

# Verizon

IFB STPD 12-001-A, C3-A-13-02-TS-08

**Amendment #8, Rev. May 24, 2018** 

**CALNET 3, Category 1: Voice and Data Services** 

Subcategory 1.2 - MPLS, VPN and Converged VoIP

# Volume 2 – Response to Unique Subcategory Requirements

SOW Technical Requirements Response

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# **Required IFB Exhibits**

Required IFB Exhibits unique to each subcategory, in the following order:

- a. Exhibit 8: Contractor's License Information
- b. Exhibit 9: Service Taxes, Fees, Surcharges and Surcredits

#### **Verizon Response**

The required exhibits are provided in the following pages, and as embedded documents in the electronic version of this submission.

#### To Open File:

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# **Preference/Incentive Exhibits**

- 2. Preference/Incentive Exhibits, (required only as indicated):
  - a. Exhibit 10: Bidding Preferences and Incentives
  - b. Exhibit 11: STD 843, DVBE Declarations (required if claiming a DVBE incentive per Section 2.3.12.)
  - c. Exhibit 12: GSPD 05-105, Bidder Declaration (required if claiming a SB preference using Subcontractors, if claiming a DVBE incentive, or if Subcontractors will receive 15% or more revenue per Section 2.3.5.)

## Verizon Response

The required exhibits are provided in the following pages, and as embedded documents in the electronic version of this submission.

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# **SOW Technical Requirements**

## SUBCATEGORY 1.2 - MULTIPLE PROTOCOL LABEL SWITCHING (MPLS), VIRTUAL PRIVATE NETWORKING (VPN), AND CONVERGED VOIP TELEPHONY

#### 1.2.1 OVERVIEW

This Subcategory 1.2 IFB provides the State's solicitation for best value solutions for MPLS, Converged VoIP, IP Audio, and Session Initiated Protocol Trunking services. This IFB also describes the CALNET 3 technical requirements necessary to support the CALNET 3 program requirements.

This IFB will be awarded to Bidders that meet the award criteria as described in IFB Section 4. The CALNET 3 Contract(s) that result from the award of this IFB will be managed on a day-to-day basis by the CALNET 3 Contract Management and Oversight (CALNET 3 CMO).

#### 1.2.1.1 BIDDER RESPONSE REQUIREMENTS

Throughout this IFB, Bidders are required to acknowledge acceptance of the requirements described herein by responding to one (1) of the following:

Example A (for requirements that require confirmation that the Bidder understands and accepts the requirement):

"Bidder	understands	the Requ	uirement	and	shall	meet	or e	exceed	it?	Yes	_ No	- "
Or.												

Example B (for responses that require the Bidder to provide a description or written response to the requirement):

"Bidder	understands	the	requirements	in	Section	XXX	and	shall	meet	or	exceed	them?	Yes
No													

Description:"

#### 1.2.1.2 DESIGNATION OF REQUIREMENTS

All Technical Requirements specified in this IFB Section are Mandatory and must be responded to as identified in IFB Section 3.4.2.5 by the Bidder. Additionally, some Mandatory requirements are "Mandatory-Scorable" and are designated as "(M S)". The State will have the option of whether or not to include each item in the Contract, based on the best interest of the State. Furthermore, Customers will have the option whether or not to order services or features included in the Contract. Service Requests for some CALNET 3 services or features may require CALNET 3 CMO approval.

Costs associated with services shall be included in the prices provided by the Bidder for the individual items included in the Subcategory Cost Worksheets. Items not listed in the



Subcategory Cost Worksheets will not be billable by the Contractor. If additional unsolicited items include the features described in the IFB and are not included as billable in the Subcategory Cost Worksheets, the cost associated with the features shall not be included in the unsolicited price.

Services and features included in the Subcategory Cost Worksheets are those that the Bidder must provide. All Bidders must provide individual prices as indicated in the Subcategory Cost Worksheets in the Bidder's Final Proposal. Items submitted with no price will be considered as offered at no cost.

#### 1.2.1.3 PACIFIC TIME ZONE

Unless specified otherwise, all times stated herein are times in the Pacific Time Zone.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

### 1.2.2 MULTI-PROTOCOL LABEL SWITCHING (MPLS) SERVICES

Bidders shall confirm that the Contractor's Multi-Protocol Label Switching (MPLS) Wide Area Network (WAN) Virtual Private Network (VPN) service will meet all of the requirements described in Table 1.2.2.

Table 1.2.2 MPLS Service Functionality

	MPLS Service Functionality		der ts or eeds? N			
1	Contractors shall provide a private MPLS WAN (VPN) service for the networking of all voice, video and data applications.	Υ				
	Bidder's Product Description:  Verizon's MPLS service, "Private IP," is a purpose-built private VPN WAN network that provides networking of voice, video and data in a converged environment.					
2	The MPLS WAN VPN service shall support voice, video and data applications over a single access connection with individual Class of Service (CoS) to allow each set of applications to be transported within its service specifications.	Y				
	Bidder's Product Description:  Verizon will provide MPLS WAN VPN for voice, video and data applications over a single access connection with individual Class of Service (CoS) to allow each set of applications to be transported within its service specifications.					



Table 1.2.2 MPLS Service Functionality (continued)

	MPLS Service Functionality		er s or eeds? N			
3	The MPLS WAN VPN service shall support the ability to assign specific application priority over other applications.	Y				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will support the ability to assign specific a priority over other applications. MPLS Quality of Service parameters will allow customers to assign specific priorities to meet their requirements. Verizon's I service has differentiated Service Classes and recognizes ten Diff-Serv Code (DSCP) that allow the customer to set specific application priority based on the parameters and requirements.	v CALN MPLS e Points	IET 3			
4	The MPLS WAN VPN service shall provide any-to-any connectivity	Υ				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will provide any-to-any connectivity.					
5	The MPLS WAN VPN service shall not use the public Internet for transport. Remote access to this solution may use the public Internet.	Y				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will not use the public Internet for transposecess to this solution may use the public Internet.	ort. Rem	note			
6	The MPLS WAN VPN service shall be a fully Managed Service that includes the Customer Edge router as described in 7c below	Y				
	Bidder's Product Description:  Verizon will provide MPLS WAN VPN service that will provide a comprehensive, fully managed, configurable Network Management service, including the Customer Edge (CE) router, the MPLS port and the access in a bundled configuration as described in 7C below.					
7	The MPLS WAN VPN service shall support the following configurations:					
7a	Port Only configuration	Υ				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will provide Port Only services.					



Table 1.2.2 MPLS Service Functionality (continued)

	MPLS Service Functionality		ler ts or eeds? N			
7b	Bundled port and access configuration	Υ				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will provide a configurable, bundled port and access configuration.					
7c	Bundled port, access and Customer Edge router configuration	Υ				
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will provide a configurable, bundled port, access and Customer Edge router configuration.					

#### 1.2.2.1 MPLS Industry Security Standards

- 1. Upon demand by the CALNET 3 CMO, Contractor will provide for viewing at Contractor's facility the security controls in force for both the MPLS WAN and converged VoIP infrastructure as well as independent audit results of those controls for authorized State personnel (under NDA). This will include the full scope of controls NIST SP 800-53, ISO/IEC 27001, or equivalent.
- 2. If Contractor determines that a breach of data has occurred within the Contractor's MPLS WAN that may involve CALNET 3 Customer data, the nature and scope of the breach (as it affects Customer data) must be reported to both the Customer and the CALNET 3 CMO within 24 hours of that determination.
- 3. If Contractor determines that a breach of infrastructure has occurred within the Contractor's MPLS WAN that may involve CALNET 3 Customer data, the nature and scope of the breach (as it affects Customer data) must be reported to both the Customer and the CALNET 3 CMO within 24 hours of that determination.
- 4. Contractor shall apply available patches and/or updates which remediate published vulnerabilities within the following timeframe requirements to the Contractor managed Customer Edge Devices:

Table 1.2.2.1, Security Patches

Vulnerability CVSS2 Base Score	Informal Category Name	Max Time to Apply Patch/Update
9.1 – 10.0	Critical	Within 14 days
8.0 – 9.0	High	Within 21 days
5.0 - 7.9	Moderate	Within 60 days



Table 1.2.2.1, Security Patches (continued)

Vulnerability CVSS2	Informal	Max Time to Apply
Base Score	Category Name	Patch/Update
Below 5.0	Low	Within 90 days

- 5. Contractor shall provide to the CALNET 3 CMO an annual report of the 12 month prior patching/update activity including min/avg/max time from patch/update release to install categorized by the classifications found in table 1.2.2.1 for all Contractor managed Customer Edge Devices.
- 6. Contractor shall provide to the CALNET 3 CMO an annual report detailing all (if any) actual violations of security protections, policies, practices, and/or procedures involving Contractor managed Customer Edge Devices and what remediations were implemented.

Bidder understands the Red	quirement and shall meet or exceed i	t? Yes <b>X</b> No

#### 1.2.2.1.1 MPLS Physical Security

Contractor shall physically secure all data and networking facilities through which data traverses Contractor's MPLS network complying with the physical security controls of NIST SP 800-53, ISO/IEC 27001, or equivalent standards.

## Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.2.1.2 Protection against Unauthorized Access

Contractor shall provide access controls for all equipment through which data traverses Contractor's MPLS WAN complying with the physical security controls of NIST SP 800-53, ISO/IEC 27001, or equivalent standards.

Bidders shall state the access security controls in force for this equipment.

Bidder	understands understands	the requirements is	n 1.2.2.1.2 and	l shall meet or	r exceed t	them?
Yes <u>X</u>	No					

#### Description:

## **Providing Equipment Access Controls**

Verizon provides equipment access controls for all equipment through which MPLS WAN data traverses, complying with or exceeding the requirement of NIST SP 800-53, ISO/IEC 27001 or equivalent standards.

## **Verizon's Access Security Controls for Equipment**

Verizon co-locates MPLS and WAN equipment in company facilities and data centers with physical access restrictions complying with physical security control standards as described in the response to *Section 1.2.2.1.1* above.



We have taken several steps within our own facility to limit the amount of key knowledge that is readily available. The passwords for "root" login to the management platforms are not given out to the operational floor. The distribution of the passwords is limited to the group leaders of the first level engineers and the second level support engineers who perform the advanced troubleshooting and change management. We use building security to prevent non-Verizon personnel access to any floors in the building.

Verizon also uses LAN switching equipment to reduce the risk that in the case of a server breach, traffic not destined for the breached server could be captured.

#### **Access to Network Elements**

Access to Verizon network elements are via a dedicated private internal data network. The network has a multi-firewall edge and internal partitioning; continuous IP scanning; system logging, parsing, and analysis; intrusion detection/monitoring; and access authentication and logging via Cisco TACACS platform. Authentication is done using a two-factor authentication method. All elements are monitored through the Verizon Information Security Operations Center.

Verizon also applies access controls to secure MPLS and management system networks. Other access controls include best practices such as denying ICMP unreachable messages (no IP unreachable). Protocol specific access-lists would be configured on the Customer Edge router. Access Lists on the Customer Edge are defined by the Customer. Access Lists are utilized on the Provider Edge to secure the MPLS network but cannot be defined in detail in order to maintain that security which they provide. The first level of access list is applied to the inbound customer interface on the Provider Edge to ensure only applicable customer VPN traffic is allowed into the MPLS core.

Verizon uses the following mechanisms to secure the Verizon MPLS network:

- Data Center employees are unable to access network equipment via console access. Other groups are responsible for equipment configuration.
- Two-factor authentication is necessary to access network devices.
- Each login must be traced back to an individual. No group logins.
- Security administration level passwords must be reset whenever administration responsibilities are transferred.

#### 1.2.2.2 MPLS WAN VPN STANDARDS

Bidders shall confirm that the Contractor's CALNET 3 MPLS WAN VPN services meet all of the standards described in Table 1.2.2.2.



Table 1.2.2.2 MPLS WAN VPN Standards

	Standard	Bide Meet Excee Y	s or
1	International Engineering Task Force (IETF) Standards Track Request for Comments (RFC's) for IPv6 when/where offered commercially by the Contractor.	Y	
2	All Standards Track IETF RFC's associated with MPLS constrained by Border Gateway Protocol (BGP) routing	Y	
3	All Standards Track IETF RFC's associated with Transport of Layer 2 frames over MPLS	Y	
4	IETF MPLS Working Group Standards Track RFCs	Υ	
5	IETF Layer 3 VPN Working Group Standards Track RFCs	Υ	
6	IETF Pseudo Wire Emulation Edge-to-Edge Working Group Standards Track RFCs	Y	
7	All IETF Standards Track RFC's associated with:		
7a	General IPSec	Υ	
7b	Encapsulating Security Payload (ESP) and Authentication Header (AH)	Υ	
7c	Key Exchange, Cryptographic Algorithms	Υ	
7d	Internet Protocol Security (IPSec) Policy Handling	Υ	
7e	IPSec Management Information Bases (MIBs)	Υ	
<b>7</b> f	Remote Access, Certificate Authorities	Υ	
7g	Secure Socket Layer (SSL) and Transport Layer Security (TLS)	Υ	
8	Encryption, if offered, shall meet Triple Data Encryption Standard (3DES) and Advanced Encryption Standard (AES) in accordance with the appropriate Federal Information Processing standard (FIPS) publications and modules, including FIPS 140-2.	Y	

#### 1.2.2.3 MPLS PERFORMANCE METRICS

Bidders shall confirm that the Contractor's solution will meet all of the requirements described in Table 1.2.2.3.



Table 1.2.2.3, MPLS Performance Metrics

	Requirement	-	lder ees? N
1	Service availability shall be 99.9% measured port to port	Υ	
2	MPLS shall have a packet loss of <0.2% measured port to port	Υ	
3	MPLS shall have jitter <10ms measured port to port	Υ	

#### 1.2.2.4 MPLS REQUIRED GEOGRAPHIC SERVICE AREAS

The Contractor shall provide MPLS services in all Incumbent Local Exchange Carrier (ILEC) territories open to competition as defined by the California Public Utilities Commission (CPUC) where facilities are available either through bidder owned facilities or through resale of Incumbent Local Exchange Carrier facilities.

For DS3 access and below, the Contractor shall provide MPLS services at the same monthly rate and same non-recurring charge in all ILEC territories open to competition as determined by the CPUC for all On-Net and Off-Net locations.

For Optical Carrier (OC) or Ethernet access, the Contractor shall provide MPLS services at the same monthly rate and same non-recurring charge in all ILEC territories open to competition as determined by the CPUC for all Contractor On-net locations. Monthly recurring and non-recurring charges for Off-net locations shall be handled on an Individual Case Basis (ICB).

Ethernet services shall only be used in conjunction with MPLS services and not as a standalone service.

Bidder shall identify the strategy for establishing agreements with ILECs in areas open to competition as defined by the CPUC necessary to provide end-to-end service in these areas. Agreements shall be in effect at Contract award.

Bidder shall describe how MPLS service will be provided in ILEC territories closed to competition as defined by the CPUC necessary to provide service in these areas. The description shall include billing arrangements (such as "pass-through", "meet point"), invoicing and price structure. Contractor shall commit to establishing business relationships with these ILECs.

Bidder	understands the re-	quirements in Sectiol	n 1.2.2.4 and shal	I meet or exc	ceed them?
Yes <u> <b>X</b></u>	No				

#### Description:

Verizon will provide MPLS services in all Incumbent Local Exchange Carrier (ILEC) territories open to competition as defined by the California Public Utilities Commission (CPUC).

For DS3 access and below, Verizon will provide MPLS services at the same monthly rate and same non-recurring charge in all ILEC territories open to competition as determined by the CPUC for all On-Net and Off-Net locations.



For Optical Carrier (OC) or Ethernet access, Verizon will provide MPLS services at the same monthly rate and same non-recurring charge in all ILEC territories open to competition as determined by the CPUC for all Verizon On-net locations. Monthly recurring and non-recurring charges for Off-net locations shall be handled on an Individual Case Basis (ICB).

Verizon Ethernet services will only be used in conjunction with MPLS services and not as a standalone service.

Special Construction will apply where local facilities to the Customer's site are not available from Verizon, either through Verizon-owned facilities or facilities acquired through a 3rd party.

