

#### DEPARTMENT OF ADMINISTRATIVE SERVICES

PROCUREMENT SERVICES

450 Columbus Boulevard, Suite 1202, Hartford, CT 06103

Sent Via E-Mail

December 6, 2017

Ms. Wendy Withycombe AT&T 500 Enterprise Drive Rocky Hill, CT 06067 ww3257@att.com

Re: Master Agreement B-03-012

Dear Ms. Withycombe:

I have received your recent request to update the Product Schedule associated with the above noted Master Agreement. This is changes updates the Master Agreement for AT&T VPN Service (AVPN) per the attached Product Schedule.

Given the terms and conditions of this agreement, the request to update the Product Schedule is approved. Please consider the services a part of the associated Master Agreement and retain this approval for future reference.

A copy of your Product Schedule Update request is attached to this letter.

Best regards,

Jean Del Greco Contract Specialist DAS Procurement Services

cc: Master Agreement File B-03-012

DAS MASTER AGREEMENT NUMBER: B-03-012 DAS APPROVAL DATE: 12/13/17

**VENDOR NAME: AT&T Corporation** 

SERVICE/PRODUCT NAME: AT&T VPN (AVPN) Service

#### **SERVICE/PRODUCT DESCRIPTION:**

AT&T VPN Service is a network-based Multiprotocol Label Switching (MPLS) service that uses Internet Protocol (IP) to deliver the attributes of a private network within the confines of a shared networking infrastructure. AT&T VPN allows you to build an application-aware VPN to link your locations and efficiently transport voice, data, and video over a single connection.

AT&T VPN allows you to establish any-to-any connectivity through a single MPLS port to each of your locations. You can have fully meshed communications without ordering additional PVCs or worrying about Committed Data Rate (CDR) at each site.

You have multiple transport and access/egress options. You can connect using Ethernet or IP MPLS ports that support point-to-point protocol (PPP), or multilink PPP (MLPPP). Because you can choose your connectivity method, you can build the right VPN solution to meet the growing and changing needs of your employees, customers, and partners. You can also securely connect Mobile (4G LTE) devices to you private VPN using AT&T's Private Mobile Connection service.

AT&T VPN offers you three network management options. With customer-managed you can manage and maintain your own routers. With the AT&T-managed option, we configure, install, manage, and maintain your routers on your behalf. With the Managed CSU-probe option, you can still manage and maintain your own routers, but AT&T provides you 7x24 diagnostics of your network.

AT&T VPN enables you to choose who manages your routers on a per-site basis and then combine all your sites, both customer-managed and AT&T-managed, on a single network. And you can change from a transport-only site to an AT&T-managed router site or to an AT&T-managed CSU-probe site, and vice versa, as your requirements change.

Unilink allows Customer to order up to twelve (12) Logical Channels/VLANs on a single MPLS Port. These multiple Logical Channels can be used for:

- one or more VPNs, and/or
- · one or more MPLS PVCs, and
- one or more VPNs and one Virtual Network Internet Connection per port

The total bandwidth of all Logical Channels on one MPLS Port may not exceed the maximum total Logical Channel bandwidth available for that MPLS Port type and speed. Unilink is not available on MPLS DSL Connections, MPLS ADSL Line Shared Connections, and IP MPLS ports using PPP or MLPPP protocol.

Subject to limitations, Customer may use multiple VLANs (at defined speeds) to enable an Ethernet MPLS Port to be part of several Customer VPNs and a single Virtual Network Internet Connection. Bursting beyond the defined VLAN speed is not supported. The sum of the speeds of all VLANs on an Ethernet MLS Port may not exceed the Ethernet MPLS Port speed.

Multi-port (a.k.a. Virtual Network Internet Connection) is a feature available with US MPLS Ethernet Dual Stack IPv4/IPv6 Ports (1G/below port speeds) only. Multi-port provides a separate VLAN used for Internet data traffic only, and may not be used for access to customer's VPN or any other network(s). Not all AT&T VPN features are available in combination with Multi-port.

The Service supports multiple logical channels on MPLS Ports when the Unilink Feature is ordered, so that the MPLS Port may be part of multiple VPNs or connect to multiple MPLS PVCs. Logical Channel speeds on MPLS Ports may not exceed the maximum Logical Speed specified by AT&T. Logical Channels may burst up to the MPLS Port speed if bandwidth is available on the MPLS Port, except for Ethernet access with defined VLAN speeds, which cannot burst.

The Multicast Feature allows the sending of data from a MPLS Port to multiple MPLS Ports within a Multicast enabled VPN ("Multicast Data"). The network replicates Multicast Data received by a Multicast-enabled MPLS Port or logical channel and then delivers the Multicast Data to the appropriate groups of Multicast-enabled MPLS Ports or logical channels on the VPN. Multicast-enabled MPLS Ports can send and receive Multicast and unicast data including sending and/or receiving data to and/or from multiple

Multicast and unicast MPLS Ports simultaneously. The Multicast Feature can be selected by Customer for a specific VPN(s) and then enabled only for designated logical channels on designated MPLS Ports in the VPN selected. The Multicast Feature is subject to defined maximum Multicast route limitations.

The AT&T VPN Route Group Feature provides the capability to designate different routing policies for a subset of Customer Sites within a VPN (a "Route Group"). An AT&T VPN MPLS Port or Logical Channel can only belong to a single Route Group. The Route Group Feature may not interoperate with other AT&T VPN features or capabilities, or with other AT&T Services.

The Hub and Spoke Feature provides the capability to prevent direct communication between Customer specified sites within a VPN (such sites are designated as "Spokes"). Customer designated Spoke Sites are capable of communicating only with Customer designated Hub Sites. Hub Sites may communicate directly with any site within the VPN. The Hub & Spoke Feature may not interoperate with other Service features or capabilities, or with other AT&T services.

AT&T VPN provides a simple solution that combines the flexibility of IP access and the inherent security and reliability of frame relay and ATM. With the networking expertise of AT&T, you can implement new applications with reduced risk, quickly ramp up for new applications, and maximize performance through built-in security and control.

MPLS enables data transmission using standard IP routing protocols between any locations via a short, pre-determined path across the network. We use an affiliate or a local service provider to connect your data equipment to the AT&T Global Network. This connectivity allows authorized users and applications to communicate on the same VPN.

AT&T VPN uses BGP routing and MPLS label forwarding to separate traffic. AT&T VPN enforces strict traffic separation by assigning a unique virtual routing and forwarding table to each of your VPNs. The result is a fully protected VPN that provides data integrity and data privacy equal to that of traditional frame relay and ATM networks.

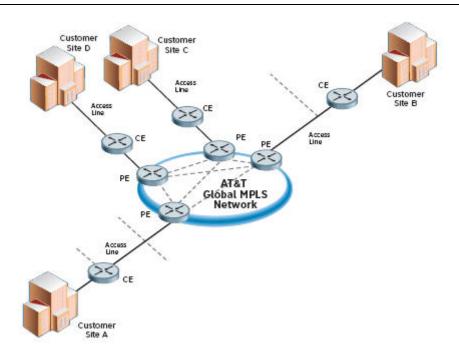
Customers requiring prioritization of network traffic such as voice, video and data applications can prioritize their traffic by Class of Service (CoS). Customer is responsible for using Class of Service in compliance with applicable legal or regulatory restrictions on voice or video applications. The following CoS are available:

- CoS1: Designed for jitter- and latency-sensitive applications like voice and video.
- CoS2V: Designed to carry very high priority business applications or may carry jittersensitive applications like video when CoS1 is already in use.
- CoS2: Designed to carry high priority business applications.
- CoS3: Designed to carry medium priority business applications.
- CoS4: Designed to carry low priority business applications and is used as the default setting if no CoS is chosen.
- CoS5: Designed to carry low priority background business applications.

