans greater than 36 months for CSME Service, and existing term plans greater than 36 months may not be renewed or extended for a term greater than 36 months.

/2/ Material formerly appeared in Part 6, Section 9, Sheet 24.

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**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**F. Term Pricing Plan (cont'd)**

7. Customers may move their existing service to a new location without incurring Termination Charges provided all of the following conditions are met:
  - The customer maintains the existing TPP at the new location or establishes a new TPP equal to or greater than the old location;
  - During the TPP, a customer may move a CSME Service location to another premises in the same LATA and keep the TPP in force without assessment of Termination Charges, provided no lapse in billing occurs;
  - The customer's request for disconnect at the existing location and the request for service at the new location are received at the same time, and the customer's disconnect order for the existing service references the new connect order for the new service;
  - Moves of one location to a premise in a different serving office may result in a change in the monthly charges. Nonrecurring charges as appropriate are applicable;
  - If the customer moves more than one location of the service concurrently, the customer will be liable for Termination Charges, as this is considered a complete disconnect of the service.

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 25.

**CUSTOMIZED SWITCHED METRO ETHERNET (CSME) SERVICE (Cont'd)**

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**F. Term Pricing Plan (Cont'd)**

8. Customers will be permitted to upgrade from CSME Service to any future Switched Ethernet products offered by the Company, without incurring Termination Charges, given all the following conditions are met:
- The customer must issue a disconnect order for the existing CSME locations and place a new service order for the new Switched Ethernet offering at the same locations. Termination Charges for CSME Service at the current locations will be waived.
  - The term of the new Switched Ethernet service contract must be equal to or greater than the remaining time left on the existing CSME contract.
  - The existing CSME Service must have been in service for a minimum period of 15 months for a 3-year contract or 18 months for a 5-year contract.
  - Upgrades are contingent on availability of fiber from premises to premises, and the availability of the new Switched Ethernet service in the serving area. Other Special Construction charges, as necessary, may apply.
9. Migration to AT&T Switched Ethernet Service<sup>SM</sup>

Customers subscribing to CSME Service may migrate to AT&T Switched Ethernet Service provided by the Company without incurring termination liability, subject to the following conditions:

- The new AT&T Switched Ethernet Service and the existing CSME Service must be billed to the same customer of record at the same customer locations.
- The customer's existing service must have been in place for at least 12 months.
- The minimum term for the new service must be at least 12 months and must be equal to or greater than the number of months remaining in the customer's existing Term Payment Plan (TPP) term.
- The speed (capacity/bandwidth) of the new service must be equal to or greater than that of the existing service.
- The customer must issue a disconnect order for the replaced CSME Service to be effective within 90 days after the AT&T Switched Ethernet Service installation date. The disconnect and new orders must be coordinated through the Company.
- If overlapping service is required, the period will be limited to not more than 90 days and billing will apply to both services during the time both services are available.

<sup>SM</sup> AT&T Switched Ethernet Service is a service mark of AT&T Intellectual Property.

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/1/ Material formerly appeared in Part 6, Section 9, Sheet 26.