Verizon has established agreements with ILECs in areas open to competition as defined by the CPUC necessary to provide end-to-end service in these areas. Agreements will be in effect at Contract award.

Verizon MPLS service will be provided in ILEC territories closed to competition as defined by the CPUC, necessary to provide service in these areas. The billing arrangements will be incorporated into the Verizon invoicing and pricing of the service. Verizon commits to establishing business relationships with these ILECs. Verizon will provide MPLS service and has current agreements with all Incumbent Local Exchange Carriers (ILEC) open to competition in California as defined by the CPUC. Verizon will establish relationships with new ILEC entities doing business in California as they appear.

#### 1.2.2.5 MPI S NETWORK DESIGNS AND DIAGRAMS

Bidders shall provide network designs and diagrams for the network and MPLS services listed under this Section 1.2.2 (MPLS Services).

Bidders shall provide two (2) hard copies and one (1) electronic copy with their proposal. Electronic drawings shall be in .dwg, .dfx, .vsd or any mutually agreed format. Hard copy drawings shall be provided in standard D size.

Drawings must include a thorough presentation of how the Contractor's network(s) deployed for each service type will address the following:

- 1. Redundancy Having one (1) or more circuits/systems deployed in case of failure of the main circuits/systems; and
- 2. Diversity Backbone network paths and infrastructure offered in such a way as to minimize the chance of a single point of failure.

The Contractor shall provide revisions upon CALNET 3 CMO request.

Drawings shall include both topology and logical representations of all critical network backbone elements to include but not be limited to the following:

- 1. Geographic location of equipment;
- 2. Type and capacity of equipment at each location including any backup systems;



- 3. Service type;
- 4. Unique identifier for each element;
- 5. Circuit type; and,
- 6. General circuit route

Bidder understands the requirements in Section 1.2.2.5 and shall meet or exceed them? Yes  $\underline{X}$  No\_\_\_\_

**Embedded Soft Copy of Drawing (Optional):** Verizon has provided an embedded copy of the required drawings.



#### 1.2.2.7 MPLS TECHNICAL REQUIREMENTS

Bidder shall confirm that its MPLS solution to be deployed for CALNET 3 will include the technical features and functionality described in Table 1.2.2.7.

Table 1.2.2.7, MPLS Technical Requirements

	Requirement	Mee Exce	der ts or eds? N	
1	Contractors shall be able to scale the number of VPNs supported by the network	Y		
	Bidders shall describe here the Contractor's ability to scale the number of VPNs: Verizon's MPLS network supports Multi-VRF and is able to scale the number of VPNs supported by the network.			
2	Contractor shall support multiple VPNs per access loop	Υ		
	Bidders shall describe here the number of VPN's that will be supported in any one (1) access loop:  Verizon's MPLS service will support multiple VPNs per access loop. The standard maximum number of VPNs over a single physical connection is as follows: 20 VPNs for traditional TDM interfaces and 12 for Ethernet interfaces. Verizon will also support non-standard numbers on an individual case basis.			
3	Contractor shall support multiple VPNs across the MPLS network	Y		
	Bidders shall describe here the number of VPN's that will be supported across the Bidder's MPLS network:  Verizon's MPLS network currently supports thousands of VPNs and continues to scale and operate efficiently and effectively. Verizon will support the amount of VPN's that are required across Verizon's MPLS network.			



Table 1.2.2.7, MPLS Technical Requirements (continued)

		Requirement	Bid Mee Exce Y	
4	4	Contractor shall provide the rapid service restoration practices for all MPLS deployments in accordance with the SLAs in Section 1.2.9.8 (Technical Service Level Agreements)	Y	

Bidders shall describe here the Contractor's specific processes that will be employed to operate or restore services in the face of unanticipated incidents, disasters or catastrophes:

#### **Maintaining Network Availability During Disasters**

Verizon's MPLS network infrastructure is designed to eliminate any single point of failure in the network backbone infrastructure. All Provider Edge and Provider Core routers are equipped with redundant processor cards and DC power supplies and dual Provider Edge routers are deployed at backbone node sites. Route Reflector redundancy is achieved by deploying dual Route Reflectors at each site. All network elements have backup battery power and standby electrical generators. All trunking connections are dual-homed to diverse routers.

#### **Disaster Recovery**

Verizon has developed a Disaster Recovery and Business Continuity response strategy for a variety of disruptive events. Verizon follows a two-phased approach to disaster recovery. The first phase is designing systems with integrated backup strategies. The second phase is maintaining a proactive disaster recovery strategy to minimize the impact a disaster has on system operations.

#### **Data Backup**

To minimize the possibility that a disaster may disrupt system operations, Verizon designs solutions with built-in system redundancies, fault tolerances and switch-over technologies. The 'Production' instance is fully replicated on a real-time basis with a failover instance in another Network POP or Data Center. The redundant system operations are geographically separated within the Verizon high availability Data network.

Verizon performs daily incremental and weekly full data backups of the data stored within the primary Data Center. The daily incremental backups are distributed to a geographically diverse secondary Data Center, and the data, operating systems and software versions at both centers are kept in sync in case of catastrophic failure at Verizon's primary Data Center.

Verizon retains the backup files online for a minimum of 90 days. The weekly full data backup files are taken offsite. The data backups are maintained offsite for at least six (6) years, or longer as required by the Customer. Verizon enables a data Flashback feature for up to 24 hours.

#### **Data Recovery**

Verizon has developed Disaster Recovery strategies around industry best practices. Preparation includes the following:



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Bidder
	Meets or
	Exceeds?
Requirement	ΥN

- Constructing a disaster recovery team.
- Performing an impact analysis to identify business processes and operations that are critical to an organization and variables that would affect them.
- Conducting a risk assessment.
- Planning a strategic response to a disaster and prioritizing operational performance goals.
- Defining a Disaster Recovery Plans to ensure the continued operation of critical functions.
- Developing and implementing a Disaster Recovery test plan.

#### **Verizon Disaster Recovery Team**

To achieve effective Disaster Recovery a member from each Verizon unit is represented on our Disaster Recovery Team. Each member is a specialist within each of their areas of expertise who not only develop the strategic direction for our disaster recovery processes, but are also the people who direct the testing and potential implementation of those processes and strategies.

Our management organization, notification and communication strategies are handled through our designated Disaster Recovery Coordinator who acts as the central point of contact. In the event that the Disaster Recovery Coordinator is not available, an alternate Disaster Recovery Coordinator assumes the responsibilities of managing the response efforts.

#### **Impact Analysis**

Verizon performs a Business Impact Analysis to assess the impact through the identification of:

- Critical business processes.
- Impact of losing the support of any resource.
- Resources needed to recover and prioritize the recovery of processes and supporting systems.
- Timing within which levels of staffing, facilities, and services need to be recovered.

#### Disaster Recovery Risk Assessment/Risk Management

The second driver in determining disaster recovery requirements is an assessment of the level of threat and the extent to which the system is vulnerable to that threat. Verizon will perform Risk Assessment activities to help to determine priorities.

#### Verizon Disaster Recovery Plan (DRP)

Verizon has developed an enterprise level Disaster Recovery Plan (DRP) which outlines our strategic response to a disaster event and prioritizes the operational performance goals by which we would re-establish operations.

In the event of a disaster, the Verizon Disaster Recovery Coordinator or Site Manager activates the Disaster Recovery Plan in conjunction with the overall



#### Table 1.2.2.7, MPLS Technical Requirements (continued)

	Bidder
	Meets or
	Exceeds?
Requirement	ΥN

Emergency/Disaster Alert and Invocation process and with the full support of all Managers and staff responsible for the impacted services or location.

#### **Establishing Communication Channels**

Following a disaster, Verizon designated Disaster Recovery Coordinators implement the following process:

- Immediately notify the designated Customer contacts in addition to activating the internal team Call Tree.
- Activate Verizon Emergency Management Bridge Line where each manager and appropriate staff members dials for further instruction.
- Set up the Primary Command Center(s) in the designated location(s) based on nature of disaster(s).
- Maintain the Status Line to provide basic instructions and status updates to all interested or impacted parties.

#### **Ensuring Availability and Recovery of All System Functionality**

Once communication channels have been established, the Disaster Recovery Team moves into the problem detection phase. During the problem detection phase of an emergency, the Disaster Recovery Team examines key areas of business function and establishes recovery priority based on the symptoms of the problem. The first priority is to re-establish the operation of critical infrastructure, hardware, applications and database services.

After critical services are operating, the Team addresses restoring additional, ancillary systems and storage devices and ensuring that all areas of the facility are restored.

Verizon ensures that the Disaster Recovery Plan remains current and accurate by:

- Continually updating the DRP.
- Revising the DRP based on an annual Disaster Recovery drill.
- Integrating Disaster Recovery planning as part of daily operations

#### **Disaster Recovery Test and Implementation**

To ensure that our plans work properly, the Disaster Recovery plans are tested frequently. The progression of exercises within the Test Plan is intended to prepare and build towards a comprehensive and realistic recovery capability.

#### **Verizon Disaster Tests & Reviews**

- Call Tree. On a pre-determined basis a call-tree test or validation is performed to ensure that all contact information is correct, that all staff members can be contacted in a timely manner.
- Walkthrough. A documentation driven review and validation of recovery activities performed by all key representatives, who are questioned on their access to, understanding of, and confidence with, documented plans & recovery procedures.
- Evacuation. An actual emergency management evacuation of a facility or floor to test the ability for all on-site resources to vacate quickly and to gather at pre-designated areas.



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bid Meet Exce Y	ts or	
	<ul> <li>Technical Recovery. Technical recovery involves the simulation of one or more components becoming unavailable in a protected environment to ensure that the recovery procedures are executed properly.</li> <li>Simulated Recovery. This test involves a controlled recovery of actual components whereby the recovery is simulated using live production data.</li> <li>Live Recovery. This test involves live production recovered to the recovery site to continue to service ongoing production operations, which includes a switchover or relocation of business operations to our redundant Data Center.</li> <li>Post Exercise Review. A review is performed by the Disaster Recovery coordinator to make suggestions for corrective actions and required updates to the DRP. The DRP is updated accordingly and a formal results summary is published to the Customer.</li> </ul>			
5	Contractor shall provide redundant network circuits in the backbone network	Y		
	Bidders shall describe here the specific network configurations that will be utilized to provide redundancy to survive failures in the backbone network:  Redundancy is the most important tool for ensuring network survivability. Verizon has explicitly engineered the MPLS network infrastructure to eliminate any single point of failure beyond the customer's access connection. All Provider Edge and Provider Core routers are equipped with redundant processor cards and DC power supplies and dual Provider Core routers are deployed at backbone node sites. Route Reflector redundancy is achieved by deploying dual Route Reflectors at each site. All network elements have backup battery power and standby electrical generators. All trunking connections are dual-homed to diverse routers.			
	Verizon's MPLS Backbone Topology			
	Verizon's MPLS backbone topology has been engineered to maximize resiliency and minimize failover times. The Provider Core is a closed private MPLS backbone – which means there is no Internet connectivity dedicated solely to MPLS Label Switching and no support for direct customer access connections.			
	Using a dedicated Provider Core enhances network scalability by reducing OSPF adjacencies, reducing the number of routes through summarization, and providing a high-speed backbone for Provider Edge trunk aggregation.			
	All Provider Edge routers are diversely trunked using dual uplinks into two diverse Provider Core routers. Dual routers are deployed at each Provider Core site and diversely trunked using 10GigE and 100GE circuits. Every Provider Core router has at least 2 physically diverse paths to other Provider Core sites to ensure that a node will never be isolated.			
	Both the Provider Edge and Provider Core trunks are QoS-enabled with a scheme that uses LLQ (Low Latency Queuing) and CBWFQ (Class-Based Fair Queuing) to enable QoS on a per hop basis, which delivers end-to-en	l Weight		



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Mee	der ts or eds? N		
	Verizon's MPLS Network				
	The Verizon MPLS network will automatically detect and dynamically reroute around transmission path failures. The OSPF routing protocol is used within the MPLS network to establish and maintain IP reachability. LDP (Label Distribution Protocol) is used to dynamically establish LSPs (Label Switched Paths) between all Provider Edge and Provider Core routers and will automatically re-establish the LSP following an OSPF rerouting event.				
	Verizon has deployed an innovative geographically diverse dual-plane Route Reflector architecture that requires only 2 Border Gateway Protocol peering sessions per Provider Edge router, minimizing the peering load on the Provider Edge and the probability of Border Gateway Protocol re-convergence events.				
	Multiple pairs of route reflectors are deployed in each geographic region. Every Provider Edge router within a region maintains Border Gateway Protocol peering sessions with the Route Reflector pair in one of the planes within its region. Each Route Reflector pair is capable of supporting the full load of its client Provider Edge routers so that a Route Reflector failure will be completely transparent.				
6	Contractor shall provide network diversity to eliminate single points of failure in the backbone network	Y			
	Bidders shall describe here the diversity that will be designed in the network to eliminate single points of failure in the backbone network				
	The Verizon MPLS backbone is engineered as a single MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS backbone wengineering standards and equipment regardless of region. The MPLS access is globally available today in over 19 over 67 countries with ongoing expansion.	ckbone em numl	is not ber		
	Verizon has explicitly engineered the MPLS network infrastructure to eliminate any single point of failure beyond the customer's access connection. All Provider Edge (PE) and Provider Core routers are equipped with redundant processor cards and DC power supplies, and dual Provider Core routers are deployed at backbone node sites. Route Reflector redundancy is achieved by deploying dual RRs at each site. All network elements have backup battery power and standby electrical generators. All trunking connections are dual homed to diverse routers.				
	The Provider Edge and Provider Core routers are directly trunked together via high-speed connections. Every Provider Edge router is diversely trunked into two diverse Provider Core routers to insure a node will never be isolated. Dual routers are deployed at each Provider Core site and diversely trunked. Every Provider Core router has at least two (2) physically diverse paths to other Provider Core sites to ensure a node will never be isolated.				
	Verizon designs the MPLS Backbone to be able to reroute around trunk failures, based on the number of trunks that exist out of any given location and the utilization				



associated with them.

Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bide Meet Excee Y	s or eds?		
	Verizon has deployed an innovative geographically diverse Route Reflector architecture that requires a limited number of Border Gateway Protocol peering sessions per Provider Edge router, minimizing the peering load on the Provider Edge and the probability of Border Gateway Protocol re-convergence events. Dual route reflectors are deployed in each geographic region and each Provider Edge router within a region maintains Border Gateway Protocol peering sessions with the Route Reflectors within its region. The RRs within a region are each capable of supporting the full load so that a failure will be completely transparent.				
7	Contractor shall provide a remote access service that allows an off-net Customer location access to any on-net Customer site contained within the same VPN. The solution may utilize the public Internet.	Y			
8	The remote access service shall be secured.	Y			
	Bidders shall describe here how the MPLS remote access solution will be secured:  Verizon's MPLS remote access solution provides secure, encrypted, remote access to the customer's Verizon MPLS network for remote locations and employees.  The remote access solution is enabled by geographically-dispersed network gateways deployed at Verizon points of presence (PoPs).				