Customers may allocate bandwidth across each Class. If any Class does not use its entire bandwidth allocation, data packets from other classes share the unused bandwidth.

AT&T VPN transport-only service uses an IPv4/IPv6 dual-stack port to support IPv6 addressing requirements. Dual stack allows IPv4 and IPv6 to coexist on the same port. This enables you to smoothly transition from an IPv4 to a 128-bit IPv6. IPv6 offers improved support for security, enhanced support for mobile devices, and auto-configuration and "plug and play" support. It also reduces the dependency on network address translation (NAT) and enables more end-to-end applications.

AT&T VPN transports traffic across the MPLS-enabled AT&T Global Network. The network uses standard IP routing protocols to transport traffic between locations via the optimal path based on the latency between network endpoints. Using label switching technology, MPLS attaches a label to each packet as it enters the network. This label uniquely identifies that packet as belonging to a specific MPLS VPN. When the packet reaches its destination, MPLS removes the label and returns the packet to its original state. The process is seamless to your users.



## AT&T VPN Service gives you these features:

- MPLS technology—AT&T VPN employs MPLS technology to transport data between locations.
  MPLS allows you to classify traffic based on applications and your bandwidth and latency needs.
  By classifying traffic, you can segregate and prioritize critical applications and latency-sensitive traffic like voice and video. AT&T VPN uses label switching and multiprotocol BGP to separate your VPN traffic from other VPNs and the Internet. This technology provides data integrity and privacy equal to frame relay, ATM, and private line service.
- IP-based disaster recovery—AT&T VPN provides you with dynamic IP disaster recovery via
  external Border Gateway Protocol (eBGP). eBGP allows load balancing across six discrete
  Customer Edge-Provider Edge (CE-PE) connections. Because AT&T VPN runs on the IP/MPLS
  network, it also supports several redundancy options for carrying primary and backup routes.
  Network-based load balancing and IP routing simplify backup and recovery from disasters. With
  dynamic load balancing and redundant routing, your data reliably travels through the network.
- Any-to-any connectivity—AT&T VPN enables communication between any two sites in your VPN, so it eliminates the need for tandem routing and defined virtual channels between sites. As your business grows, you can easily add sites to the VPN, and AT&T will manage the IP core capacity to accommodate the additional connections. In addition, packets take a more direct route to their destinations instead of passing through the hub, reducing hub traffic and, since it requires less bandwidth and equipment at the hub.
- Service Level Agreements (SLAs)—We provide industry-leading SLAs that cover delay, throughput, availability, time-to-repair, and service installation time. Our AT&T VPN site availability SLA objective is 100%. With our agreements, you can trust that your critical data is quickly and reliably transmitted.
- Network management options—AT&T VPN allows you to choose between two management options on a per-site basis: transport and managed. You can manage your own VPN routers on your premises or have AT&T manage and maintain them. As your management requirements change, you can change transport sites to managed router sites, and vice versa. In addition, you can combine transport and managed sites in a single network, allowing you to choose the option that offers the best cost and resource value on a site-by-site basis.
- Access choices—You can connect using Ethernet or IP MPLS ports that support point-to-point
  protocol (PPP), or multilink PPP (MLPPP). You can choose the fastest and most efficient access
  method to serve your needs. Mobile connectivity is also available with PMC.
- **Load balancing**—AT&T VPN supports both BGP and static routing. Using the BGP multipath option, you can enable and disable load sharing across multiple AT&T VPN ports as your needs require. Efficient load balancing helps to improve your network performance and reliability.

• **Network diagnostics and help desk support**—AT&T's networking experts in our Network Operation Centers provide proactive 24x7 monitoring of your network connection. In addition, we offer help desk support on a 24x7 basis. As a result, we diagnose your service and identify and correct service issues quickly, so you can trust that your network will always perform at its optimum level.

#### AT&T offers these advantages:

- Data Network Strength—AT&T understands data transport—we own and operate wireline, wireless, and IP data networks, including one of the world's most advanced and powerful IP backbones. Our networks offer local, national, and global coverage. With the wide reach and reliability of our global data network, we're able to provide dependable VPN services, so you can focus on your business.
- Security—AT&T has one of the most comprehensive security portfolios in the industry. We build in
  robust security measures at every network layer to help reduce the risk of outages and intrusions.
  Our AT&T VPN service offers you the level of security you expect from our traditional ATM and
  frame relay services and extends that security to your IP-VPN environment.
- Performance—You expect communication services that work, and we can deliver. We've made
  substantial investments each year to improve our technology infrastructure so that we can provide
  superior performance. This high-performing infrastructure allows us to easily integrate your data,
  voice, and video traffic on a single IP network. And, our global IP/MPLS network provides worldclass performance with high availability, low latency, and low loss.
- **Support**—Getting straight answers to your questions is important. That's why we give you an experienced, professional account team that knows your business and can recommend the best solutions. Your AT&T account team will develop an AT&T VPN solution that can handle your critical data, voice, and video applications.
- Reliability—AT&T is one of the strongest, most dependable communication providers in the
  industry. We monitor our network to identify and correct service issues quickly. And, we offer a suite
  of diversity options to help meet your disaster recovery needs and keep your communication
  system running smoothly, even under extreme conditions.
- Complete Solutions—AT&T offers a wide range of solutions. We can work with a variety of communication products and can assess your needs to identify potential solutions. Our network design consultants can design an AT&T VPN network that integrates your legacy and client/server applications with a single network backbone.
- Experience and Expertise—With more than 100 years of experience, AT&T draws on its expertise to champion innovation and develop comprehensive, reliable solutions. We've used that experience to build one of the world's best networks for your voice, data, and video services, and we'll continue to improve that network by deploying new technologies.
- Financial Stability

  You can rely on us to be your service provider

  now and in the future. AT&T
  has a strong balance sheet and a history of prudent financial management. You can count on us to
  deliver the service you need today and to continue to support your growing business and
  technology needs.

#### SERVICE LEVELS:

# **Service Level Agreements**

## **General SLA Terms**

AT&T has established performance objectives for the Service. While AT&T does not guarantee performance objectives, AT&T will provide credits to an eligible Customer when a performance objective is not met. If a SLA states that a Customer is eligible for a SLA credit, this means that the Customer is eligible subject to the terms, definitions and any exclusions or limitations stated herein.

#### **Definitions**

Covered Service Monthly Charges means:

• the monthly charges for an affected MPLS Port at the Customer Site,

 the monthly charges for Optional Features associated with the MPLS Port at an impacted Customer Site, including charges for affected features such as Class of Service, Managed Router, or Managed CSU-Probe, but excludes Virtual Network Internet Connection charges.

# **SLA Eligibility Table**

Customer eligibility for Service Level Agreements shall be determined by the Service Component type, Management Option, and in some cases the type of access for a Site as described in the SLA Eligibility Tables.

SLA Eligibility Table					
Table 1 Eligibility for On Time Provisioning, Site Availability/ Time to Restore and Network SLAs					
	Site Management Option				
SLA	Transport	Managed CSU-Probe	Managed Router		
On Time Provisioning – New Starts	Yes	Yes	Yes		
On Time Provisioning - Moves, Adds, Changes Physical	Yes	Yes	Yes		
On Time Provisioning - Moves, Adds, Changes Logical	No	No	No		
Site Availability / Time to Restore	Yes	Yes	Yes		
Network Latency, Network Data Delivery, Network Jitter	Yes	Yes	Yes		

SLA Eligibility Table					
Table 2 Eligibility for MPLS Port-to-MPLS-Port, MPLS Site-to-MPLS Site SLAs					
014 4	Site 2 – Management Option				
Site 1 – Management Option	Transport	Managed CSU-Probe	Managed Router	Managed Router and Managed CSU-Probe*	
Transport	Port to Port	Port to Port	Port to Port	Port to Port	
Managed CSU- Probe	Port to Port	Managed CSU- Probe Site to Site	Port to Port	Managed CSU-Probe Site to Site	
Managed Router	Port to Port	Port to Port	Managed Router Site to Site	Managed Router Site to Site	
Managed Router and Managed CSU- Probe	Port to Port	Managed CSU- Probe Site to Site	Managed Router Site to Site	Managed Router Site to Site	

**Definitions and Notes:** 

"Port to Port" means the Transport MPLS Port-to-MPLS Port Latency and Transport -MPLS Port Data Delivery SLAs are applicable to both Site 1 and Site 2.

"Managed CSU-Probe Site to Site" means Managed CSU-Probe MPLS Site-to-MPLS Site Latency and MPLS Site-to-MPLS Site Data Delivery SLAs applicable to both Site 1 and Site 2.

"Managed Router Site to Site" means MPLS Site-to-MPLS Site Latency, MPLS Site-to-MPLS Site Data Delivery and MPLS Site-to-MPLS Site Jitter SLAs applicable to Site 1 and Site 2 (if Site 1 and Site 2 are a Qualified Pair).

\*Managed CSU-Probe MPLS Site-to-MPLS Site Latency and Managed CSU-Probe MPLS Site-to-MPLS Site Data Delivery SLAs do not apply to Managed CSU-Probe Sites or Site pairs not included in the single applicable VPN designated by Customer for such SLAs.

# **SLA Exclusions and Limitations**

AT&T is not responsible for failure to meet an SLA resulting from:

- negligent conduct or misuse by Customer or users of the Service;
- failure or deficient performance of power, equipment, inside wiring, services or systems not provided by AT&T;
- at sites supported by Managed CPE, failure of (including failure by Customer to order, provision or support) the dedicated analog line connected to the Managed CPE for out-of-band management and testing. However this exclusion does not apply to Latency, Data Delivery, or Jitter SLAs during periods when both sites in the site pair are available and meet the requirements in the General SLA Terms;
- At sites where customer has chosen Customer Self-Installation Option, delays in provisioning due to CPE equipment not being assembled on time or correctly by the applicable Due Date;
- Customer requested or caused delays or Customer's election to not release a Service Component for testing and/or repair;
- service interruptions, deficiencies, degradations or delays:
  - due to access lines or CPE not provided by AT&T;
  - due to use of the NetFlow Feature on the AT&T VPN Managed Router;
  - during any period in which AT&T or its agents are not provided access to the premises where access lines associated with the Service are terminated or AT&T CPE is located;
  - during any period when a Service Component is removed from service by AT&T for maintenance or upgrade of the Service or a Service Component during a scheduled maintenance window or upon prior notice by AT&T,
  - during any period when a Service Component is removed from service by AT&T for replacement, rearrangement, or for the implementation of a Customer order;

SLAs do not apply if Customer and AT&T agree to another remedy for the same interruption, deficiency, degradation, or delay affecting the Service Component subject to the SLA.

For all SLA claims, if the same occurrence causes AT&T to fail to meet more than one SLA applicable to a Customer Site, Customer is eligible to receive a credit under only one SLA. Additionally, Customer may receive:

- Only one credit in any calendar month for a failure by AT&T to meet any of the Network Latency, Network Data Delivery and Network Jitter SLA.
- Credits for an affected Customer Site in a given month totaling no more than the total Covered Service Monthly Charges for the Site that month.

Validation of Managed Router MPLS Site-to-MPLS Site Latency, MPLS Site-to-MPLS Site Data Delivery, and MPLS Site-to-MPLS Site Jitter SLA Claims

Validation of the first three (3) MPLS Site-to-MPLS Site Latency, the first three (3) MPLS Site-to-MPLS Site Data Delivery, or the first three (3) MPLS Site-to-MPLS Site Jitter SLA claim requests for the same Qualifying Pair during a six (6) month rolling period will be based on the average monthly performance metrics reported in the "Average" column of the Customer's Site to Site reports. Beginning with the fourth MPLS Site-to-MPLS Site Latency, or the fourth MPLS Site-to-MPLS Site Jitter SLA claim request for the same Qualified Pair in a rolling six (6) month period, AT&T will base validation of these claims on the monthly metrics published in the "Adjusted" column in these reports.

The metrics published in the Customer's Site to Site reports in the "Average" column reflect all MPLS Port utilization measured during a month. The metrics published in the Customer's Site to Site reports in the "Adjusted" column eliminate measurements taken during periods of Port utilization at excess levels, which can impact Latency, Data Delivery and Jitter measurements. For MPLS Port sizes less than 512k, utilization above 50% will be eliminated from reported results. For MPLS Port sizes 512k and greater, utilization levels above 70% will be eliminated from reported results.

#### **Claims Process**

In order for a Customer to be eligible to receive a credit under a SLA:

- The credit request must be submitted by the end of the month following the month in which the provisioning was completed or the performance objective failure occurred.
- A trouble ticket must be opened with respect to the trouble or service deficiency causing AT&T to miss a performance objective; except that trouble tickets need not be opened for Customer to be eligible for SLA credits under Network Latency, Network Data Delivery, and Network Jitter SLAs, and On-Time Provisioning SLAs. Customer is required to open a trouble ticket in order to be eligible for SLA credits for the:
  - MPLS Port Data Delivery SLA;
  - MPLS Port -to-MPLS Port Latency SLA;
  - Managed Router and or Managed CSU-Probe MPLS Site-to-MPLS Site Latency SLA;
  - Managed Router and or Managed CSU-Probe MPLS Site-to-MPLS Site Data Delivery SLA;
  - Managed Router MPLS Site-to-MPLS Site Jitter SLA; and
  - Site Availability/Time to Restore (Trouble tickets related to Site Availability/Time to Restore service deficiencies will be opened by AT&T at Sites where Customer has ordered the Managed Router and or Managed CSU-Probe Feature).

## **Use of Alternate Service**

If Customer elects to use another means of communications during the period of interruption, Customer must pay the charges for the alternative service used.

## **On-Time Provisioning SLA**

The performance objective for the On-Time Provisioning SLA is to complete installation of new Service at a Site, including AT&T-provided access lines, by the applicable Due Date. If AT&T does not meet this performance objective, Customer is eligible to:

- Receive a credit equal to one month of the discounted Covered Monthly Charges for the Site that was not installed on time.
- Moves
- Add the Managed Router feature to existing Service
- Add router cards to router
- Resiliency
- Disconnect router or router/port

For Service with Managed CSU-Probe, On-Time Provisioning SLA applies to the following

#### physical MACDs:

The On-Time Provisioning SLA also applies to Customer change orders. Customer shall receive a credit of 50% of the Non-Recurring charges for Ports, PVCs, COS Packages, or CIR changes.

For Service with Managed Router, the On-Time Provisioning SLA applies to the following physical MACDs:

- Add Managed CSU-Probe to a Site.
- Disconnect managed CSU-Probe from a Site.

The performance objective is to complete the above-listed physical MACDs by the applicable Due Date. If AT&T does not meet this performance objective, Customer is eligible to receive a credit equal to 50% of the one-time charge for the physical MACD.

If AT&T agrees to expedite an order for a Service Component, the On-Time Provisioning SLA applies to the original Due Date provided by AT&T, not the expedited date.

#### Latency

AT&T provides Latency SLAs for Network Latency, MPLS Port-to-MPLS Port Latency, and MPLS Managed Router and Managed CSU-Probe MPLS Site-to-MPLS Site Latency.