Table 1.2.2.7, MPLS Technical Requirements (continued)

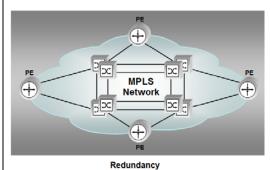
	Requirement	Mee	der ts or eds? N		
	The service provides remote access through an exclusively-provisioned secure access gateway port between the remote customer site and the Verizon remote access network service.				
	Remote sites use Verizon or third-party dial, Wireless Internet, DSL, or Internet broadband to connect to the Verizon IP Internet backbone. Then, using a VPN software client, the remote site automatically establishes a secure IPSec tunnel, through the IP network to the secured port, located on a Verizon network gateway.				
	The VPN client allows optional split tunneling for flexible end-user access customer's Verizon network service only, or to the customer's Verizon network and the public Internet.		rvice		
9	The MPLS WAN VPN service shall support controlled and monitored connections between the MPLS network and the public Internet via a hardened trusted managed firewall	Y			
	Bidders shall describe here the hardened trusted managed firewall that will be provided and how it will be used to control and monitor connections between the MPLS network and the public Internet:				
	Verizon is able to provide VPN access and hardened, trusted, managed firewall services over a common architecture, using a secured portion of a network firewall. The managed firewall service bundles IP access with a network-based firewall to protect against a range of network security threats.				
	The firewall service uses a virtual context within the secure gateway to manage inbound and outbound traffic flows while providing access from the customer's private Virtual Route Forwarding (VRF) to the Internet. A virtual firewall instance is created within a firewall services module within the secure gateway infrastructure.				
	The VLANs within the secure gateway isolate traffic between users and all between your private Customer VRF, the firewall context, and ultimately to public Internet.				
10	Contractor shall list points-of-presence (PoP) where provider edge routers are located	Y			
	Bidders shall list here the locations of all PoPs where provider edge routers are deployed for CALNET 3 and the associated common language location identifier (CLLI):  Verizon's MPLS network in California currently consists of ten (10) PoP locations, each with multiple Provider Edge routers, as depicted in 1.2.2.5, "MPLS Network Designs and Diagrams."  Locations & CLLI identifiers are:				
	<ul> <li>Bakersfield – BKFDCA12</li> <li>Dominguez Hills – TRNCCA11</li> <li>Hayward – HYWRCA11</li> </ul>				



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Mee	der ts or eds? N
	■ Los Angeles – LSANCA03		
	■ Rialto – RILTCA11		
	■ Sacramento – WSCRCA03		
	■ San Diego – SNDGCA03		
	■ San Francisco – SNFCCA05		
	■ San Jose – SNJSCA02		
	■ Santa Clara – SNVACA01		
11	The MPLS WAN VPN service shall be resilient	Υ	
	Bidders shall describe here the minimum level of service that will be amid network failure:	maintai	ined
	Bidders shall describe here the minimum level of service that will be amid network failure:	maintai	ined
	The minimum level of service that will be maintained amid network failure in MPLS WAN VPN Network is delineated within the Service Level Agreement		on's

The minimum level of service that will be maintained amid network failure in Verizon's MPLS WAN VPN Network is delineated within the Service Level Agreements as described in the RFP. To maintain this minimum level of service, Verizon architects each Point of Presence (POP) as a highly resilient Layer 3-routed environment. Verizon's POP minimum design requirements include diverse entrance facilities and diverse power feeds with generator backup. The network Provider Edge (PE) Routers are fully redundant and connect to multiple (no less than 2) PE/PCore Routers which mitigate the impact of physical route failures while allowing for logical reroutes as a core attribute of a Layer 3-routed environment as illustrated in this diagram.



MPLS routers have diverse physical and logical connectivity to the network

Verizon has also provided a network diagram in the SOW Supporting Technical Literature section that demonstrates this capability to meet this minimum level of service.



#### Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement		der ts or eds? N	
12	Contractor shall provide support for multiple Layer 2 access protocols	Υ		
	Bidders shall describe here the Layer 2 access protocols that will be the Contractor's solution:  Verizon's solution will use Layer 2 access protocols and/or encapsulation.  Layer 2 access protocols used in Verizon's Layer 3 MPLS network is commas encapsulation. The Layer 2 protocols are encapsulated within the Layer between the Customer Edge and Provider Edge routers.  Verizon's MPLS supports the following Layer 2 access protocols:  Frame Relay  Packet Over SONET (POS)  High-level Data Link Control (HDLC)  Point-to-Point Protocol (PPP)	monly k	nown	
13	Contractor shall provide segregation of Customer traffic in a VPN environment	Y		
	Bidders shall describe here how the solution will segregate Customer traffic in a VPN and any additional features included by the Contractor at no cost that are available to Customers to protect access to Customer data:  The Verizon MPLS solution will segregate Customer traffic in a VPN and will provide additional features to Customers at no cost to protect access to Customer data:  All of the Layer 3 functionality in the MPLS network is located in the core of the network, and there is no interconnectivity between the public IP network and Verizon's private MPLS network.			

Verizon's MPLS meets or exceeds the security characteristics described below, which are typically associated with traditional Layer 2 VPN service:

- It is necessary to have addressing and routing separation.
- The internal structure of the backbone network must be hidden from the outside.
- The network must be resistant to attacks.

#### **Address Space**

Customers need the flexibility of maintaining their own addressing plans and the freedom to use either public or private address space. MPLS allows the use of public or private IP addressing. This is possible by adding a 64-bit route distinguisher (RD) to each IPv4/IPv6 route. This new route called a "VPN-IPv4/IPv6 address" ensures that VPN-unique addresses are also unique in the MPLS core.

#### **Routing Separation**

All of the Layer 3 functionality in the MPLS network is located in the core of the network, and there is absolutely no interconnectivity to public IP networks from this environment.



Table 1.2.2.7, MPLS Technical Requirements (continued)

#### Bidder Meets or Exceeds? Y N

## Requirement

Layer 3 MPLS provides route separation by having each Provider Edge router maintain a separate routing table for each connected VPN.

This routing table, called a "Virtual Routing and Forwarding instance (VRF)," contains the routes from one VPN that were learned statically or through a dynamic routing protocol. These VRFs are separate from each other as well as from the global routing table. Individual VRFs are further secured from injecting non-customer routes by the use of Import and Export targets with Multi-Protocol Border Gateway Protocol. In addition, VRF tables are set up to only accept routes and pass user data from the sub-interface that is set up for the directly connected customer. MPLS has the same addressing and routing separation capabilities as comparable Layer-2 VPNs, such as Frame-Relay or ATM.

#### **Hiding the MPLS Core Network**

MPLS does not reveal additional unnecessary information even to customer VPNs. Since the interface to the VPNs is Border Gateway Protocol there is no need to reveal any information about the core. The only information that is required in the case of a routing protocol between Provider Edge and Customer Edge is the address of the Provider Edge router.

If this is not desired, static routing can be configured between the Provider Edge and CE. With this measure, the MPLS core can be kept completely hidden and be addressed using public or even private addressing. Using the Trace Route utility, the MPLS cloud does not show up as a hop in the output.

#### **Resistance to Attacks**

With MPLS, it is impossible to gain access into other VPNs, unless this has been specifically configured (extranet configuration), making it is impossible to attack other VPNs from within a VPN. This makes MPLS as secure as its Frame-Relay and ATM counterparts.

#### **MPLS Label Spoofing**

All interfaces into the MPLS core network only require IP packets, without labels. For security reasons, a Provider Edge router should never accept a packet with a label from a Customer Edge router.

The implementation is such that labeled packets that arrive on any interface where label switching is not enabled will be dropped – which means that it is not possible to insert fake labels, since no labels will be accepted.

It is almost impossible to insert a 'spoofed' label into an MPLS network to gain access to another VPN or the MPLS core.

In this capability, MPLS provides the same security and privacy associated with Layer 2 Frame Relay & ATM based networks. Customers do not have to add a connection-oriented overlay to the Verizon MPLS Service network to encrypt tunnels, which would be required if the customer was using Internet Protocol Security (IPSec).



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Mee	der ts or eds? N	
14	The MPLS WAN VPN service shall support IPv4 Capability	Υ		
	Bidder's Product Description:  Verizon MPLS network will support IPv4 Capability on the existing MPLS architecture deployed today. Whether sending IPv4 or IPv6, it will be transparent to the backbone, as all packet forwarding within the MPLS network is based on MPLS labels only. Multi Protocol Border Gateway Protocol continues to carry routing information, whether IPv4 or IPv6.			
15	The MPLS WAN VPN service shall support IPv6 Capability when/where offered commercially by the Contractor	Υ		
	Bidder's Product Description:  Verizon MPLS supports IPv6 and will mirror the same connectivity and ser which are available today with IPv4. This includes support for Quality of Se along with the same interface and speed options.  MPLS has been readying the provider edge devices to support IPv6. Provi routers have been upgraded to support IPv6.  IPv6 support is based on RFC 4659, an extension of RFC 4364, which allo distribution of IPv6 routes.  Support for IPv6 is provided by the same MPLS architecture deployed toda MPLS core does not require network upgrades to transport IPv6 traffic. IP whether IPv4 or IPv6, is transparent to the core backbone, as all packet fo within the MPLS network is based on MPLS labels only.  The control plane remains untouched and continues to utilize OSPF and L path selection. Multi Protocol Border Gateway Protocol continues to carry routing information, whether IPv4 or IPv6. The IPv6 awareness, and upgraexists only at the network edge on the Customer Edge to Provider Edge line.	der Edg ows for the ay. The Address rwardin DP for I customed de pote	geshe sing, g abel	
16	The Contractor shall provide MPLS port diversity capability within the same MPLS POP	Υ		
	Bidders shall describe here the MPLS port diversity capability to be included in the Contractor's solution:  Each Verizon MPLS PoP contains multiple carrier-class router nodes, each with multiple control and processor planes. Port diversity can be provided within the same PoP by using a second Provider Edge in that PoP, or using a port that is controlled by a different processor and control plane —which, in effect, is a separate logical device.			



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bid Mee Exce Y	ts or		
17	The Contractor shall provide MPLS PoP diversity capability	Υ			
	Bidders shall describe here the MPLS point-of-presence diversity capability to be included in the Contractor's solution:  Verizon MPLS allows for PoP diversity, also referred to a Geographic Diversity or Gateway Deiversity, which would ensure that the customer's circuit is diverse at the POP, or gateway level from another customer MPLS circuit.				
18	The Contractor shall provide dial backup capability to support routing of traffic outside of the MPLS network in case of MPLS network failure	Y			
	Bidders shall describe here the dial backup capability supported by the Contractor's solution:  Verizon will provide dial backup capability to support routing of traffic outside of the MPLS network in case of MPLS network failure.				
19	The MPLS WAN VPN service shall support IP Multicasting	Υ			
	Bidders shall describe here the maximum number of multicast routes that will be supported by the Contractor's solution:  Verizon MPLS supports IP Multicasting, which is considered a bandwidth-conserving technology that reduces traffic by simultaneously delivering a steady stream of information to multiple locations. MPLS Multicasting VPN supports Protocol Independent Multicast Sparse Mode -Version 2 (PIM-SM (v2)) and PIM Source Specific Multicast (SSM). The default maximum number of multicast routes supported as a standard service in a MPLS VPN is 200. This can be increased on a per-Customer-VPN basis.				
20	The MPLS WAN VPN service shall provide Multiple CoS to support the prioritization of Entity applications and traffic flows	Υ			
	Bidders shall describe here the CoS levels that will be supported for and the ingress/egress profiles supported by the Contractor's solution shall describe here the mechanisms that will be used for CALNET 3 to Customer to mark packets for treatment that corresponds to the ingrepolicy chosen:  The Verizon MPLS Network provides multiple Classes of Service (CoS) for traffic types. Rate policies provide separate bandwidth reservations for the traffic classes.  There are five (5) Standard CoS for traffic types and one (1) Optional (unsteature) CoS for traffic types.  Standard Classes of Service	on. Bido hat allo ess/egr r differe differer	lers w the ess		
	The Standard supported Classes of Service are as follows:				



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Bidde Meets	
	Exceed	s?
Requirement	YN	ı

- Assured Forwarding 4 (AF4). Used for either video or business critical applications such as SAP, Siebel, PeopleSoft, or Point of Sale (POS). Traffic marked AF4 has the second highest forwarding priority.
- Assured Forwarding 3 (AF3). Associated with business critical applications; i.e., SAP, Siebel, PeopleSoft, POS, TN3270 emulations, Citrix. The main difference between AF4 and AF3 is that the AF4 class is associated primarily with video applications. Traffic marked AF3 has the third highest forwarding priority.
- Assured Forwarding 2 (AF2). Ideal for Telnet, extranet Web applications, and general data applications. Traffic marked AF2 are given fourth highest forwarding priority.
- Assured Forwarding 1 (AF1). Ideal for Batch Data and general data applications.
   Traffic marked AF1 are given fifth highest forwarding priority.
- Best Effort (BE). With the lowest forwarding priority, BE is typically used for FTP, database synchronization, eMail, Web surfing. Traffic marked BE has the lowest priority.

#### **Classes of Service and Traffic Types**

Queue	Naming
AF4	Video / Priority Data
AF3	Mission Critical Data
AF2	Business Data
AF1	General Data
BE	Default Data
EF (Unsolicited)*	Real Time / Voice

<sup>\*</sup>Expedited Forwarding (EF). Unsolicited.

The optional and sixth CoS, Expedited Forwarding (EF), is dedicated for real-time applications such as voice. A Gold CAR is contracted and assigned ("subscription") to the EF class. Traffic marked EF has the highest traffic priority.

#### **Access to Priority Classes**

Access to these traffic priority classes is based on the following as applicable:

- **IETF DSCP Settings.** IP precedence settings applied to the ToS (Type of Service) byte in the IP header.

In order to use the CoS, either DSCP or IP precedence must be set by the Customer Edge device before the traffic leaves the premises. If congestion occurs on the MPLS Network, Real-Time traffic has the highest delivery ratio above all traffic types.



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Bidder Meets or Exceeds?
	Exceeds
Requirement	ΥN

(Unsolicited: Real-Time – Expedite Forwarding bandwidth will be maintained regardless of the traffic type. Real-time traffic that is delivered to the MPLS network in excess of the subscribed EF level will be dropped.)

 CoS is Layer 3 Based. The CoS scheme for the MPLS Network is IP based and not Layer 2 based, which means that the CoS obtained is related to Layer 3 parameters and not Layer 2.

The mechanisms used by CoS are as follows:

- IP Precedence Packet Classification
- Low Latency Queuing (LLQ)
- Class-Based Weighted Fair Queuing (CBWFQ)
- Weighted Random Early Discard (WRED)

#### **Bandwidth Reservations - Policing of the Classes of Service**

- Video/Priority Data traffic is not regulated at the ingress of the MPLS network and will be able to burst to full port speed if available, and based on the outbound prioritization configured on the Customer Edge router.
  - Rate Policies are configured with CBWFQ to prioritize data and WRED for congestion control in this class. Traffic that is marked Video/Priority Data will be provided at least 40% of the bandwidth remaining from Real-Time traffic. Traffic that is marked Priority Data High will be delivered in a higher ratio than Priority Data Low as the queue approaches a congested state.
- **Mission Critical Data traffic** is not regulated at the ingress of the MPLS network and will be able to burst to full port speed if available, and based on the outbound prioritization configured on the Customer Edge router.
  - Additionally, when using Diff-Serv, customers may further designate traffic into Mission Critical High/Low levels. Rate Policies are configured with CBWFQ to prioritize data WRED for congestion control in this class. Traffic that is marked as Mission Critical Data will be provided at least 16% of the bandwidth remaining from Real-Time traffic. Traffic that is marked Mission Critical High will be delivered in a higher ratio than Mission Critical Low as the queue approaches a congested state.
- Business Data traffic is not regulated at the ingress of the MPLS network and will be able to burst to full port speed if available, and based on the outbound prioritization configured on the Customer Edge router. Rate Policies are configured with CBWFQ to prioritize data WRED for congestion control in this class.
  - Traffic that is marked Business Data High will be delivered in a higher ratio than Business Data Low as the queue approaches a congested state.
- General Data traffic is not regulated at the ingress of the MPLS network and will be able to burst to full port speed if available, based on the outbound prioritization configured on the Customer Edge router.



Table 1.2.2.7, MPLS Technical Requirements (continued)

# Bidder Meets or Exceeds? Requirement Y N

Rate Policies are configured with CBWFQ to prioritize data WRED for congestion control in this class. Traffic that is marked General Data High will be delivered in a higher ratio than General Data Low as the queue approaches a congested state.

- **Default Data traffic** is not regulated at the ingress of the MPLS network and will be able to burst to full port speed if available, and based on the outbound prioritization configured on the Customer Edge router. Rate Policies are configured with CBWFQ to prioritize data WRED for congestion control in this class. Traffic that is marked as General Data will be provided at least 4% of the bandwidth remaining from Real-Time traffic.

#### Traffic Engineering and Quality of Service (QoS)

Verizon uses several techniques to deliver Quality of Service (QoS) and manage Traffic Engineering on the MPLS Network. These techniques allow sharing of links in the presence of contending traffic flows by using rate policies, and queuing disciplines. These techniques are applied to all traffic flows on the MPLS Network.