## **Network Latency SLA**

The performance objectives for the Network Latency SLA are for the Network Latency to be no greater than the latencies set forth in the Network Latency Performance Objectives Table.

If AT&T does not meet this performance objective in a given calendar month, Customer is eligible for a Network Latency SLA credit equal to 1/30th of Customer's total discounted Covered Monthly Charges for the affected Sites for that month.

"Network Latency" is a monthly measure of the AT&T network-wide delay within the Region, which is the average interval of time it takes during the applicable calendar month for test packets of data to travel between selected pairs of AT&T Network Nodes within the Region. Specifically, the time it takes test packets to travel from one AT&T Network Node in a pair to another and back is measured for selected pairs of AT&T Network Nodes in the Region over the month. Latency for the month is the average of these measurements.

#### **Network Latency Performance Objectives Table**

Network Latency Performance Objectives Table				
Region	Performance Objectives			
United States*	37 ms			

<sup>\*</sup>Measurements for the US Region includes Sites located within the US Mainland only but will be used to determine credits for US Sites generally (including Alaska, Hawaii, Puerto Rico and the Virgin Islands).

#### **Network Data Delivery SLA**

The performance objectives for the Network Data Delivery SLA are for the Network Data Delivery percentages within a Region to be no less than those set forth in the Network Data Delivery Performance Objectives Table.

If AT&T does not meet this performance objective in a given calendar month, Customer is eligible for an Network Data Delivery SLA credit equal to 1/30th of Customer's total discounted Covered Monthly Charges for the Sites in the affected Region for that month.

The "Network Data Delivery Percentage" for a Region is the average Data Delivery percentage for that month for all selected pairs of AT&T Network Nodes in the Region calculated by dividing Data Received by Data Delivered and multiplying by 100.

"Data Delivered" is the number of test packets of data delivered in a month by AT&T to an ingress router at an AT&T Network Node in a Region for delivery to an egress router at another specific AT&T Network Node in the Region.

"Data Received" is the number of such test packets of data that are actually received by the egress router at the other AT&T Network Node in the Region.

# **Network Data Delivery Performance Objectives Table**

Network Data Delivery Performance Objectives Table			
Region	Performance Objectives		
United States*	99.95%		

<sup>\*</sup>Measurements for the US Region include Sites located within the US Mainland only but will be used to determine credits for US Sites generally (including Alaska, Hawaii, Puerto Rico and the Virgin Islands).

#### **Jitter**

AT&T provides Jitter SLAs for Network Jitter and Managed Router MPLS Site-to-MPLS Site Jitter.

#### **Network Jitter SLA**

The performance objective for the Network Jitter SLA is for Network Jitter in a given month to be no more than the jitter set forth in the Network Jitter Performance Objectives Table.

If AT&T does not meet this performance objective, Customer is eligible for a Network Jitter SLA credit equal to 1/30th of Customer's total discounted Covered Monthly Charges for the Sites in the affected Region for that month.

"Network Jitter" is a monthly measure of the AT&T Network-wide IP packet delay variation within the applicable Region, which is the average difference in the interval of time it takes during the applicable calendar month for selected pairs of test packets of data in data streams to travel between pairs of AT&T Network Nodes in the Region. Specifically, the difference in time it takes a selected pair of test packets in a data stream to travel from one AT&T Network Node in a pair to another is measured for selected pairs of AT&T Network Nodes in the Region over the month. One of the test packets in the selected pair will always be a packet in the data stream that takes the least time to travel from one AT&T Network Node in a pair to another. VPN Network Jitter for the month is the average of these measurements.

#### **Network Jitter Performance Objectives Table**

Network Jitter Performance Objectives Table			
Region	Performance Objectives		
United States*	1.0 ms		

<sup>\*</sup>Measurements for the US Region includes Sites located within the US Mainland only but will be used to determine credits for US Sites generally (including Alaska, Hawaii, Puerto Rico and the Virgin Islands).

#### Site Availability/Time to Restore SLA

The performance objective for the Site Availability/Time to Restore SLA is for the AT&T VPN Site Availability to be 100%. If AT&T does not meet this performance objective, Customer is eligible for a Site Availability/Time to Restore SLA credit for each Outage equal to the Customer's total discounted Covered Monthly Charges for the affected MPLS Port, multiplied by a percentage based on the duration of (Time to Restore) the Outage, as set forth in the Site Availability/Time to Restore SLA Credit Table.

"Outage" means an occurrence within the AT&T Network (including Managed CPE) and/or the AT&T-provided access that results in the inability of Customer to transmit or receive IP packets for more than one minute.

Measurement of an Outage for SLA credit purposes begins when a trouble ticket is opened by AT&T Customer Care and Customer releases the affected Service Component(s) to AT&T (when it is necessary for AT&T to diagnose and/or restore a Service Component into use) and ends when AT&T Customer Care makes its first attempt to notify Customer that the problem

has been resolved and the Service Components are restored and available for Customer to use.

For sites located outside of the United States any outage time shall exclude time that is outside of the standard operating hours of the local access provider used by AT&T for the affected Customer Site.

# Site Availability/Time to Restore SLA Credit Table

Site Availability/Time to Restore SLA Credit Table					
Time to Restore Outage					
Equal To or Greater Than:	Or Less Than:	U.S. Credit			
6 hours	7 hours	25%			
7 hours	8 hours	25%			
8 hours	9 hours	50%			
9 hours	10 hours	50%			
10 hours	11 hours	50%			
11 hours	12 hours	50%			
12 hours	13 hours	50%			
13 hours	14 hours	50%			
14 hours	15 hours	50%			
15 hours	16 hours	50%			
16 hours	17 hours	100%			
17 hours	18 hours	100%			
18 hours	19 hours	100%			
19 hours	20 hours	100%			
20 hours	21 hours	100%			
21 hours	22 hours	100%			
22 hours	23 hours	100%			
23 hours	24 hours	100%			
24 hours	36 hours	100%			
36 hours	48 hours	100%			
48 hours	72 hours	100%			
72 hours	>72 hours	100%			

## **SERVICE AVAILABILITY/LIMITATIONS:**

Service is available in Connecticut.

# **INSTALLATION INTERVALS:**

T1, NxT1 access: \*26-40 days from receipt of order Ethernet access: \*71-85 days from receipt of order

\*Subject to capacity and availability.