#### LLQ and CBWFQ

The Provider Core trunks are QoS-enabled with a Layer 3 QoS scheme that utilizes Low Latency Queuing (LLQ) and Class-Based Weighted Fair Queuing (CBWFQ) to enable QoS on a per hop basis instead of relying on over-provisioned trunks like other Service Providers. Access connections and the uplink trunks between the Provider Edge routers and the Provider Core routers utilize a similar but enhanced Layer 3 QoS scheme, e.g. LLQ and CBWFQ, which, together with the core, provides end-to-end QoS support for MPLS customers.

#### **WRED**

Weighted Random Early Discard (WRED) is also used to manage network congestion. WRED is a congestion avoidance mechanism that slows traffic by randomly dropping packets based on class when congestion exists. As outbound buffers fill up, WRED drops a few frames early before congestion becomes serious. The network then sends a message to the end-user TCP/IP sessions to slow down. The resulting drop in traffic load relieves the congestion that otherwise would have occurred.

#### **Core Routing**

Every Provider Edge router is diversely trunked into two diverse Provider-Core (Provider Core) routers to insure a node will never be isolated. Every Provider Core router has at least two physically diverse paths to other Provider Core sites to insure a node will never be isolated. Open Shortest Path First (OSPF) Routing is used within the Provider Core to establish and maintain IP reachability. Using a dedicated Provider Core enhances network scalability by reducing OSPF adjacencies and providing high density aggregation of Provider Edge trunks. This diverse, redundant design allows maximum throughput in the network, minimizing congestion.

#### **Core Capacity**

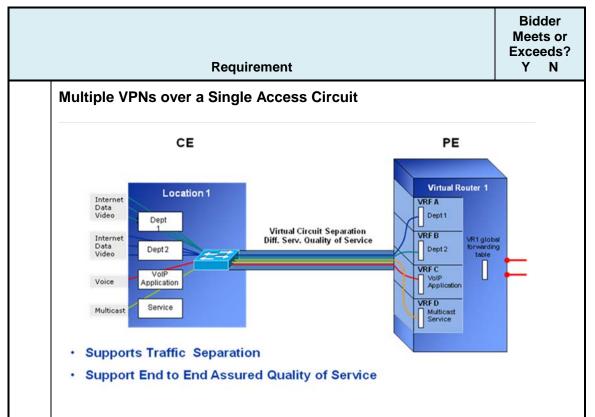


Table 1.2.2.7, MPLS Technical Requirements (continued)

		Requirement	Bid Mee Exce Y	ts or
	Verizon carefully models each and every customer before implementing MPLS, using WANDL network modeling and optimization software. This helps ensure that the MPLS Network infrastructure is properly engineered to support enterprise networks.			
		Daily monitoring is performed on the network to track actual network traffic accordingly. For physical trunk utilization, if the peak traffic average reached Verizon will augment the network. Based on this information the Data Traffengineering group proactively deploys additional switches/ports/trunks to ecustomer traffic sent across the backbone is delivered in accordance with Service Level Agreement.	es 50%, fic ensure t	hat
	21	The MPLS WAN VPN service shall support the division of an MPLS port into multiple logical channels such that each logical channel can be used to support a VPN.	Υ	
		Bidder's Product Description:		
		Verizon will provide MPLS WAN VPN service to support division of MPLS logical channels, which can be used to support VPNs.	into mul	ltiple,
		<b>VRFs (Virtual Routing Forwarding)</b> can be implemented to create smaller inside of a customer's Verizon MPLS service.	er VPNs	i
		VRF-Lite		
		MPLS uses VRF-lite with multiple logical interfaces, such as VLANs or virt		
		VRF-lite features a per-site forwarding table. Every site to which the Provider Edge router is attached is associated with one of these tables.		
		A VRF will look up a particular packet's destination IP address only if the arriving packet is associated with the forwarding table.		
	Associations are made by mapping the logical interface access (such as a VLAN or Virtual Circuit) or physical interface access to the VRF.			or
١		Several departments can belong to the same VRF.		



Table 1.2.2.7, MPLS Technical Requirements (continued)



# Provisioning of multiple VPNs over a single access circuit.

VRF-lite enables the customer to build end-to-end departmental networks by extending the routing separation provided by MPLS to the customer's local intranet. The Border Gateway Protocol/MPLS VPN technology implemented in MPLS provides per-customer routing separation by building a separate Virtual Routing & Forwarding (VRF) table in the MPLS Provider Edge devices for each customer VPN. The use of VRFs ensures that any customer or site that belongs to a VPN is provided access only to the set of routes contained within that VRF table.

With VRF-lite – *also known as Multi-VRF CE* (Customer Edge) – the concept of VRFs is extended to the Customer Edge router. Now the Customer Edge router has the ability to maintain separate VRF tables to extend the privacy and security of an MPLS VPN network down to the various LANs in a branch office. Multiple VPNs can be configured on the MPLS network to separate data traffic by department or application.

Customers who implement VRF-lite on their Customer Edge router can create multiple VPN connections into MPLS via a single MPLS Port. Each department on the customer's LAN can have a virtual connection (through a Permanent Virtual Circuit or VLAN) to the MPLS service. This enables customers to segment their network and to dedicate bandwidth for each organization based on their unique needs. Access encapsulation must be Frame Relay in order to utilize multiple logical sub-interfaces.



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Mee	der ts or eds? N	
22	The MPLS WAN VPN service shall support access speeds from 128 Kbps to 10 Gbps			
	Bidder's Product Description:  Verizon's MPLS service has a number of available access, transport and pranging from 56Kbps through 10Gbps.	port spe	eds	
23	The MPLS WAN VPN service shall support multiple network interfaces	Υ		
	Bidders shall list here the network interfaces that will be supported for CALNET 3, e.g., Dedicated Private Line, SONET, or Ethernet:  Verizon's MPLS supports multiple network interfaces, including dedicated private line, SONET, or Ethernet network interfaces.			
24	The MPLS WAN VPN service shall support multiple Layer 2 protocols	Υ		
	Bidders shall list here the Layer 2 protocols that will be supported for Verizon MPLS supports the following Layer 2 protocol encapsulation meth  Frame Relay  Packet Over SONET (POS)  High-level Data Link Control (HDLC)  Point-to-Point Protocol (PPP)  Ethernet		ET 3:	
25	The MPLS WAN VPN service shall support wireless Customer access capability to the MPLS network	Y		
	Bidder's Product Description:  Verizon's MPLS WAN VPN service supports wireless access to MPLS through Verizon Wireless private data network. 4G/LTE, 3G, and 1xRTT access supported, based on customer signal strength to a Verizon Wireless tower Wireless data service is usage sensitive.  Speeds supported through the Verizon Wireless private data access networking in the supports access speeds up to 144Kbps  1xRTT supports access speeds up to 144Kbps  EVDO Rev A supports uplink access speeds up to 800 Kbps and down speeds up to 1.4 Mbps  4G LTE supports uplink speeds up to 5 Mbps and downlink access speeds up to 1.4 Mbps	peeds a . This V  ork inclu  nlink ac	erizon de – cess	



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bid Mee Exce Y	ts or	
26	The MPLS WAN VPN service shall support Digital Subscriber Line (DSL) with speeds from 128 Kbps to 1500 Kbps	Y		
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will support Digital Subscriber Line (DS speeds ranging from 128 Kbps to 1500 Kbps.	SL) with		
27	The MPLS WAN VPN service shall support Customer access to the MPLS network via satellite communications	Y		
	Bidder's Product Description:  Verizon's MPLS WAN VPN service will support Customer access via satellite communication.  Verizon's Private Satellite service enables customers to access the Verizon MPLS network from any location within the satellite coverage area.  This service is an effective broadband connectivity solution that provides access to customer remote locations in all 50 states, as well as Puerto Rico and the U.S. Virgin Islands.  Remote satellite terminals are aggregated using an individual Virtual LAN (VLAN) per customer. Each VLAN is mapped to an MPLS PVC at the satellite hub. Private Satellite service provides speeds up to 2 Mbps transmit, 2 Mbps receive as a standard service offering, with speeds above 2 Mbps available via the ICB process.			

Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bidder Meets or Exceeds? Y N
	Satellite Hub Customer Edge to MPLS Provider Edge Peering Architecture  IP Traffic  NMS  Provide Edge  RCST  CIRx  CIRX	
28	The MPLS service shall include inside wiring/demarcation extension up	Host/Server
	to 300 feet in Customer provided conduit.  Bidder's Product Description:  Verizon MPLS service will include inside wiring/demarcation extension up customer provided conduit.	to 300 feet in
29	The MPLS service shall include business line and modem for out-of-band emergency access to the managed router	Y
	Bidder's Product Description:  Verizon MPLS service will include modem and business line for out-of-ban access to the managed router.	nd emergency



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Mee	der ts or eds? N	
30	Contractor shall identify managed router reports available at no additional charge. Bidder shall describe the method of accessing these reports.	Y		
	Bidder's Product Description:  Verizon provides reports that show CPE health (CPU, memory utilization) and LAN/WAN interface bandwidth utilization and errors at no additional charge. In addition to the CPE health reports, Verizon includes capacity planning, What-If reporting, as well as On-Demand and scheduled capacity analysis reports that include TopN, Trend, and At-a-Glance as a standard service at no additional cost. All reports are available and accessed through the Verizon Enterprise Center (VEC) portal.			
Contr	ractor shall provide fully managed router service bundles that include:			
31a	Router Maintenance. Proactively detect, isolate and resolve hardware, software and firmware faults associated with the managed router and modem used for access to the managed router. The Contractor shall also respond to Customer reported faults. Router maintenance shall be provided 24x365. If dispatch is required, a Field Service Repair Technician shall arrive within four (4) hours of isolating the fault to the managed router/modem. Customer shall be notified of router faults and be provided trouble status at (1) hour intervals.	Y		
	Bidder's Product Description			
	Verizon proactively detects, isolates and resolves hardware, software and firmware faults associated with the managed router and out-of-band management modem. Additionally, Verizon will respond to Customer-reported faults. Verizon provides router maintenance 24x365. If a dispatch is required, a Field Service Repair Technician shall arrive within four (4) hours of isolating the fault to the managed router or modem. Verizon will notify Customer of detected and reported faults within fifteen (15) minutes and will provided a trouble status on one (1) hour intervals or better.			
31b	Router Monitoring. Proactively detect, isolate and resolve logical faults associated with the managed router. Router monitoring shall be provided 24x365.	Y		
	Bidder's Product Description  Verizon proactively detects, isolates, and resolves logical faults associated managed router. Verizon provides router monitoring 24x365.	d with th	е	
31c	Router Management. Manage router configuration. This includes passwords, access lists and configuration changes due to moves, adds, changes and deletes.	Y		
	Bidder's Product Description			



Table 1.2.2.7, MPLS Technical Requirements (continued)

	Requirement	Bidder Meets or Exceeds? Y N
	Verizon's Router Management provides for the management of the router Changes covered by Router Management include (but are not limited to)—  Password changes  Access lists  Configuration changes due to moves, adds, changes and deletes.	configuration.
31d	Network Monitoring. Proactively detect, isolate and resolve network faults. Network monitoring shall be provided 24x365. Customer shall be notified of network faults and be provided trouble status at one (1) hour intervals.	Y
	Bidder's Product Description  Verizon will proactively detect, isolate and resolve network faults associate customer networks 24x365. Additionally, Verizon will respond to Customer faults. Verizon will notify Customer of detected and reported faults within fi minutes and will provided a trouble status on one (1) hour intervals or better	reported fteen (15)

#### 1.2.2.8 MPLS TRANSPORT SPEEDS

Contractor's CALNET 3 solution shall include transport options to one (1) endpoint for each of the speeds detailed in Tables 1.2.2.8. Pricing for each of these speeds will be provided by the Bidder in the response to the Subcategory Cost Worksheets.

#### 1.2.2.8.1 MPLS Port Transport Speeds

Table 1.2.2.8.1.a, MPLS Port Transport Speeds

	Requirement		dder ees? N	Bidder's Product Identifier
1	MPLS Transport DS1 Port service at minimum line rate of 128 Kbps	Y		PORT0128
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 128 Kbps port only service on sub rate DS1 Port.			
2	MPLS Transport DS1 Port service at minimum line rate of 384 Kbps	Y PORT0384		
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 384 Kbps port only service on sub rate DS1 Port.				



## Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier	
3	MPLS Transport DS1 Port service at minimum line rate of 512 Kbps	Y		PORT0512	
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 512 Kbps port only service on sub rate DS1 Port.					
4	MPLS Transport DS1 Port service at minimum line rate of 768 Kbps	Υ		PORT0768	
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 768 Kbps port only service on sub rate DS1 Port.					
5	MPLS Transport DS1 Port service at minimum line rate of 1.024 Mbps	Y		PORT1024	
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 1.024 Mbps port only service on sub rate DS1 Port.				
6	MPLS Transport DS1 Port service at minimum line rate of 1.544 Mbps	Υ		PORT1536	
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 1.544 Mbps port only service on a full rate DS1 Port.	ers a n	ninimun	n line rate of	
7	MPLS Transport NxDS1 Port service at minimum line rate of 3.088 Mbps	Υ		MPND0003	
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 3.088 Mbps port only service on a full rate Multilink PPP 2x DS1 Port.				
8	MPLS Transport NxDS1 Port service at minimum line rate of 4.632 Mbps	Y		MPND0004	
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 4.632 Mbps port only service on a full rate Multilink PPP 3x DS1 F		ninimun	n line rate of	



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier		
9	MPLS Transport NxDS1 Port service at minimum line rate of 6.176 Mbps	Y		MPND0006		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 6.176 Mbps port only service on a full rate Multilink PPP 4x DS1 Port.					
10	MPLS Transport NxDS1 Port service at minimum line rate of 7.720 Mbps	Y		MPND0007		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 7.720 Mbps port only service on a full rate Multilink PPP 5x DS1 Port.					
11	MPLS Transport NxDS1 Port service at minimum line rate of 9.264 Mbps	Y		MPND0009		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 9.264 Mbps port only service on a full rate Multilink PPP 6x DS1 P		ninimun	n line rate of		
12	MPLS Transport DS3 Port service at minimum line rate of 10 Mbps	Y		MTDS0010		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 10 Mbps port only service on a sub rate DS3 Port.	ers a n	ninimun	n line rate of		
13	MPLS Transport NxDS1 Port service at minimum line rate of 12.352 Mbps	Y		MPND0012		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 12.352 Mbps port only service on a full rate Multilink PPP 8x DS1 Port.					
14	MPLS Transport DS3 Port service at minimum line rate of 20 Mbps	Y		MTDS0020		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 20 Mbps port only service on a sub rate DS3 Port.	ers a n	ninimun	n line rate of		



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier			
15	MPLS Transport DS3 Port service at minimum line rate of 45 Mbps	Y		MTDS0045			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 45 Mbps port only service on a full rate DS3 Port.						
16	MPLS Transport OC3 Port service at minimum line rate of 155 Mbps	Y		PIOC0003			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 155 Mbps port only service on a full rate OC3 Port.						
17	MPLS Transport OC12 Port service at minimum line rate of 622 Mbps	Y		PIOC0012			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 622 Mbps port only service on a full rate OC12 Port.	ers a n	ninimun	n line rate of			
18	MPLS Transport Ethernet Port service at minimum line rate of one (1) Mbps	Y		PIET0001			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome one (1) Mbps port only service with an Ethernet port.	ers a n	ninimun	n line rate of			
19	MPLS Transport Ethernet Port service at minimum line rate of two (2) Mbps	Y		PIET0002			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of two (2) Mbps port only service with an Ethernet port.						
20	MPLS Transport Ethernet Port service at minimum line rate of three (3) Mbps	Y		PIET0003			
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome three (3) Mbps port only service with an Ethernet port.	ers a n	ninimun	n line rate of			



## Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier		
21	MPLS Transport Ethernet Port service at minimum line rate of four (4) Mbps	Υ		PIET0004		
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of four (4) Mbps port only service with an Ethernet port.						
22	MPLS Transport Ethernet Port service at minimum line rate of five (5) Mbps	Y		PIET0005		
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of five (5) Mbps port only service with an Ethernet port.						
23	MPLS Transport Ethernet Port service at minimum line rate of six (6) Mbps	Υ		PIET0006		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of six (6) Mbps port only service with an Ethernet port.					
24	MPLS Transport Ethernet Port service at minimum line rate of seven (7) Mbps	Y		PIET0007		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome seven (7) Mbps port only service with an Ethernet port.	ers a n	ninimun	n line rate of		
25	MPLS Transport Ethernet Port service at minimum line rate of eight (8) Mbps	Y		PIET0008		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of eight (8) Mbps port only service with an Ethernet port.					
26	MPLS Transport Ethernet Port service at minimum line rate of nine (9) Mbps	Υ		PIET0009		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customenine (9) Mbps port only service with an Ethernet port.	ers a n	ninimun	n line rate of		



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier		
27	MPLS Transport Ethernet Port service at minimum line rate of 10 Mbps	Y		PIET0010		
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 10 Mbps port only service with an Ethernet port.						
28	MPLS Transport Ethernet Port service at minimum line rate of 20 Mbps	Y		PIET0020		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 20 Mbps port only service with an Ethernet port.					
29	MPLS Transport Ethernet Port service at minimum line rate of 30 Mbps	Y		PIET0030		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 30 Mbps port only service with an Ethernet port.					
30	MPLS Transport Ethernet Port service at minimum line rate of 40 Mbps	Υ		PIET0040		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 40 Mbps port only service with an Ethernet port.	ers a n	ninimun	n line rate of		
31	MPLS Transport Ethernet Port service at minimum line rate of 50 Mbps	Y		PIET0050		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 50 Mbps port only service with an Ethernet port.					
32	MPLS Transport Ethernet Port service at minimum line rate of 60 Mbps	Υ		PIET0060		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 60 Mbps port only service with an Ethernet port.					



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier		
33	MPLS Transport Ethernet Port service at minimum line rate of 70 Mbps	Y		PIET0070		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 70 Mbps port only service with an Ethernet port.					
34	MPLS Transport Ethernet Port service at minimum line rate of 80 Mbps	Y		PIET0080		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 80 Mbps port only service with an Ethernet port.					
35	MPLS Transport Ethernet Port service at minimum line rate of 90 Mbps	Y		PIET0090		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 90 Mbps port only service with an Ethernet port.					
36	MPLS Transport Ethernet Port service at minimum line rate of 100 Mbps	Y		PIET0100		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 100 Mbps port only service with an Ethernet port.	ers a n	ninimum	n line rate of		
36 a	MPLS Transport Ethernet Port Only - 150 Mbps Speed	Y		PRTO0150		
	Bidder's Product Description:					
	MPLS Transport Ethernet Port Only - 150 Mbps Speed provides c Port only service to connect to an unbundled access circuit not inc					
37	MPLS Transport Ethernet Port service at minimum line rate of 200 Mbps	Y		PIET0200		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 200 Mbps port only service with a Gigabit Ethernet port.	ers a n	ninimun	n line rate of		



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier		
38	MPLS Transport Ethernet Port service at minimum line rate of 300 Mbps	Y		PIET0300		
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 300 Mbps port only service with a Gigabit Ethernet port.						
39	MPLS Transport Ethernet Port service at minimum line rate of 400 Mbps	Y		PIET0400		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 400 Mbps port only service with a Gigabit Ethernet port.					
40	MPLS Transport Ethernet Port service at minimum line rate of 500 Mbps	Υ		PIET0500		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 500 Mbps port only service with a Gigabit Ethernet port.					
41	MPLS Transport Ethernet Port service at minimum line rate of 600 Mbps	Y		PIET0600		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 600 Mbps port only service with a Gigabit Ethernet port.	ers a n	ninimun	n line rate of		
42	MPLS Transport Ethernet Port service at minimum line rate of 700 Mbps	Y		PIET0700		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of 700 Mbps port only service with a Gigabit Ethernet port.					
43	MPLS Transport Ethernet Port service at minimum line rate of 900 Mbps	Υ		PIET0900		
	Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Custome 900 Mbps port only service with a Gigabit Ethernet port.	ers a n	ninimun	n line rate of		



# Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement	_	dder ees? N	Bidder's Product Identifier	
44	MPLS Transport Ethernet Port service at minimum line rate of one (1) Gbps	Y		PIET1000	
Bidder's Product Description:  Verizon's MPLS transport service will provide CALNET 3 Customers a minimum line rate of one (1) Gbps port only service with a Gigabit Ethernet port.					
45	MPLS Transport Ethernet Port Only - 1.5 Gbps Speed	Υ		PRTO1005	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 1.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				
46	MPLS Transport Ethernet Port Only - 2 Gbps Speed	Υ		PRTO2000	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 2 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				
47	MPLS Transport Ethernet Port Only - 2.5 Gbps Speed	Y		PRTO2005	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 2.5 Gps Speed provides cus Port only service to connect to an unbundled access circuit not inc				
48	MPLS Transport Ethernet Port Only - 3 Gbps Speed	Υ		PRTO3000	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 3 Gbps Speed provides cust Port only service to connect to an unbundled access circuit not income.				
49	MPLS Transport Ethernet Port Only - 3.5 Gbps Speed	Υ		PRTO3005	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 3.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				
50	MPLS Transport Ethernet Port Only - 4 Gbps Speed	Υ		PRTO4000	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 4 Gbps Speed provides cust Port only service to connect to an unbundled access circuit not inc				



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier			
51	MPLS Transport Ethernet Port Only - 4.5 Gbps Speed	Υ		PRTO4005			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 4.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.						
52	MPLS Transport Ethernet Port Only - 5 Gbps Speed	Υ		PRTO5000			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.						
53	MPLS Transport Ethernet Port Only - 5.5 Gbps Speed	Υ		PRTO5005			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 5.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.						
54	MPLS Transport Ethernet Port Only - 6 Gbps Speed	Υ		PRTO6000			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 6 Gbps Speed provides cust Port only service to connect to an unbundled access circuit not income.						
55	MPLS Transport Ethernet Port Only - 6.5 Gbps Speed	Υ		PRTO6005			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 6.5 Gbps Speed provides cu Port only service to connect to an unbundled access circuit not inc						
56	MPLS Transport Ethernet Port Only - 7 Gbps Speed	Υ		PRTO7000			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 7 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item						
57	MPLS Transport Ethernet Port Only - 7.5 Gbps Speed	Υ		PRTO7005			
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 7.5 Gbps Speed provides cu Port only service to connect to an unbundled access circuit not inc						



Table 1.2.2.8.1.a, MPLS Port Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier	
58	MPLS Transport Ethernet Port Only - 8 Gbps Speed	Υ		PRTO8000	
Bidder's Product Description:  MPLS Transport Ethernet Port Only - 8 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.					
59	MPLS Transport Ethernet Port Only - 8.5 Gbps Speed	Υ		PRTO8005	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 8.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				
60	MPLS Transport Ethernet Port Only - 9 Gbps Speed	Υ		PRTO9000	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 9 Gbps Speed provides cust Port only service to connect to an unbundled access circuit not inc				
61	MPLS Transport Ethernet Port Only - 9.5 Gbps Speed	Υ		PRTO9005	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 9.5 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				
62	MPLS Transport Ethernet Port Only - 10 Gbps Speed	Υ		PRTM0010	
	Bidder's Product Description:  MPLS Transport Ethernet Port Only - 10 Gbps Speed provides customer a MPLS Ethernet Port only service to connect to an unbundled access circuit not included on this line item.				



The Contractor may offer additional unsolicited MPLS Port Transport Speeds in Table 1.2.2.8.1.b.

Table 1.2.2.8.1.b Unsolicited MPLS Port Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier
1			
Ľ	Bidder's Product Desc	cription:	
2	Bidder's Product Desc	cription:	
3	Bidder's Product Desc	cription:	

# 1.2.2.8.2 MPLS Port and Access Bundled Transport Speeds

#### Table 1.2.2.8.2.a, MPLS Port and Access Bundled Transport Speeds

	Requirement	Bidder Agrees? Y N		Bidder's Product Identifier	
1	MPLS Transport DS1 Port and Access service at minimum line rate of 128 Kbps	Y		MPPA0128	
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 128 Kbps service on a sub rate DS1 Port on DS1 access.					
2	MPLS Transport DS1 Port and Access service at minimum line rate of 256 Kbps	Y		MPPA0256	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 256 Kbps service on a sub rate DS1 Port on DS1 access.				
3	MPLS Transport DS1 Port and Access service at minimum line rate of 384 Kbps	Y		MPPA0384	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 384 Kbps service on a sub rate DS1 Port on DS1 access.				



Table 1.2.2.8.2.a, MPLS Port and Access Bundled Transport Speeds (continued)

	Requirement	_	dder ees? N	Bidder's Product Identifier
4	MPLS Transport DS1 Port and Access service at minimum line rate of 512 Kbps	Y		MPPA0512
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate sub rate DS1 Port on DS1 access.	of 512	2 Kbps	service on a
5	MPLS Transport DS1 Port and Access service at minimum line rate of 768 Kbps	Y		MPPA0768
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 768 Kbps service on a sub rate DS1 Port on DS1 access.				
6	MPLS Transport DS1 Port and Access service at minimum line rate of 1.024 Mbps	Y		MPPA1024
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate sub rate DS1 Port on DS1 access.	of 1.0	24 Mbp	os service on
7	MPLS Transport DS1 Port and Access service at minimum line rate of 1.544 Mbps	Y		MPPA1544
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate a full rate DS1 Port on DS1 access.	of 1.5	44 Mbp	os service on
8	MPLS Transport NxDS1 Port and Access service at minimum line rate of 3.088 Mbps	Υ		MNDP0003
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate a full rate Multilink PPP 2x DS1 Port and 2x DS1 Access.	of 3.0	88 Mbp	os service on
9	MPLS Transport NxDS1 Port and Access service at minimum line rate of 4.632 Mbps	um Y		MNDP0004
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate a full rate Multilink PPP 3x DS1 Port and 2x DS1 Access.	of 4.6	32 Mbp	os service on



Table 1.2.2.8.2.a, MPLS Port and Access Bundled Transport Speeds (continued)

	Requirement		dder ees? N	Bidder's Product Identifier	
10	MPLS Transport NxDS1 Port and Access service at minimum line rate of 6.176 Mbps	Y		MPAB0006	
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 6.176 Mbps service of a full rate Multilink PPP 4x DS1 Port and 4x DS1 Access.					
11	MPLS Transport NxDS1 Port and Access service at minimum line rate of 7.720 Mbps	Υ		MPTN0007	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 7.720 Mbps service on a full rate Multilink PPP 5x DS1 Port and 5x DS1 Access.				
12	MPLS Transport NxDS1 Port and Access service at minimum line rate of 9.264 Mbps	Y		MPAB0009	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 9.264 Mbps service on a full rate Multilink PPP 6x DS1 Port and 6x DS1 Access.				
13	MPLS Transport DS3 Port and Access service at minimum line rate of 10 Mbps	Y		MDPA0010	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate sub rate DS3 Port and DS3 Access.	of 10	Mbps s	ervice on a	
14	MPLS Transport NxDS1 Port and Access service at minimum line rate of 12.352 Mbps	Υ		MNDP0012	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate a full rate Multilink PPP 8x DS1 Port and 8x DS1 Access.	of 12.	352 Mb	pps service on	
15	MPLS Transport DS3 Port and Access service at minimum line rate of 15 Mbps	Y		MDPA0015	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 15 Mbps service on a sub rate DS3 Port and DS3 Access.				



Table 1.2.2.8.2.a, MPLS Port and Access Bundled Transport Speeds (continued)

	Requirement		lder ees? N	Bidder's Product Identifier	
16	MPLS Transport DS3 Port and Access service at minimum line rate of 20 Mbps	Y		MDPA0020	
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 20 Mbps service on a sub rate DS3 Port and DS3 Access.					
17	MPLS Transport DS3 Port and Access service at minimum line rate of 25 Mbps	Y		MDPA0025	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 25 Mbps service on a sub rate DS3 Port and DS3 Access.				
18	MPLS Transport DS3 Port and Access service at minimum line rate of 30 Mbps	Y		MDPA0030	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 30 Mbps service on a sub rate DS3 Port and DS3 Access.				
19	MPLS Transport DS3 Port and Access service at minimum line rate of 45 Mbps	Y		MDPA0045	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 45 Mbps service on a full rate DS3 Port and DS3 Access.				

The Contractor may offer additional unsolicited MPLS Port and Access Bundled Transport Speeds in Table 1.2.2.8.2.b.



## Table 1.2.2.8.2.b Unsolicited MPLS Port and Access Bundled Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier			
1						
	Bidder's Product Desc	cription:				
2						
	Bidder's Product Desc	cription:				
3	Bidder's Product Description:					

# 1.2.2.8.3 MPLS Port, Access and Router Bundled Transport Speeds

# Table 1.2.2.8.3.a, MPLS Port, Access and Router Bundled Transport Speeds

	Requirement		der es? N	Bidder's Product Identifier
1	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 128 Kbps	Y		IPTK0128
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 128 Kbps service.  Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
2	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 384 Kbps	Y		IPTK0384
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 384 Kbps service.  Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
3	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 512 Kbps	Y		IPTK0512
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 512 Kbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.			



Table 1.2.2.8.3.a, MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Requirement		lder ees? N	Bidder's Product Identifier	
4	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 768 Kbps	Y		IPTK0768	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate  Verizon will provide the required bundled router, management of t and Access.				
5	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 1.024 Mbps	Y		IPTK1024	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate  Verizon will provide the required bundled router, management of t and Access.				
6	MPLS Transport DS1 port, access and router bundled service at minimum line rate of 1.544 Mbps	Υ		IPTK1536	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate will provide the required bundled router, management of the route Access.				
7	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 3.088 Mbps	Υ		IPTK3088	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 3.088 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
8	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 4.632 Mbps	Υ		IPTK4632	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate will provide the required bundled router, management of the route Access.				
9	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 5.000 Mbps	Υ		IPTK5000	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate will provide the required bundled router, management of the route Access.				



Table 1.2.2.8.3.a, MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Requirement		lder ees? N	Bidder's Product Identifier	
10	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 6.176 Mbps	Υ		IPTK6144	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate will provide the required bundled router, management of the route Access.				
11	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 7.720 Mbps	Υ		MPRB0007	
Bidder's Product Description:  Verizon's MPLS NxDS1 transport service will provide a minimum line rate of 7.720 Mbps.  Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
12	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 9.264 Mbps	Υ		MPRB0009	
	Bidder's Product Description:  Verizon's MPLS NxDS1 transport service will provide a minimum I Verizon will provide the required bundled router, management of t and Access				
13	MPLS Transport NxDS1 port, access and router bundled service at minimum line rate of 12.352 Mbps	Υ		MPRB0012	
	Bidder's Product Description:  Verizon's MPLS NxDS1 transport service will provide a minimum line rate of 12.352 Mbps.  Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
14	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 10 Mbps	Υ		IPTM0010	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate provide the required bundled router, management of the router, M				
15	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 15 Mbps	Υ		IPTM0015	
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 15 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



Table 1.2.2.8.3.a, MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Requirement		lder ees? N	Bidder's Product Identifier
16	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 20 Mbps	Y		IPTM0020
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 20 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
17	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 25 Mbps	Y		IPTM0025
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 25 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
18	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 30 Mbps	Y		IPTM0030
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate provide the required bundled router, management of the router, M			
19	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 40 Mbps	Y		IPTM0040
Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate of 40 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
20	MPLS Transport DS3 port, access and router bundled service at minimum line rate of 45 Mbps	Y		IPTM0045
	Bidder's Product Description:  Verizon's MPLS transport service will provide a minimum line rate provide the required bundled router, management of the router, M			



The Contractor may offer additional unsolicited MPLS Port, Access and Router Bundled Transport Speeds in Table 1.2.2.8.3.b.