B-03-012 MASTER AGREEMENT NUMBER: DAS APPROVAL DATE: 12/13/2017 VENDOR NAME: AT&T Corporation **SERVICE NAME:** AT&T VPN (AVPN) Service Date of Activity Date Non-Item Recurring Unit Add. Delete. Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost Bv DAS **Unit Cost** Change) Request AVPN MPLS Port 1.544M/1.536M / 07/29/15 1 1.544 Mb \$131.76 Add 07/07/15 T1 per port Port \$0.00 AVPN MPLS Port 1.544M/1.536M / 10/25/17 12/13/17 T1 per port T1 Port \$0.00 \$84.64 Change 1 AVPN MPLS Port 3.088 Mb / 2xT1 07/07/15 07/29/15 2 3.088 Mb \$0.00 \$208.98 Add per port Port AVPN MPLS Port 3.088 Mb / 2xT1 Delete 10/25/17 12/13/17 3.088 Mb Port \$0.00 \$235.20 per port AVPN MPLS Port 4.632 Mb / 3xT1 Add 07/07/15 07/29/15 3 per port 4.632 Mb Port \$0.00 \$274.32 AVPN MPLS Port 4.632 Mb / 3xT1 \$305.20 Delete 10/25/17 12/13/17 4.632 Mb Port \$0.00 per port AVPN MPLS Port 2 Mb / Ethernet Add 07/07/15 07/29/15 2 Mb Port \$0.00 \$168.48 per port AVPN MPLS Port 2 Mb / Ethernet Delete 10/25/17 12/13/17 2 Mb Port \$0.00 \$233.80 per port AVPN MPLS Port 3 Mb / Ethernet 3 Mb Add 07/07/15 07/29/15 Port \$0.00 \$203.04 per port AVPN MPLS Port 3 Mb / Ethernet Delete 10/25/17 12/13/17 per port 3 Mb Port \$0.00 \$233.80 AVPN MPLS Port 4 Mb / Ethernet Add 07/07/15 07/29/15 4 Mb Port \$0.00 \$236.79 per port AVPN MPLS Port 4 Mb / Ethernet Delete 10/25/17 12/13/17 4 Mb Port \$0.00 \$233.80 per port AVPN MPLS Port 5 Mb / Ethernet Add 07/07/15 07/29/15 5 Mb Port \$0.00 \$185.64 per port AVPN MPLS Port 5 Mb / Ethernet Delete 10/25/17 12/13/17 7 5 Mb Port \$0.00 \$233.80 per port AVPN MPLS Port 6 Mb / Ethernet 6 Mb \$196.86 Add 07/07/15 07/29/15 per port Port \$0.00 AVPN MPLS Port 6 Mb / Ethernet 6 Mb Delete 10/25/17 12/13/17 8 Port \$0.00 \$233.80 per port AVPN MPLS Port 7 Mb / Ethernet Add 07/07/15 07/29/15 9 per port 7 Mb Port \$0.00 \$211.99 AVPN MPLS Port 7 Mb / Ethernet 10/25/17 12/13/17 9 7 Mb Port \$0.00 \$233.80 Delete per port AVPN MPLS Port 8 Mb / Ethernet 8 Mb Add 07/07/15 07/29/15 10 per port Port \$0.00 \$229.33

B-03-012 DAS APPROVAL DATE: 12/13/2017 MASTER AGREEMENT NUMBER: VENDOR NAME: AT&T Corporation SERVICE NAME: AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Recurring Add. Delete Vendor Approved Item Description of Service/Equipment Bandwidth Unit Code Cost By DAS **Unit Cost** Change) Request AVPN MPLS Port 8 Mb / Ethernet Delete 10/25/17 12/13/17 10 8 Mb Port \$0.00 \$233.80 per port AVPN MPLS Port 9 Mb / Ethernet Add 07/07/15 07/29/15 11 9 Mb \$0.00 per port Port \$246.67 AVPN MPLS Port 9 Mb / Ethernet Delete 10/25/17 12/13/17 11 per port 9 Mb Port \$0.00 \$233.80 AVPN MPLS Port 10 Mb / Ethernet Add 07/29/15 12 10 Mb \$0.00 \$259.42 07/07/15 per port Port AVPN MPLS Port 10 Mb / Ethernet 10/25/17 12/13/17 12 10 Mb Port \$0.00 \$233.80 Change per port AVPN MPLS Port 20 Mb / Ethernet 20 Mb Add 07/07/15 07/29/15 13 per port Port \$0.00 \$356.49 AVPN MPLS Port 20 Mb / Ethernet 10/25/17 12/13/17 13 20 Mb Port \$0.00 \$303.10 Change per port AVPN MPLS Port 30 Mb / Ethernet Add 07/07/15 07/29/15 14 per port 30 Mb Port \$0.00 \$473.45 AVPN MPLS Port 30 Mb / Ethernet 10/25/17 12/13/17 14 30 Mb Port \$0.00 \$461.30 Change per port AVPN MPLS Port 40 Mb / Ethernet Add 07/07/15 07/29/15 15 40 Mb \$0.00 Port \$571.20 AVPN MPLS Port 40 Mb / Ethernet 10/25/17 12/13/17 15 40 Mb Port \$0.00 \$461.30 Change per port AVPN MPLS Port 50 Mb / Ethernet 07/07/15 07/29/15 16 50 Mb \$0.00 \$682.04 Add per port Port AVPN MPLS Port 50 Mb / Ethernet Change 10/25/17 12/13/17 16 per port 50 Mb Port \$0.00 \$461.30 AVPN MPLS Port 60 Mb / Ethernet Add 07/07/15 07/29/15 17 60 Mb Port \$0.00 \$796.11 per port AVPN MPLS Port 60 Mb / Ethernet Change 10/25/17 12/13/17 17 per port 60 Mb Port \$0.00 \$620.20 AVPN MPLS Port 70 Mb / Ethernet Add 07/07/15 07/29/15 18 70 Mb Port \$0.00 \$902.70 per port AVPN MPLS Port 70 Mb / Ethernet 70 Mb Port \$0.00 \$620.20 Change 10/25/17 12/13/17 18 per port AVPN MPLS Port 80 Mb / Ethernet Add 07/07/15 07/29/15 19 per port 80 Mb Port \$0.00 \$971.89 AVPN MPLS Port 80 Mb / Ethernet 10/25/17 12/13/17 19 80 Mb Port \$0.00 \$620.20 Change per port

B-03-012 DAS APPROVAL DATE: 12/13/2017 MASTER AGREEMENT NUMBER: VENDOR NAME: AT&T Corporation SERVICE NAME: AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Recurring Add. Delete. Vendor Approved Item Description of Service/Equipment Bandwidth Unit Code Cost Bv DAS **Unit Cost** Change) Request AVPN MPLS Port 90 Mb / Ethernet Add 07/07/15 07/29/15 20 90 Mb Port \$0.00 \$1,059.78 per port AVPN MPLS Port 90 Mb / Ethernet 90 Mb 10/25/17 12/13/17 20 Port \$0.00 \$620.20 Change per port AVPN MPLS Port 100 Mb / Ethernet Add 07/07/15 07/29/15 21 per port 100 Mb Port \$0.00 \$1,140.19 AVPN MPLS Port 100 Mb / Ethernet 100 Mb Change 10/25/17 12/13/17 21 \$0.00 \$620.20 per port Port AVPN MPLS Port 150 Mb / Ethernet Add 07/07/15 07/29/15 22 150 Mb Port \$0.00 \$1,654.44 per port AVPN MPLS Port 150 Mb / Ethernet 10/25/17 12/13/17 22 150 Mb \$0.00 \$1,036.00 Change per port Port AVPN MPLS Port 200 Mb / Ethernet Add 07/07/15 07/29/15 23 200 Mb Port \$0.00 \$2,184.50 per port AVPN MPLS Port 200 Mb / Ethernet Change 10/25/17 12/13/17 23 per port 200 Mb Port \$0.00 \$1,627.50 AVPN MPLS Port 250 Mb / Ethernet Add 07/07/15 07/29/15 24 250 Mb Port \$0.00 \$2,570.06 per port AVPN MPLS Port 250 Mb / Ethernet 10/25/17 12/13/17 24 250 Mb Port \$0.00 \$1,627.50 Change AVPN MPLS Port 300 Mb / Ethernet Add 07/07/15 07/29/15 25 300 Mb Port \$0.00 \$2,830.67 per port AVPN MPLS Port 300 Mb / Ethernet 10/25/17 12/13/17 25 300 Mb Port \$0.00 \$1,981.00 Change per port AVPN MPLS Port 400 Mb / Ethernet Add 07/07/15 07/29/15 26 per port 400 Mb Port \$0.00 \$3.351.55 AVPN MPLS Port 400 Mb / Ethernet 400 Mb \$0.00 Change 10/25/17 12/13/17 26 Port \$1.981.00 per port AVPN MPLS Port 450 Mb / Ethernet Add 07/07/15 07/29/15 27 450 Mb Port \$0.00 \$3.611.99 per port AVPN MPLS Port 450 Mb / Ethernet Change 10/25/17 12/13/17 27 450 Mb Port \$0.00 \$2,159.50 per port AVPN MPLS Port 500 Mb / Ethernet Add 07/07/15 07/29/15 28 500 Mb \$0.00 Port \$3,416,85 per port AVPN MPLS Port 500 Mb / Ethernet 500 Mb Change 10/25/17 12/13/17 28 per port Port \$0.00 \$2,159.50 AVPN MPLS Port 600 Mb / Ethernet Add 600 Mb \$0.00 07/07/15 07/29/15 29 Port \$3.876.00 per port

B-03-012 MASTER AGREEMENT NUMBER: DAS APPROVAL DATE: 12/13/2017 VENDOR NAME: AT&T Corporation SERVICE NAME: AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Add. Delete Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost By DAS **Unit Cost** Change) Request AVPN MPLS Port 600 Mb / Ethernet Change 10/25/17 12/13/17 29 600 Mb Port \$0.00 \$2,387.00 per port AVPN MPLS Port 700 Mb / Ethernet Add 07/07/15 07/29/15 30 700 Mb \$0.00 \$4,885.95 per port Port AVPN MPLS Port 700 Mb / Ethernet Change 10/25/17 12/13/17 30 per port 700 Mb Port \$0.00 \$3,969.00 AVPN MPLS Port 800 Mb / Ethernet Add 07/29/15 31 800 Mb \$0.00 \$5,334.15 07/07/15 per port Port AVPN MPLS Port 800 Mb / Ethernet 10/25/17 12/13/17 31 per port 800 Mb Port \$0.00 \$3,969.00 Change AVPN MPLS Port 900 Mb / Ethernet Add 07/07/15 07/29/15 32 per port 900 Mb Port \$0.00 \$5,804.55 AVPN MPLS Port 900 Mb / Ethernet Change 10/25/17 12/13/17 32 per port 900 Mb Port \$0.00 \$3,969.00 AVPN MPLS Port 1,000 Mb / Add 07/07/15 07/29/15 33 Ethernet per port 1,000 Mb Port \$0.00 \$6,271.20 AVPN MPLS Port 1.000 Mb / Change 10/25/17 12/13/17 33 Ethernet per port 1,000 Mb Port \$0.00 \$3,969.00 MPLS Managed Router-Basic (Cisco 1921, 2901, or similar) AT&T Owned Add 07/07/15 07/29/15 34 and Managed \$0.00 \$138.65 each MPLS Managed Router-Basic AT&T 10/25/17 Change 12/13/17 34 Owned and Managed n/a each \$0.00 \$126.50 MPLS Managed Router-Small (Cisco 2811, 2911, or similar) AT&T Owned and Managed Add 07/07/15 07/29/15 35 each \$0.00 \$148.05 MPLS Managed Router-Small AT&T Owned and Managed 10/25/17 12/13/17 35 n/a \$0.00 Change \$148.05 each MPLS Managed Router-Medium (Cisco 2921 or similar) AT&T Owned and Managed Add 07/07/15 07/29/15 36 each \$0.00 \$183.30 MPLS Managed Router-Medium AT&T Owned and Managed n/a Change 10/25/17 12/13/17 36 each \$0.00 \$167.75 MPLS Managed Router-Large (Cisco 3925 or similar) AT&T Owned and Managed Add 07/07/15 07/29/15 37 each \$0.00 \$347.80 MPLS Managed Router-Large AT&T 10/25/17 12/13/17 37 Owned and Managed \$0.00 \$319.00 Change n/a each

B-03-012 MASTER AGREEMENT NUMBER: DAS APPROVAL DATE: 12/13/2017 **VENDOR NAME: AT&T Corporation** SERVICE NAME: AT&T VPN (AVPN) Service Date of Activity Date Non-Item Recurring Unit Add. Delete Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost By DAS Change) Request Unit Cost MPLS Managed Router-XLarge (Cisco 3945 or similar) AT&T Owned Add 07/07/15 07/29/15 38 and Managed each \$0.00 \$437.10 MPLS Managed Router-X Large AT&T Owned and Managed 10/25/17 12/13/17 38 n/a \$0.00 \$401.50 Change each MPLS Managed Router-XL+ (Cisco ASR 1001 or similar) AT&T Owned 07/29/15 39 and Managed \$0.00 Add 07/07/15 each \$911.60 MPLS Managed Router-XL+ AT&T 10/25/17 12/13/17 39 Owned and Managed n/a \$0.00 \$1,165.50 Delete each MPLS Managed Router-XXL (Cisco ASR1002 or similar) AT&T Owned Add 07/07/15 07/29/15 40 and Managed \$0.00 \$1,126.40 each MPLS Managed Router-XXL AT&T Owned and Managed Change 10/25/17 12/13/17 40 n/a each \$0.00 \$1,105.50 AVPN Managed CPE Feature / Gig 07/07/15 07/29/15 41 **Ethernet Card** Add \$0.00 \$28.00 each AVPN Managed CPE Feature / Gig Delete 10/25/17 12/13/17 41 **Ethernet Card** n/a each \$0.00 \$28.00 T1.5 Local Access 0-25 Miles from AT&T POP (See Note 2) T1.5 Add 07/07/15 07/29/15 42 \$0.00 \$265.00 Circuit T1.5 Local Access 0-25 Miles from AT&T POP (See Note 2) Delete 10/25/17 12/13/17 42 T1.5 Circuit \$0.00 \$265.00 T1.5 Local Access 26-50 Miles from Add 07/07/15 07/29/15 43 AT&T POP (See Note 2) T1.5 \$0.00 \$462.00 Circuit T1.5 Local Access 26-50 Miles from 10/25/17 12/13/17 43 AT&T POP (See Note 2) T1.5 \$462.00 Delete Circuit \$0.00 \$350.00 + T1.5 Local Access 51 Miles and \$6.50 per Add 07/07/15 07/29/15 44 Over to the AT&T POP (See Note 2) T1.5 Circuit \$0.00 mile \$350.00 + T1.5 Local Access 51 Miles and \$6.50 per Delete 10/25/17 12/13/17 44 Over to the AT&T POP (See Note 2) T1.5 Circuit \$0.00 mile T1.5 Local Access for 55 Farmington Add 07/07/15 07/29/15 45 Avenue, Hartford, CT T1.5 Circuit \$0.00 \$265.00 T1.5 Local Access for 55 Farmington Avenue, Hartford, CT T1.5 \$0.00 \$265.00 Delete 10/25/17 12/13/17 45 Circuit