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds

	Feature Name	Fe	eature Desc	cription	Bidder's Product Identifier	
	Expedite MPLS Service	Expedite MPLS Service will provide improved installation intervals less than the standard intervals with available facilities.			EXMP0000	
Bidder's Product Description:  Verizon is proposing Expedite MPLS as an unsolicited service offering in Section 1.2. Verizon is providing Expedite MPLS Service which will provide to the customer improved instated intervals less than the standard intervals. Standard intervals for provisioning the following services include:					ed installation	
	Service Interval Type					
	MPLS Port Transport (	1.2.2.8.1)	35	Coordinated/Manage	d Project	
1	MPLS Port and Access (1.2.2.8.2)	Bundle Transport	35	Coordinated/Manage	d Project	
	MPLS Port, Access and (1.2.2.8.3)	d Router Transport	45	Coordinated/Manage	d Project	
	MPLS Port, Access and On-Net Transport Spee		45	Coordinated/Manage	d Project	
MPLS Port, Access an Off-Net Transport Sp			45	Coordinated/Managed Project		
	MPLS Port, Access and Ethernet On-Net Trans		45	Coordinated/Manage	d Project	
		MPLS Port, Access and Router Bundled Ethernet Off-Net Transport (1.2.2.8.7)  45 Coordinated/Managed				



## **MPLS EF Gold CAR**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name Feature Description		Bidder's Product Identifier		
	MPLS EF Gold CAR at 8 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
2	Bidder's Product Description:  Verizon is proposing MPLS EF Gold CAR as an unsolicited service offering in section 1.2. Expedited Forwarding (EF) – Gold CAR is applicable as an additional enhanced service element to our MPLS WAN service offering in this section.  MPLS EF Gold CAR general description applies to the following MPLS EF Gold CAR line items. The MPLS Enhanced Traffic Management (ETM) service allows the assignment of up to six (6) traffic priority classes with up to ten (10) priority levels, thus facilitating prioritization and differentiation of applications.  Verizon's Expedite Forwarding (EF) – Gold CAR Service is an optional priority class that can be added to a network as a Class of Service (CoS). EF queue has the highest priority of the six available priority classes and is used primarily for real time Data traffic. EF is typically used by customers who wish to utilize Voice over IP (VoIP) over the MPLS network for "Real Time" applications. The EF CoS utilizes a Low Latency Queue (LLQ) through the core of the MPLS network. Strict priority queuing is used to control jitter with EF CoS. The EF CoS is the highest priority of data traffic in the MPLS Network. EF Data traffic is prioritized in the PE ingress and egress access queues between the PE and the CE devices. These access queues allow EF marked data packets to enter and exit the MPLS Network at a higher priority than other data Traffic. Verizon utilizes the "Gold CAR" naming convention to designate the EF CoS compared to the other priority classes available to the customer. EF Real-Time Data must conform to the optionally subscribed GOLD CAR rate at the ingress of the MPLS network for the transmitted real-time traffic. EF Traffic that exceeds the subscribed GOLD CAR rate at the ingress will be discarded by the MPLS PE Router. These rate policies do not allow for bursting of Real-Time traffic. Any traffic that exceeds the subscribed EF/Real Time CoS is dropped. Customers must ensure that CE devices send packets with the appropriate IP Type of				
	MPLS EF Gold CAR at 16 Kbps	MPLS EF Gold EF CAR at 16 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0016		
3	Bidder's Product Description:  Verizon will provide MPLS EF Gold EF CAR at 16 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
	MPLS EF Gold CAR at 32 Kbps	MPLS EF Gold CAR at 32 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0032		
4	Bidder's Product De Verizon will provide M Expedited Forwarding	MPLS EF Gold CAR at 32 Kbps provides one additional queu	ue for		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	ne Feature Description			
	MPLS EF Gold CAR at 128 Kbps	MPLS EF Gold CAR at 128 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0128		
5	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 128 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
	MPLS EF Gold CAR at 256 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.		CRGD0256		
6	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 256 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
	MPLS EF Gold CAR at 384 Kbps	MPLS EF Gold CAR at 384 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0384		
7	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 384 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
	MPLS EF Gold CAR at 512 Kbps	MPLS EF Gold CAR at 512 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0512		
8	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 512 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
	MPLS EF Gold CAR at 768 Kbps	MPLS EF Gold CAR at 768 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0768		
9	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 768 Kbps provides one additional queue for Expedited Forwarding (EF) traffic.				
10	MPLS EF Gold CAR at 1.024 Mbps	MPLS EF Gold CAR at 1.024 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD1024		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name Feature Description		Bidder's Product Identifier			
	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 1.024 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.					
	MPLS EF Gold CAR at 1.376 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.  MPLS EF Gold CAR at 1.376 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.		CRGD1376			
11	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 1.376 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.					
1.2	MPLS EF Gold CAR at 1.536 Mbps	additional queue for Expedited Forwarding (EF) traffic.				
12	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 1.536 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.					
	MPLS EF Gold CAR at 1.728 Mbps	MPLS EF Gold CAR at 1.728 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD1728			
13	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 1.728 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.					
	MPLS EF Gold CAR at 2 Mbps	MPLS EF Gold CAR at 2 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0002			
14	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 2 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.					
	MPLS EF Gold CAR at 3 Mbps	MPLS EF Gold CAR at 3 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0003			
15						



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

•	,		Bidder's						
	Feature Name	Eastura Deparintion	Product Identifier						
		Feature Description							
	MPLS EF Gold CAR at 3.5 Mbps	MPLS EF Gold CAR at 3.5 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGE0003						
16	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 3.5 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 4.096 Mbps	MPLS EF Gold CAR at 4.096 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0004						
17	Bidder's Product De Verizon will provide M Expedited Forwardin	MPLS EF Gold CAR at 4.096 Mbps provides one additional of	queue for						
	MPLS EF Gold CAR at 5Mbps	MPLS EF Gold CAR at 5 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0005						
18	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 5 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 7.2 Mbps	MPLS EF Gold CAR at 7.2 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0007						
19	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 7.2 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 9.216 Mbps	MPLS EF Gold CAR at 9.216 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0009						
20	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 9.216 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 10 Mbps	MPLS EF Gold CAR at 10 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0010						
21	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 10 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
22			CRGD0013						



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier						
	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 13.488 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 15.360 Mbps	MPLS EF Gold CAR at 15.360 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD1560						
23	Bidder's Product De Verizon will provide N Expedited Forwarding	MPLS EF Gold CAR at 15.360 Mbps provides one additional	queue for						
	MPLS EF Gold CAR at 17.808 Mbps	MPLS EF Gold CAR at 17.808 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0017						
24	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 17.808 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 18.432 Mbps	MPLS EF Gold CAR at 18.432 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD1843						
25	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 18.432 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								
	MPLS EF Gold CAR at 20 Mbps	MPLS EF Gold CAR at 20 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0020						
26	Bidder's Product De Verizon will provide M Expedited Forwarding	MPLS EF Gold CAR at 20 Mbps provides one additional que	ue for						
	MPLS EF Gold CAR at 24.576 Mbps	MPLS EF Gold CAR at 24.576 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD2457						
27	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 24.576 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.								



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

·			Bidder's					
			Product					
	Feature Name	Feature Description	Identifier					
	MPLS EF Gold CAR at 30 Mbps	MPLS EF Gold CAR at 30 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0030					
28	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 30 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 40 Mbps	MPLS EF Gold CAR at 40 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0040					
29	Bidder's Product De Verizon will provide M Expedited Forwardin	MPLS EF Gold CAR at 40 Mbps provides one additional que	ue for					
0.5	MPLS EF Gold CAR at 44.992 Mbps	· ·						
30	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 44.992 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 50 Mbps	MPLS EF Gold CAR at 50 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0050					
31	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 50 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 72 Mbps	MPLS EF Gold CAR at 72 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0072					
32	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 72 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 90 Mbps	MPLS EF Gold CAR at 90 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0090					
33	Bidder's Product De Verizon will provide M Expedited Forwardin	MPLS EF Gold CAR at 90 Mbps provides one additional que	ue for					
34	MPLS EF Gold CAR at 110.500 Mbps	MPLS EF Gold CAR at 110.500 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0110					



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier					
	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 110.500 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 139.936 Mbps	MPLS EF Gold CAR at 139.936 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0139					
35	Bidder's Product De Verizon will provide M Expedited Forwarding	MPLS EF Gold CAR at 139.936 Mbps provides one additional	al queue for					
	MPLS EF Gold CAR at 180 Mbps	MPLS EF Gold CAR at 180 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0180					
36	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 180 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 248.8 Mbps	MPLS EF Gold CAR at 248.8 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0248					
37	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 248.8 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 450 Mbps	MPLS EF Gold CAR at 450 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0450					
38	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 450 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
	MPLS EF Gold CAR at 700 Mbps	MPLS EF Gold CAR at 700 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.	CRGD0700					
39	Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 700 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.							
40	MPLS EF Gold CAR at 900 Mbps	MPLS EF Gold CAR at 900 Mbps provides one additional queue for Expedited Forwarding (EF) traffic.						



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

Feature Name	Feature Description	Bidder's Product Identifier			
Bidder's Product Description:  Verizon will provide MPLS EF Gold CAR at 900 Mbps provides one additional queue for					
Expedited Forwarding		cuc ioi			

**MPLS Multicast** 



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
41	MPLS Multicast Tier 8 - 100 Mbps-499.99 Mbps	MPLS Multicast Tier 8 - Bandwidth Range 100 Mbps-499.99 Mbps	PIPM0008



#### **Bidder's Product Description:**

Verizon is proposing MPLS Multicast as an unsolicited service offering in Section 1.2. MPLS Multicast VPN is applicable as an additional enhanced service element to our MPLS WAN service offering in this section.

MPLS Multicast general description applies to the following MPLS Multicast line items. MPLS Multicast is a bandwidth conserving technology that reduces traffic by simultaneously delivering a steady stream of information to multiple locations. Applications that take advantage of MPLS Multicast include video conferencing, corporate communications, distance learning, and distribution of software, stock quotes, and news.

With this feature, customers can create a multicasting group that consists of the locations within their network. These locations will receive packets of information sent from the host site. At the host site, the customer creates the data stream, which is sent to the network. The network receives the information and simultaneously sends a copy to each member of the multicasting group.

MPLS Multicast supports Protocol Independent Multicast (PIM) Spare Mode (Version 2) and PIM Source Specific Multicast (SSM).

Multicast traffic is sent to the access port with its own multicast CAR (MCAR) value at MPLS ingress. The customer must select an input rate (input/ingress to MPLS) for their multicast traffic originating at their primary source site(s). The customer cannot send more traffic than the agreed upon rate or the multicast traffic at ingress to MPLS will be discarded.

Multicast ingress rate enforcement is not related to MPLS Real–Time CAR enforcement. Multicast VPN traffic is treated separately from unicast at ingress. A customer can send full multicast input concurrently with fully utilized Real–Time and/or AF CAR inputs as long as the port speed is not exceeded. CAR independence remains even when multicast traffic is marked as Real–Time (EF), AF, or BE by the customer.

At egress, the DiffServ marking placed on multicast traffic by the customer is honored in the egress queues of the Provider Edge (PE) toward the Customer Edge (CE); therefore, Class of Service (CoS) is extended to include multicast at the egress edge of the network, though some hardware exceptions apply. Multicast Tier 0 through Tier 7 are included with the Verizon MPLS at no extra charge.

**MPLS Multicast Tier 8** has a Bandwidth Range of 100 Mbps-499.99 Mbps for Multicast Traffic across a MPLS Network.

Tier Name	Bandwidth Range
Multicast Tier 0	0 Kbps-15 Kbps
Multicast Tier 1	16 Kbps-511 Kbps
Multicast Tier 2	512 Kbps-1.499 Mbps
Multicast Tier 3	1.5 Mbps-2.99 Mbps
Multicast Tier 4	3 Mbps-5.99 Mbps
Multicast Tier 5	6 Mbps-14.99 Mbps
Multicast Tier 6	15 Mbps-44.99 Mbps
Multicast Tier 7	45 Mbps-99.99 Mbps
Multicast Tier 8	100 Mbps-499.99 Mbps



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name		Feat		Bidder's Product Identifier		
		Multicast Tier 9		500 Mbps-999.99 Mbps			
		М	ulticast Tier 10	1G bps-4.99 Gbps			
		М	ulticast Tier 11	5 Gbps-9.99 Gbps			
MPLS Multicast Tie 9 - 500 Mbps-999.99 Mbps		-	MPLS Multicast Tie 999.99 Mbps	r 9 - Bandwidth Range 500 Mt	ops-	PIPM0009	
Bidder's Product Description:  Multicast Tier 9 has a Bandwidth Range of 500 Mbps-999.99 Mbps for Multicast Traffi MPLS Network.							

# **MPLS Port Only Cross Connect**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier			
	MPLS Port Only Cross Connect 200 Mbps Ethernet	MPLS Port Only Cross Connect 200 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 200 Mbps Ethernet.	PICC0001			
	Verizon is proposing MP Section 1.2. MPLS Port element to our MPLS W	Bidder's Product Description:  Verizon is proposing MPLS Port Only Cross Connect as an unsolicited service offering in Section 1.2. MPLS Port Only Cross Connect is applicable as an additional enhanced service element to our MPLS WAN service offering in this section.				
43	MPLS Port Only Cross Connect general description applies to the following MPLS Port Only Cross Connect line items.  MPLS Cross Connect is a point-to-point Intra-building dedicated circuit used to connect customers to the MPLS Network. Cross Connection ("Cross Connect") charges apply strictly to MPLS Port Only ("Port Only") services. Port Only services are only available when Customer is collocated in the same building as the Port Only capable IP MPLS hub. A Cross Connection is only available via Ethernet from 250 Mbps to 10 Gbps. Port Only services may be available when Customer is collocated within an adjacent building if agreed to by Verizon. The MPLS Cross Connection would be applied to replace a traditional Local Loop with one of the following network configurations:					
	Configuration 1 – A customer requires a connection between the MPLS network and the customer's Network Colocation space within the same lit building.  Configuration 2 – A customer requires a connection between the MPLS network and the customer's alternative provider's colocation space within the same Verizon lit building					
	Configuration 3 – A customer requires a connection between the MPLS network and the customer's location within the same Verizon lit building.  MPLS Port Only Cross Connect 200 Mbps Ethernet is a point-to-point intra-building connection between a customer location utilizing a MPLS Port only circuit and a Verizon Port-Only Capable IP MPLS Hub. This service request is for a 200 Mbps Ethernet Port Only Cross Connection service.					
	MPLS Port Only Cross Connect 250 Mbps Ethernet	MPLS Port Only Cross Connect 250 Ethernet is a Point-to-point Intra-building Cross Connect at 250 Mbps Ethernet.	PICC0002			
44	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 250 Ethernet is a Point-to-point Intrabuilding Cross Connect at 250 Mbps Ethernet.					



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

`	mueu)			Bidder's		
	Feature Name		Feature Description	Product Identifier		
45	MPLS Port Only Cross Connect 300 Mbps Ethernet		MPLS Port Only Cross Connect is a Point-to- point Intra-building Cross Connect at 300 Mbps Ethernet.	PICC0003		
45	Verizon will provide MPL	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect is a Point-to-point Intra-building Cross Connect at 300 Mbps Ethernet.				
46	MPLS Port Only Cross Connect 350 Mbps Ethernet		MPLS Port Only Cross Connect 350 is a Point- to-point Intra-building Cross Connect at 350 Mbps Ethernet.	PICC0004		
40	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 350 is a Point-to-point Intra-building Cross Connect at 350 Mbps Ethernet.					
47	MPLS Port Only Cross Connect 400 Mbps Ethernet		MPLS Port Only Cross Connect 400 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 400 Mbps Ethernet.	PICC0005		
47	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 400 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 400 Mbps Ethernet.					
48	MPLS Port Only Cross Connect 450 Mbps Ethernet		MPLS Port Only Cross Connect 450 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 450 Mbps Ethernet.	PICC0006		
40	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 450 Mbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 450 Mbps Ethernet.					
40	MPLS Port Only Cross Connect 500 Mbps Ethernet		MPLS Port Only Cross Connect 500 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 500 Mbps Ethernet.	PICC0007		
49	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 500 Mbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 500 Mbps Ethernet.					
	MPLS Port Only Cross Connect 600 Mbps Ethernet		MPLS Port Only Cross Connect 600 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 600 Mbps Ethernet.	PICC0008		
50	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 600 Mbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 600 Mbps Ethernet.					



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,			Bidder's	
	Feature Name		Feature Description	Product Identifier	
51	MPLS Port Only Cross Connect 700 Mbps Ethernet		MPLS Port Only Cross Connect 700 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 700 Mbps Ethernet.	PICC0009	
31	Bidder's Product Desc Verizon will provide MPL building Cross Connect	to-point Intra-			
52	MPLS Port Only Cross Connect 800 Mbps Ethernet		MPLS Port Only Cross Connect 800 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 800 Mbps Ethernet.	PICC0010	
52	Bidder's Product Desc Verizon will provide MPL building Cross Connect	.S Por	t Only Cross Connect 800 Mbps Ethernet is a Point-	to-point Intra-	
50	MPLS Port Only Cross Connect 900 Mbps Ethernet		MPLS Port Only Cross Connect 900 Mbps Ethernet is a Point-to-point Intra-building Cross Connect at 900 Mbps Ethernet.	PICC0011	
53	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 900 Mbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 900 Mbps Ethernet.				
54	MPLS Port Only Cross Connect 1 Gbps Ethernet		MPLS Port Only Cross Connect 1 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 1 Gbps Ethernet.	PICC0012	
54	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 1 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 1 Gbps Ethernet.				
	MPLS Port Only Cross Connect 1.5 Gbps Ethernet		MPLS Port Only Cross Connect 1.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 1.5 Gbps Ethernet.	PICC0013	
55	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 1.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 1.5 Gbps Ethernet.				
	MPLS Port Only Cross Connect 2 Gbps Ethernet		MPLS Port Only Cross Connect 2 Gbps Ethernet is an Intra-building Cross Connect at 2 Gbps Ethernet.	PICC0014	
56	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 2 Gbps Ethernet is an Intra-building Cross Connect at 2 Gbps Ethernet.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name		Feature Description	Bidder's Product Identifier		
	MPLS Port Only Cross Connect 2.5 Gbps Ethernet		MPLS Port Only Point-to-point Intra-building Cross Connect at 2.5 Gbps Ethernet.	PICC0015		
57	Bidder's Product Descri Verizon will provide MPLS Ethernet.		Only Point-to-point Intra-building Cross Connect at	2.5 Gbps		
58	MPLS Port Only Cross Connect 3 Gbps Ethern	et E	MPLS Port Only Cross Connect 3 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 3 Gbps Ethernet.	PICC0016		
30	Bidder's Product Descri Verizon will provide MPLS building Cross Connect at	Port C	Only Cross Connect 3 Gbps Ethernet is a Point-to bs Ethernet.	-point Intra-		
50	MPLS Port Only Cross Connect 3.5 Gbps Ethernet		MPLS Port Only Cross Connect 3.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 3.5 Gbps Ethernet.	PICC0017		
59	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 3.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 3.5 Gbps Ethernet.					
60	MPLS Port Only Cross Connect 4 Gbps Ethern	et i	MPLS Port Only Cross Connect 4 Gbps Ethernet s a Point-to-point Intra-building Cross Connect at 4 Gbps Ethernet.	PICC0018		
60	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 4 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 4 Gbps Ethernet.					
04	MPLS Port Only Cross Connect 4.5 Gbps	F	MPLS Port Only Cross Connect 4.5 Gbps is a Point-to-point Intra-building Cross Connect at 4.5 Gbps Ethernet.	PICC0019		
61	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 4.5 Gbps is a Point-to-point Intra-building Cross Connect at 4.5 Gbps Ethernet.					
	MPLS Port Only Cross Connect 5 Gbps Ethern	et E	MPLS Port Only Cross Connect 5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 5 Gbps Ethernet.	PICC0020		
62	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 5 Gbps Ethernet.					



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name		Feature Description	Bidder's Product Identifier	
63	MPLS Port Only Cross Connect 5.5 Gbps Ethernet	E	MPLS Port Only Cross Connect 5.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 5.5 Gbps Ethernet.	PICC0021	
03	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 5.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 5.5 Gbps Ethernet.				
64	MPLS Port Only Cross Connect 6 Gbps Ethern	<b>et</b> is	MPLS Port Only Cross Connect 6 Gbps Ethernet is a Point-to-point Intra-building Cross Connect it 6 Gbps Ethernet.	PICC0022	
64	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 6 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 6 Gbps Ethernet.				
	MPLS Port Only Cross Connect 6.5 Gbps Ethernet	E	MPLS Port Only Cross Connect 6.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 6.5 Gbps Ethernet.	PICC0023	
65	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 6.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 6.5 Gbps Ethernet.				
66	MPLS Port Only Cross Connect 7 Gbps Ethern	<b>et</b> is	MPLS Port Only Cross Connect 7 Gbps Ethernet s a Point-to-point Intra-building Cross Connect at 7 Gbps Ethernet.	PICC0024	
00	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 7 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 7 Gbps Ethernet.				
	MPLS Port Only Cross Connect 7.5 Gbps Ethernet	E	MPLS Port Only Cross Connect 7.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 7.5 Gbps Ethernet.	PICC0025	
67	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 7.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 7.5 Gbps Ethernet.				
	MPLS Port Only Cross Connect 8 Gbps Ethern	<b>et</b> is	MPLS Port Only Cross Connect 8 Gbps Ethernet s a Point-to-point Intra-building Cross Connect at 8 Gbps Ethernet.	PICC0026	
68	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 8 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 8 Gbps Ethernet.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name		Feature Description	Bidder's Product Identifier	
69	MPLS Port Only Cross Connect 8.5 Gbps Ethernet		MPLS Port Only Cross Connect 8.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 8.5 Gbps Ethernet.	PICC0027	
69	Bidder's Product Description:  Verizon will provide MPLS Port Only Cross Connect 8.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 8.5 Gbps Ethernet.				
70	MPLS Port Only Cross Connect 9 Gbps Ethernet		MPLS Port Only Cross Connect 9 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 9 Gbps Ethernet.	PICC0028	
70	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 9 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 9 Gbps Ethernet.				
71	MPLS Port Only Cross Connect 9.5 Gbps Ethernet		MPLS Port Only Cross Connect 9.5 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 9.5 Gbps Ethernet.	PICC0029	
/ 1	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 9.5 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 9.5 Gbps Ethernet.				
72	MPLS Port Only Cross Connect 10 Gbps Ethe	rnet	MPLS Port Only Cross Connect 10 Gbps Ethernet is a Point-to-point Intra-building Cross Connect at 10 Gbps Ethernet.	PICC0030	
72	Bidder's Product Description: Verizon will provide MPLS Port Only Cross Connect 10 Gbps Ethernet is a Point-to-point Intrabuilding Cross Connect at 10 Gbps Ethernet.				

#### MPLS Layer 2

# Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

		Feature Name	Feature Description	Bidder's Product Identifier	
73		MPLS Layer 2 – 64 Kbps PVC	MPLS Layer 2 – 64 Kbps PVC provides 64 Kbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL0064	
	73	Bidder's Product Description:  Verizon is proposing MPLS Layer 2 as an Unsolicited Service Offering in section 1.2. MPLS  Layer 2 is applicable as an additional enhanced service element to Verizon's MPLS VPN (Layer  3) and Converged VoIP services, provided in this section.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
	MPLS Layer 2 general description applies to the following MPLS Layer 2 line items.  MPLS Layer 2 is a next-generation MPLS-based Layer 2 solution that supports Point-to-Point (Virtual Private Lines) and Point-to-Multipoint (Virtual Private Networks - VPNs) configurations over Private IP's global MPLS network. MPLS Layer 2 is based on the Virtual Private Wire Service (VPWS) standard that enables Verizon to provision point-to-point pseudo-wires over the MPLS network to meet a broad range of Layer 2 networking requirements. MPLS Layer 2 is ideal for customers looking to migrate from traditional Private Lines or legacy Frame Relay, FRASI, or ATM services to an MPLS-based Layer 2 point-to-point or point-to-multipoint solution. MPLS Layer 2 key features include:  • Supports Point-to-Point and Point-to-Multipoint configurations.  • Delivers a Layer 2 VPN with similar feature set to traditional Frame Relay service  • Enables a near-seamless migration from Frame Relay to MPLS that can leverage the customer's existing CPE and CPE configurations.  • Supports IP and non-IP applications.  • Supports IP and non-IP applications.  • Supports all routing protocols EIGRP, BGP, RIPv2, etc.  • Customer controls IP routing configurations. Enables customer to control convergence times and routing paths during failover events.  • Supports Frame Relay encapsulation.  • Supports DSO, NXDSO, DS1, NXDS1, Subrate DS3, DS3, OC-3, OC-12, OC-48. In order to utilize this Verizon MPLS Layer 2 service, CALNET 3 customers will need to order a TDM T1, NXT1, DS3, OC-3, OC-12 or OC-48 Access per access circuit. Verizon MPLS Layer 2 is a MPLS based layer 2 solution that provides either a point-to-point or point-to-multi-point configuration over Verizon's global MPLS Network. MPLS Layer 2 is based on the Virtual Private Wire Service (VPWS) standard that enables Verizon to provision point-to-point pseudo wires over the MPLS network. MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 64 Kbps Permanent Virtual Ci			
	MPLS Layer 2 – 128 Kbps PVC	MPLS Layer 2 – 128 Kbps PVC provides 128 Kbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL0128	
74	Bidder's Product Description:  MPLS Layer 2 – 128 Kbps PVC is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 128 Kbps Permanent Virtual Circuits (PVC) connectivity on a sub rate DS1.			
75	MPLS Layer 2 – 256 Kbps PVC	MPLS Layer 2 – 256 Kbps PVC provides 256 Kbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL0256	
	Bidder's Product Description:  MPLS Layer 2 – 256 Kbps PVC is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 256 Kbps Permanent Virtual Circuits (PVC) on a sub rate DS1.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MPLS Layer 2 – 384 Kbps PVC	MPLS Layer 2 – 384 Kbps PVC service provides 384 Kbps connectivity on a sub rate DS1.	PIPL0384		
76	Bidder's Product Description:  MPLS Layer 2 – 384 Kbps PVC is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 384 Kbps Permanent Virtual Circuits (PVC) on sub rate DS1.				
	MPLS Layer 2 – 512 Kbps PVC	MPLS Layer 2 – 512 Kbps PVC service provides 512 Kbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL0512		
77	Bidder's Product Description:  MPLS Layer 2 – 512 Kbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 512 Kbps Permanent Virtual Circuits (PVC) on a sub rate DS1.				
	MPLS Layer 2 - 768 Kbps PVC	MPLS Layer 2 – 768 Kbps PVC service provides 768 Kbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL0768		
78	Bidder's Product Description:  MPLS Layer 2 – 768 Kbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 768 Kbps Permanent Virtual Circuits (PVC) on a sub rate DS1.				
	MPLS Layer 2 – 1.024 Mbps PVC	MPLS Layer 2 – 1.024 Mbps PVC service provides 1.024 Mbps Permanent Virtual Circuit (PVC) connectivity on a sub rate DS1.	PIPL1024		
79	Bidder's Product Description:  MPLS Layer 2 – 1.024 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 1.024 Mbps Permanent Virtual Circuits (PVC) connectivity on a sub rate DS1.				
	MPLS Layer 2 – 3.072 Mbps PVC	MPLS Layer 2 – 3.072 Mbps PVC service provides 3.072 Mbps Permanent Virtual Circuit (PVC) connectivity on 2x DS1.	PIPL3072		
80	Bidder's Product Description:  MPLS Layer 2 – 3.072 Mbps PVC. This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 3.072 Mbps Permanent Virtual Circuits (PVC) connectivity on 2x DS1.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MPLS Layer 2 – 4.608 Mbps PVC	MPLS Layer 2 – 4.608 Mbps PVC service provides 4.068 Mbps Permanent Virtual Circuit (PVC) connectivity on 3x DS1	PIPL4608		
81	Bidder's Product Description:  MPLS Layer 2 – 4.608 Mbps PVC This is a Verizon MPLS based layer 2 service, based VPWS standard, to provide a point-to-point solution at 4.068 Mbps Permanent Virtual C (PVC) connectivity on 3x DS1.				
	MPLS Layer 2 – 6.144 Mbps PVC	MPLS Layer 2 – 6.144 Mbps PVC service provides 6.144 Mbps Permanent Virtual Circuit (PVC) connectivity on 4x DS1.	PIPL6144		
82	Bidder's Product Description:  MPLS Layer 2 – 6.144 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 4.068 Mbps Permanent Virtual Circuits (PVC) connectivity on 4x DS1.				
83	MPLS Layer 2 – 7.680 Mbps PVC	MPLS Layer 2 – 7.680 Mbps PVC service provides 7.680 Mbps Permanent Virtual Circuit (PVC) connectivity on 5x DS1.	PIPL7680		
	Bidder's Product Description:  MPLS Layer 2 – 7.680 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 7.680 Mbps Permanent Virtual Circuits (PVC) connectivity on 5x DS1.				
	MPLS Layer 2 - 8 Mbps PVC	MPLS Layer 2 – 8 Mbps PVC service provides 8 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0008		
84	Bidder's Product Description:  MPLS Layer 2 – 8 Mbps PVC. This is a Verizon MPLS based layer 2 service, based on VP standard, to provide a point-to-point solution at 8 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 – 9 Mbps PVC	MPLS Layer 2 – 9 Mbps PVC service provides 9 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0009		
85	Bidder's Product Description:  MPLS Layer 2 – 9 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 9 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MPLS Layer 2 – 9.216 Mbps PVC	MPLS Layer 2 – 9.216 Mbps PVC service provides 9.216 Mbps Permanent Virtual Circuit (PVC) connectivity on 6x DS1.	PIPL9216		
86	Bidder's Product Description:  MPLS Layer 2 – 9.216 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 9.216 Mbps Permanent Virtual Circuits (PVC) connectivity on 6x DS1.				
	MPLS Layer 2 - 10 Mbps PVC	MPLS Layer 2 – 10 Mbps PVC service provides 10 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0010		
87	Bidder's Product Description:  MPLS Layer 2 – 10 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 10 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 – 10.752 Mbps PVC	MPLS Layer 2 – 10.752 Mbps PVC service provides 10.752 Mbps Permanent Virtual Circuit (PVC) connectivity on 7x DS1.	PIPL1075		
88	Bidder's Product Description:  MPLS Layer 2 – 10.752 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 10.752 Mbps Permanent Virtual Circuits (PVC) connectivity on 7x DS1.				
	MPLS Layer 2 - 12 Mbps PVC	MPLS Layer 2 – 12 Mbps PVC service provides 12 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0012		
89	Bidder's Product Description:  MPLS Layer 2 – 12 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VP standard, to provide a point-to-point solution at 12 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 – 12.288 Mbps PVC	MPLS Layer 2 – 12.288 Mbps PVC service provides 12.288 Mbps Permanent Virtual Circuit (PVC) connectivity on 8x DS1.	PIPL1228		
90	Bidder's Product Description:  MPLS Layer 2 – 12.288 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 12.288 Mbps Permanent Virtual Circuits (PVC) connectivity on 8x DS1.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MPLS Layer 2 – 15 Mbps PVC	MPLS Layer 2 – 15 Mbps PVC service provides 15 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0015		
91	Bidder's Product Description:  MPLS Layer 2 – 15 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 15 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 - 18 Mbps PVC	MPLS Layer 2 – 18 Mbps PVC service provides 18 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0018		
92	Bidder's Product Description:  Verizon MPLS Layer 2. This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 18 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 – 20 Mbps PVC	MPLS Layer 2 – 20 Mbps PVC service provides 20 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0020		
93	Bidder's Product Description:  MPLS Layer 2 – 20 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 20 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 - 21 Mbps PVC	MPLS Layer 2 – 21 Mbps PVC service provides 21 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0021		
94	Bidder's Product Description:  MPLS Layer 2 – 21 Mbps PVC This is a Verizon MPLS based layer 2 service, based on standard, to provide a point-to-point solution at 21 Mbps Permanent Virtual Circuits (PV connectivity on sub rate DS3.				
	MPLS Layer 2 - 24 Mbps PVC	MPLS Layer 2 – 24 Mbps PVC service provides 24 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0024		
95	Bidder's Product Description:  MPLS Layer 2 – 24 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 24 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MPLS Layer 2 – 25 Mbps PVC	MPLS Layer 2 – 25 Mbps PVC service provides 25 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0025		
96	Bidder's Product Description:  MPLS Layer 2 – 25 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPW standard, to provide a point-to-point solution at 25 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 - 27 Mbps PVC	MPLS Layer 2 – 27 Mbps PVC service provides 27 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0027		
97	Bidder's Product Description:  MPLS Layer 2 – 27 Mbps PVC This is a Verizon MPLS based layer 2 service, based on standard, to provide a point-to-point solution at 27 Mbps Permanent Virtual Circuits (PV connectivity on sub rate DS3.				
	MPLS Layer 2 - 30 Mbps PVC	MPLS Layer 2 – 30 Mbps PVC service provides 30 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0030		
98	Bidder's Product Description:  MPLS Layer 2 – 30 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 30 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				
	MPLS Layer 2 - 33 Mbps PVC	MPLS Layer 2 – 33 Mbps PVC service provides 33 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0033		
99	ription: s PVC Thisis a Verizon MPLS based layer 2 service, bas bint-to-point solution at 33 Mbps Permanent Virtual Circuit DS3.				
	MPLS Layer 2 – 35 Mbps PVC	MPLS Layer 2 – 35 Mbps PVC service provides 35 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0035		
100	Bidder's Product Description:  MPLS Layer 2 – 35 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 35 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier
	MPLS Layer 2 – 36 Mbps PVC	MPLS Layer 2 – 36 Mbps PVC service provides 36 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0036
101		os PVC This is a Verizon MPLS based layer 2 service, bas point-to-point solution at 36 Mbps Permanent Virtual Circuit	
	MPLS Layer 2 – 40 Mbps PVC	MPLS Layer 2 – 40 Mbps PVC service provides 40 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0040
102	Bidder's Product Description:  MPLS Layer 2 – 40 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 40 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.		
	MPLS Layer 2 – 41 Mbps PVC	MPLS Layer 2 – 41 Mbps PVC service provides 41 Mbps Permanent Virtual Circuit (PVC) connectivity on sub rate DS3.	PIPL0041
103	Bidder's Product Description:  MPLS Layer 2 – 41 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 41 Mbps Permanent Virtual Circuits (PVC) connectivity on sub rate DS3.		
	MPLS Layer 2 – 44.736 Mbps PVC	MPLS Layer 2 – 44.736 Mbps PVC service provides 44.736 Mbps Permanent Virtual Circuit (PVC) connectivity on a DS3.	PIPL4473
104	Bidder's Product Description:  MPLS Layer 2 – 44.736 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 44.736 Mbps Permanent Virtual Circuits (PVC) connectivity on a DS3.		
	MPLS Layer 2 – 155 Mbps / 155.52 PVC	MPLS Layer 2 – 155 Mbps / 155.52 PVC service provides 155 Mbps / 155.52 Mbps Permanent Virtual Circuit (PVC) connectivity on a OC3.	PIPL0155
105	Bidder's Product Description:  MPLS Layer 2 – 155 Mbps / 155.52 PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 155 Mbps / 155.52 Mbps Permanent Virtual Circuits (PVC) connectivity on a OC3.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MPLS Layer 2 – 622.08 Mbps PVC	MPLS Layer 2 – 622.08 Mbps PVC service provides 622.08 Mbps Permanent Virtual Circuit (PVC) connectivity on an OC12.	PIPL0622
106	Bidder's Product Description:  MPLS Layer 2 – 622.08 Mbps PVC This is a Verizon MPLS based layer 2 service, based on VPWS standard, to provide a point-to-point solution at 622.08 Mbps Permanent Virtual Circuits (PVC) connectivity on an OC12.		