MASTER AGREEMENT NUMBER: B-03-012 DAS APPROVAL DATE: 12/13/2017 **VENDOR NAME: AT&T Corporation** SERVICE NAME: AT&T VPN (AVPN) Service Date of Activity Date Non-Item Recurring Unit Add, Delete, Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost Bv DAS Change) **Unit Cost** Request 5 Mb Ethernet Access Circuit (See Add 07/07/15 07/29/15 46 Note 1) 5 Mbps Circuit \$0.00 \$563.14 5 Mb Ethernet Access Circuit (See Note 1) \$563.14 Delete 10/25/17 12/13/17 46 5 Mbps Circuit \$0.00 10 Mb Ethernet Access Circuit (See Add 07/07/15 07/29/15 47 Note 1) 10 Mbps Circuit \$0.00 \$600.00 10 Mb Ethernet Access Circuit (See \$600.00 Note 1) Delete 10/25/17 12/13/17 47 10 Mbps Circuit \$0.00 20 Mb Ethernet Access Circuit (See 07/07/15 07/29/15 48 Note 1) \$0.00 \$687.98 Add 20 Mbps Circuit 20 Mb Ethernet Access Circuit (See Delete 10/25/17 12/13/17 48 Note 1) 20 Mbps Circuit \$0.00 \$687.98 50 Mb Ethernet Access Circuit (See 07/07/15 07/29/15 49 50 Mbps \$0.00 \$837.43 Add Note 1) Circuit 50 Mb Ethernet Access Circuit (See Delete 10/25/17 12/13/17 49 Note 1) 50 Mbps Circuit \$0.00 \$837.43 100 Mb Ethernet Access Circuit (See 07/07/15 07/29/15 50 100 Mbps \$0.00 \$965.60 Add Note 1) Circuit 100 Mb Ethernet Access Circuit (See \$965.60 Delete 10/25/17 12/13/17 50 100 Mbps Circuit \$0.00 150 Mb Ethernet Access Circuit (See 07/07/15 07/29/15 51 150 Mbps \$0.00 \$2,034.04 Add Note 1) Circuit 150 Mb Ethernet Access Circuit (See Delete 10/25/17 12/13/17 51 Note 1) 150 Mbps Circuit \$0.00 \$2,034.04 250 Mb Ethernet Access Circuit (See Add 07/07/15 07/29/15 52 Note 1) 250 Mbps Circuit \$0.00 \$2,947.22 250 Mb Ethernet Access Circuit (See Note 1) 10/25/17 12/13/17 52 250 Mbps \$0.00 \$2,947.22 Delete Circuit 500 Mb Ethernet Access Circuit (See Add 07/07/15 07/29/15 53 Note 1) 500 Mbps Circuit \$0.00 \$4,171.08 500 Mb Ethernet Access Circuit (See Delete 10/25/17 12/13/17 53 Note 1) 500 Mbps \$0.00 \$4,171.08 Circuit 600 Mb Ethernet Access Circuit (See Note 1) 600 Mbps Add 07/07/15 07/29/15 54 Circuit \$0.00 \$4,504.97 600 Mb Ethernet Access Circuit (See Delete 10/25/17 12/13/17 54 Note 1) 600 Mbps Circuit \$0.00 \$4,504.97 1,000 Mb Ethernet Access Circuit (See Note 1) \$0.00 Add 07/07/15 07/29/15 55 1,000 Mbps Circuit \$5,054.88

B-03-012 MASTER AGREEMENT NUMBER: DAS APPROVAL DATE: 12/13/2017 VENDOR NAME: AT&T Corporation **SERVICE NAME:** AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Add. Delete Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost By DAS **Unit Cost** Change) Request 1,000 Mb Ethernet Access Circuit Delete 10/25/17 12/13/17 55 (See Note 1) 1,000 Mbps Circuit \$0.00 \$5,054.88 ATT Managed External CSU - PPP Add 10/25/17 12/13/17 56 nxT1 each \$1,500.00 \$434.00 ATT Managed External CSU -Add 10/25/17 12/13/17 57 Ethernet Ethernet each \$1.500.00 \$117.30 12/13/17 \$7.80 10/25/17 58 MPLS Unilink Feature T1 Port Add \$0.00 Add 10/25/17 12/13/17 59 MPLS Unilink Feature 2xT1 Port \$0.00 \$23.80 \$16.38 Add 10/25/17 12/13/17 60 MPLS Unilink Feature 3xT1 Port \$0.00 10/25/17 12/13/17 Add 61 MPLS Unilink Feature 2-10m Port \$0.00 \$23.10 10/25/17 12/13/17 62 MPLS Unilink Feature 20m \$0.00 \$30.10 Add Port 10/25/17 12/13/17 \$46.20 Add 63 MPLS Unilink Feature 30-50m Port \$0.00 10/25/17 \$62.30 Add 12/13/17 64 MPLS Unilink Feature 60-100m \$0.00 Port 10/25/17 12/13/17 Add 65 MPLS Unilink Feature 150m Port \$0.00 \$103.60 10/25/17 12/13/17 66 MPLS Unilink Feature 200-250m \$0.00 \$163.10 Add Port MPLS Unilink Feature 10/25/17 12/13/17 \$0.00 Add 67 300-400m Port \$198.10 10/25/17 500m \$0.00 \$216.30 Add 12/13/17 68 MPLS Unilink Feature Port 10/25/17 600m \$238.70 Add 12/13/17 69 MPLS Unilink Feature Port \$0.00 10/25/17 \$0.00 \$396.90 MPLS Unilink Feature 700m-1G Add 12/13/17 70 Port Multi VPN Logical Channel Add 10/25/17 12/13/17 71 Surcharge **VLANS 1-20 VLAN** \$0.00 \$102.00 Multi VPN Logical Channel 10/25/17 12/13/17 Add 72 Surcharge **VLANS 21-80 VLAN** \$0.00 \$342.00 MPLS HiCap Flex Port - Ethernet \$256.90 Add 10/25/17 12/13/17 73 2m/10m Port \$0.00 MPLS HiCap Flex Port - Ethernet Add 10/25/17 12/13/17 74 3m/10m Port \$0.00 \$256.90 10/25/17 12/13/17 75 MPLS HiCap Flex Port - Ethernet \$256.90 Add 4m/10-20m Port \$0.00 MPLS HiCap Flex Port - Ethernet 12/13/17 \$256.90 Add 10/25/17 76 5m/10-20m Port \$0.00 \$256.90 Add 10/25/17 12/13/17 77 MPLS HiCap Flex Port - Ethernet 6m/10-30m Port \$0.00 10/25/17 12/13/17 78 MPLS HiCap Flex Port - Ethernet \$0.00 \$256.90 Add 7m/10-30m Port 10/25/17 12/13/17 79 MPLS HiCap Flex Port - Ethernet \$256.90 Add 8m/10-40m Port \$0.00 Add 10/25/17 12/13/17 80 MPLS HiCap Flex Port - Ethernet 9m/10-40m Port \$0.00 \$256.90 12/13/17 10/25/17 MPLS HiCap Flex Port - Ethernet 10m/10-60m \$0.00 \$256.90 Add 81 Port Add 10/25/17 12/13/17 82 MPLS HiCap Flex Port - Ethernet 15m/20-70m Port \$0.00 \$777.70 MPLS HiCap Flex Port - Ethernet \$0.00 Add 10/25/17 12/13/17 83 20m/20-100m Port \$333.90 MPLS HiCap Flex Port - Ethernet \$1.054.90 Add 10/25/17 12/13/17 84 25m/30-100m Port \$0.00 10/25/17 12/13/17 85 MPLS HiCap Flex Port - Ethernet 30m/30-100m \$0.00 Add Port \$507.50 MPLS HiCap Flex Port - Ethernet Add 10/25/17 12/13/17 86 35m/40-150m Port \$0.00 \$962.50 87 MPLS HiCap Flex Port - Ethernet Add 10/25/17 12/13/17 40m/40-200m Port \$0.00 \$507.50 10/25/17 MPLS HiCap Flex Port - Ethernet Add 12/13/17 88 45m/50-200m \$0.00 \$507.50 Port

B-03-012 MASTER AGREEMENT NUMBER: DAS APPROVAL DATE: 12/13/2017 VENDOR NAME: AT&T Corporation SERVICE NAME: AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Add. Delete. Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost By DAS **Unit Cost** Change) Request 10/25/17 12/13/17 89 MPLS HiCap Flex Port - Ethernet 50m/50-200m Port \$0.00 \$507.50 Add 90 MPLS HiCap Flex Port - Ethernet \$681.80 Add 10/25/17 12/13/17 60m/60-300m Port \$0.00 MPLS HiCap Flex Port - Ethernet Add 10/25/17 12/13/17 91 70m/70-300m Port \$0.00 \$681.80 10/25/17 12/13/17 92 MPLS HiCap Flex Port - Ethernet 80m/80-400m \$0.00 \$681.80 Add Port 90m/90-450m Add 10/25/17 12/13/17 93 MPLS HiCap Flex Port - Ethernet \$0.00 \$681.80 Port 100m/100-10/25/17 12/13/17 94 MPLS HiCap Flex Port - Ethernet 500m Add Port \$0.00 \$681.80 120m/150-Add 10/25/17 12/13/17 95 MPLS HiCap Flex Port - Ethernet 600m \$0.00 Port \$1,139.60 140m/150-700m Add 10/25/17 12/13/17 96 MPLS HiCap Flex Port - Ethernet Port \$0.00 \$1,139.60 150m/150-Add 10/25/17 12/13/17 97 MPLS HiCap Flex Port - Ethernet 700m Port \$0.00 \$1,139.60 155m/200-800m Add 10/25/17 12/13/17 98 MPLS HiCap Flex Port - Ethernet Port \$0.00 \$1,139.60 200m/200m-10/25/17 12/13/17 99 MPLS HiCap Flex Port - Ethernet 1G Add Port \$0.00 \$1,790.60 250m/250m-1G Add 10/25/17 12/13/17 | 100 MPLS HiCap Flex Port - Ethernet Port \$0.00 \$1,790.60 300m/300m-Add 10/25/17 12/13/17 | 101 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,179.10 350m/400m-Add 10/25/17 12/13/17 | 102 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,179,10 400m/400m-Add 10/25/17 12/13/17 | 103 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,179.10 450m/450m-10/25/17 12/13/17 | 104 MPLS HiCap Flex Port - Ethernet 1G \$0.00 \$2,375.80 Add Port 500m/500m-Add 10/25/17 12/13/17 | 105 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,375.80 550m/600m-10/25/17 12/13/17 | 106 MPLS HiCap Flex Port - Ethernet 1G \$2,625.70 Add Port \$0.00 600m/600m-Add 10/25/17 12/13/17 | 107 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,625.70 700m/700m-Add 10/25/17 12/13/17 | 108 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,625.70 800m/800m-\$2,625.70 Add 10/25/17 12/13/17 109 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00

B-03-012 DAS APPROVAL DATE: 12/13/2017 MASTER AGREEMENT NUMBER: VENDOR NAME: AT&T Corporation SERVICE NAME: AT&T VPN (AVPN) Service Date of Date Activity Non-Item Recurring Unit Add. Delete. Vendor Approved Item Description of Service/Equipment Bandwidth Unit Recurring Code Cost By DAS **Unit Cost** Change) Request 900m/900m-Add 10/25/17 12/13/17 | 110 MPLS HiCap Flex Port - Ethernet 1G Port \$0.00 \$2,625.70 AVPN MPLS Port 2 Gb / Ethernet 12/13/17 33a 2 Gb Add 10/25/17 Port \$0.00 \$4,362.40 per port AVPN MPLS Port 2.5 Gb / Ethernet Add 10/25/17 12/13/17 | 33b per port 2.5Gb Port \$0.00 \$4,756.50 AVPN MPLS Port 3 Gb / Ethernet 12/13/17 33c 3 Gb \$0.00 Add 10/25/17 Port \$4,756.50 per port AVPN MPLS Port 3.5 Gb / Ethernet Add 10/25/17 12/13/17 | 33d 3.5 Gb Port \$0.00 \$4,756.50 per port AVPN MPLS Port 4 Gb / Ethernet 4 Gb Add 10/25/17 12/13/17 | 33e Port \$0.00 \$4,756.50 per port AVPN MPLS Port 4.5 Gb / Ethernet Add 10/25/17 12/13/17 33f 4.5 Gb Port \$0.00 \$4,756.50 per port AVPN MPLS Port 5 Gb / Ethernet 5 Gb Add 10/25/17 12/13/17 | 33g per port Port \$0.00 \$4,756.50 AVPN MPLS Port 5.5 Gb / Ethernet Add 10/25/17 12/13/17 33h 5.5 Gb Port \$0.00 \$5,149.90 per port AVPN MPLS Port 6 Gb / Ethernet Add 10/25/17 12/13/17 33i 6 Gb Port \$0.00 \$5,149.90 AVPN MPLS Port 6.5 Gb / Ethernet Add 10/25/17 12/13/17 33i 6.5 Gb Port \$0.00 \$5,149.90 per port AVPN MPLS Port 7 Gb / Ethernet 7 Gb Add 10/25/17 12/13/17 | 33k Port \$0.00 per port \$5,149.90 AVPN MPLS Port 7.5 Gb / Ethernet Add 12/13/17 331 7.5 Gb 10/25/17 per port Port \$0.00 \$5.149.90 AVPN MPLS Port 8 Gb / Ethernet Add 10/25/17 12/13/17 | 33m 8 Gb Port \$0.00 \$5,149.90 per port AVPN MPLS Port 8.5 Gb / Ethernet Add 10/25/17 12/13/17 | 33n per port 8.5 Gb Port \$0.00 \$5.149.90 AVPN MPLS Port 9 Gb / Ethernet **12/13/17** | 330 9 Gb Add 10/25/17 Port \$0.00 \$5,149.90 per port AVPN MPLS Port 9.5 Gb / Ethernet Add 10/25/17 12/13/17 | 33p 9.5 Gb Port \$0.00 \$5,149,90 per port AVPN MPLS Port 10 Gb / Ethernet 10 Gb Add 10/25/17 12/13/17 | 33q per port Port \$0.00 \$5,149.90 MPLS Managed Router-Very Basic

AT&T Owned and Managed

n/a

\$0.00

each

\$70.70

Add

10/25/17

12/13/17 34a

MASTER AGREEMENT NUMBER: B-03-012 DAS APPROVAL DATE: 12/13/2017

VENDOR NAME: AT&T Corporation

SERVICE NAME: AT&T VPN (AVPN) Service

A -4: .:4	Date of	Date	<del>`                                    </del>	<del>_</del>			<del></del>	Non-	
Activity (Add, Delete, Change)		Approved By DAS	Item	Item Code	Description of Service/Equipment	Bandwidth	Unit	Recurring Unit Cost	Recurring Unit
	1				MPLS Managed Router-Very Small				
Add	10/25/17	12/13/17	34b		AT&T Owned and Managed	n/a	each	\$0.00	\$157.50
	·	· ·			AVPN MPLS Port 6.176 Mb / 4xT1				
Add	10/25/17	12/13/17	3a		per port	6.176 Mb	Port	\$0.00	\$370.30
	1	1			AVPN MPLS Port 7.720 Mb / 5xT1				
Add	10/25/17	12/13/17	3b		per port	7.720 Mb	Port	\$0.00	\$460.5
	ı	,			AVPN MPLS Port 9.264 Mb / 6xT1				
Add	10/25/17	12/13/17	3c		per port	9.264 Mb	Port	\$0.00	\$584.50
	·	,			AVPN MPLS Port 10.808 Mb / 7xT1				
Add	10/25/17	12/13/17	3d		per port	10.808 Mb	Port	\$0.00	\$637.0
	1	,			AVPN MPLS Port 12.352 Mb / 8xT1				
Add	10/25/17	12/13/17	3e		per port	12.352 Mb	Port	\$0.00	\$686.0
		!							
NOTES -		'							

<sup>1.</sup> Ethernet Access circuits to be priced on an Individual Case Basis dependent on Provider and location.

There is also an incremental bandwdith usage (overage) associated for usage > MBC <= Port. (\$0.007/kb)

<sup>2.</sup> T1 & nxT1 Access circuits to be priced on an Individual Case Basis based on location.

<sup>3.</sup> HiCAP Flex Ethernet is a "burstable" service. Bandwidth is defined as (Minimum Bandwidth Commitment) / (Access Speed).