## **Ethernet Access**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
107	Ethernet Access (Type 1) – 1 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 10 BaseT Uni Handoff.	EAON0001
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 10 BaseT Uni Handoff.		
	Ethernet Access (Type 1) – 2 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 10 BaseT Uni Handoff.	EAON0002
108		n: Access (Type 1) service, Ethernet service provided at 2 Mbps on a 10 BaseT Uni Handoff.	on Verizon



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
109	Ethernet Access (Type 1) – 3 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 10 BaseT Uni Handoff.	EAON0003	
		n: Access (Type 1) service, Ethernet service provided at 3 Mbps on a 10 BaseT Uni Handoff.	on Verizon	
110	Ethernet Access (Type 1) – 4 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 10 BaseT Uni Handoff.	EAON0004	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 10 BaseT Uni Handoff.			
111	Ethernet Access (Type 1) – 5 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 10 BaseT Uni Handoff.	EAON0005	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 10 BaseT Uni Handoff.			
112	Ethernet Access (Type 1) – 6 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 10 BaseT Uni Handoff.	EAON0006	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 10 BaseT Uni Handoff.			
113	Ethernet Access (Type 1) – 7 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 10 BaseT Uni Handoff.	EAON0007	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 10 BaseT Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
114	Ethernet Access (Type 1) – 8 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 10 BaseT Uni Handoff.	EAON0008	
	Bidder's Product Description Verizon will provide Ethernet A provider designated facilities a	n: Access (Type 1) service, Ethernet service provided at 8 Mbps on a 10 BaseT Uni Handoff.	on Verizon	
115	Ethernet Access (Type 1) – 9 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 10 BaseT Uni Handoff.	EAON0009	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 10 BaseT Uni Handoff.			
116	Ethernet Access (Type 1) – 10 Mbps – 10 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 10 BaseT Uni Handoff.	EAON0010	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 10 BaseT Uni Handoff.			
117	Ethernet Access (Type 1) – 1 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0011	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
118	Ethernet Access (Type 1) – 2 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0012	
		n: Access (Type 1) service, Ethernet service provided at 2 Mbps on a 100 BaseTX or a 100 Base FX Uni H		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
119	Ethernet Access (Type 1) – 3 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0013	
		<b>n:</b> Access (Type 1) service, Ethernet service provided at 3 Mbps on a 100 BaseTX or a 100 Base FX Uni H		
120	Ethernet Access (Type 1) – 4 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0014	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
121	Ethernet Access (Type 1) – 5 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0015	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
122	Ethernet Access (Type 1) – 6 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0016	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
123	Ethernet Access (Type 1) – 7 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0017	
		n: Access (Type 1) service, Ethernet service provided at 7 Mbps on a 100 BaseTX or a 100 Base FX Uni H		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
124	Ethernet Access (Type 1) – 8 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0018	
	Bidder's Product Descriptio Verizon will provide Ethernet A provider designated facilities a	<b>n:</b> Access (Type 1) service, Ethernet service provided at 8 Mbps on a 100 BaseTX or a 100 Base FX Uni F	on Verizon landoff.	
125	Ethernet Access (Type 1) – 9 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0019	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
126	Ethernet Access (Type 1) – 10 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0020	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
127	Ethernet Access (Type 1) – 20 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0021	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
128	Ethernet Access (Type 1) – 30 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0022	
		n: Access (Type 1) service, Ethernet service provided at 30 Mbps on a 100 BaseTX or a 100 Base FX Uni		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

_	,		Bidder's
	Feature Name	Feature Description	Product Identifier
129	Ethernet Access (Type 1) – 40 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0023
		n: Access (Type 1) service, Ethernet service provided at 40 Mbps on a 100 BaseTX or a 100 Base FX Uni	
130	Ethernet Access (Type 1) – 50 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0024
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
131	Ethernet Access (Type 1) – 60 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0025
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
132	Ethernet Access (Type 1) – 70 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0026
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
133	Ethernet Access (Type 1) – 80 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0027
		n: Access (Type 1) service, Ethernet service provided at 80 Mbps on a 100 BaseTX or a 100 Base FX Uni	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier
134	Ethernet Access (Type 1) – 90 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0028
		<b>n:</b> Access (Type 1) service, Ethernet service provided at 90 Mbps on a 100 BaseTX or a 100 Base FX Uni	
135	Ethernet Access (Type 1) – 100 Mbps – 100 Mbps UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0029
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
136	Ethernet Access (Type 1) – 1 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0030
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
137	Ethernet Access (Type 1) – 2 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0031
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
138	Ethernet Access (Type 1) – 3 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0032	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
139	Ethernet Access (Type 1) – 4 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0033	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
140	Ethernet Access (Type 1) – 5 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0034	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
	Ethernet Access (Type 1) – 6 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0035	
141	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
142	Ethernet Access (Type 1) – 7 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0036	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
143	Ethernet Access (Type 1) – 8 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0037	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
144	Ethernet Access (Type 1) – 9 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0038	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
	Ethernet Access (Type 1) – 10 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0039	
145	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			D: 11 1
	Feature Name	Feature Description	Bidder's Product Identifier
146	Ethernet Access (Type 1) – 20 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0040
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
147	Ethernet Access (Type 1) – 30 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0041
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
148	Ethernet Access (Type 1) – 40 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0042
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
	Ethernet Access (Type 1) – 50 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0043
149	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
150	Ethernet Access (Type 1) – 60 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0044	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
151	Ethernet Access (Type 1) – 70 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0045	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
152	Ethernet Access (Type 1) – 80 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0046	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
153	Ethernet Access (Type 1) – 90 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0047	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
154	Ethernet Access (Type 1) – 100 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0048	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
155	Ethernet Access (Type 1) – 150 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 150 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000 BaseSX Uni Handoff.	EAON0049	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 150 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000 BaseSX Uni Handoff.			
156	Ethernet Access (Type 1) – 200 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 200 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0050	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 200 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
157	Ethernet Access (Type 1) – 300 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 300 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0051	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 300 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Distribute	
	Feature Name	Feature Description	Bidder's Product Identifier	
158	Ethernet Access (Type 1) – 400 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 400 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0052	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 400 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
159	Ethernet Access (Type 1) – 500 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 500 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0053	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 500 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
160	Ethernet Access (Type 1) – 600 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 600 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0054	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 600 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
161	Ethernet Access (Type 1) – 700 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 700 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0055	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 700 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

`			D: 11 1	
	Feature Name	Feature Description	Bidder's Product Identifier	
162	Ethernet Access (Type 1) – 800 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 800 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0056	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 800 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
163	Ethernet Access (Type 1) – 900 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 900 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0057	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 900 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
164	Ethernet Access (Type 1) – 1000 Mbps – GigE UNI Speed – ALL CA Central Offices Except ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1000 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0058	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1000 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
	On-Net Ethernet Access (Type 1) – 1 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 10 BaseT Uni Handoff.	EAON0073	
165	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 10 BaseT Uni Handoff.		on Verizon	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

•	,		Bidder's
	Feature Name	Feature Description	Product Identifier
166	On-Net Ethernet Access (Type 1) – 2 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 10 BaseT Uni Handoff.	EAON0074
	Bidder's Product Descriptio Verizon will provide Ethernet A provider designated facilities a	<b>n:</b> Access (Type 1) service, Ethernet service provided at 2 Mbps on a 10 BaseT Uni Handoff.	on Verizon
167	On-Net Ethernet Access (Type 1) – 3 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 10 BaseT Uni Handoff.	EAON0075
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 10 BaseT Uni Handoff.		
168	On-Net Ethernet Access (Type 1) – 4 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 10 BaseT Uni Handoff.	EAON0076
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 10 BaseT Uni Handoff.		
160	On-Net Ethernet Access (Type 1) – 5 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 10 BaseT Uni Handoff.	EAON0077
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 10 BaseT Uni Handoff.		
170	On-Net Ethernet Access (Type 1) – 6 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 10 BaseT Uni Handoff.	EAON0078
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 10 BaseT Uni Handoff.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
171	On-Net Ethernet Access (Type 1) – 7 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 10 BaseT Uni Handoff.	EAON0079	
	Bidder's Product Description Verizon will provide Ethernet A provider designated facilities a	n: Access (Type 1) service, Ethernet service provided at 7 Mbps on a 10 BaseT Uni Handoff.	on Verizon	
172	On-Net Ethernet Access (Type 1) – 8 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 10 BaseT Uni Handoff.	EAON0080	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 10 BaseT Uni Handoff.			
173	On-Net Ethernet Access (Type 1) – 9 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 10 BaseT Uni Handoff.	EAON0081	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 10 BaseT Uni Handoff.			
174	On-Net Ethernet Access (Type 1) – 10 Mbps – 10 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 10 BaseT Uni Handoff.	EAON0082	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 10 BaseT Uni Handoff.		on Verizon	
175	On-Net Ethernet Access (Type 1) – 1 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0083	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
176	On-Net Ethernet Access (Type 1) – 2 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0084	
	Bidder's Product Description Verizon will provide Ethernet A provider designated facilities a	n: Access (Type 1) service, Ethernet service provided o t 2 Mbps on a 100 BaseTX or a 100 Base FX Uni Ha	on Verizon andoff.	
177	On-Net Ethernet Access (Type 1) – 3 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0085	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
178	On-Net Ethernet Access (Type 1) – 4 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0086	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
179	On-Net Ethernet Access (Type 1) – 5 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0087	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
180	On-Net Ethernet Access (Type 1) – 6 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0088	
		n: Access (Type 1) service, Ethernet service provided o t 6 Mbps on a 100 BaseTX or a 100 Base FX Uni Ha		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

·	,			
	Feature Name	Feature Description	Bidder's Product Identifier	
181	On-Net Ethernet Access (Type 1) – 7 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0089	
		n: Access (Type 1) service, Ethernet service provided o t 7 Mbps on a 100 BaseTX or a 100 Base FX Uni Ha		
182	On-Net Ethernet Access (Type 1) – 8 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0090	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
183	On-Net Ethernet Access (Type 1) – 9 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0091	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
184	On-Net Ethernet Access (Type 1) – 10 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0092	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.			
185	On-Net Ethernet Access (Type 1) – 20 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0093	
		n: Access (Type 1) service, Ethernet service provided o t 20 Mbps on a 100 BaseTX or a 100 Base FX Uni H		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product
	Feature Name	Feature Description	Identifier
186	On-Net Ethernet Access (Type 1) – 30 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0094
		<b>n:</b> access (Type 1) service, Ethernet service provided c t 30 Mbps on a 100 BaseTX or a 100 Base FX Uni I	
187	On-Net Ethernet Access (Type 1) – 40 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0095
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
188	On-Net Ethernet Access (Type 1) – 50 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0096
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
189	On-Net Ethernet Access (Type 1) – 60 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0097
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
190	On-Net Ethernet Access (Type 1) – 70 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0098
		n: access (Type 1) service, Ethernet service provided of t 70 Mbps on a 100 BaseTX or a 100 Base FX Uni I	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

·			Distalanta
	Feature Name	Feature Description	Bidder's Product Identifier
191	On-Net Ethernet Access (Type 1) – 80 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0099
		<b>n:</b> access (Type 1) service, Ethernet service provided o t 80 Mbps on a 100 BaseTX or a 100 Base FX Uni H	
192	On-Net Ethernet Access (Type 1) – 90 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0100
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
193	On-Net Ethernet Access (Type 1) – 100 Mbps – 100 Mbps UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.	EAON0101
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 100 BaseTX or a 100 Base FX Uni Handoff.		
	On-Net Ethernet Access (Type 1) – 1 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0102
194		n: access (Type 1) service, Ethernet service provided o t 1 Mbps on a 1000 BaseTX, 1000 Base LX Uni Har	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

(COIII			Distal 1	
	Feature Name	Feature Description	Bidder's Product Identifier	
195	On-Net Ethernet Access (Type 1) – 2 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0103	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 2 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
196	On-Net Ethernet Access (Type 1) – 3 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0104	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 3 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
197	On-Net Ethernet Access (Type 1) – 4 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0105	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 4 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
198	On-Net Ethernet Access (Type 1) – 5 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0106	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 5 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

,			District	
	Feature Name	Feature Description	Bidder's Product Identifier	
199	On-Net Ethernet Access (Type 1) – 6 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0107	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 6 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
200	On-Net Ethernet Access (Type 1) – 7 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0108	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 7 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
201	On-Net Ethernet Access (Type 1) – 8 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0109	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 8 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
202	On-Net Ethernet Access (Type 1) – 9 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0110	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 9 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
203	On-Net Ethernet Access (Type 1) – 10 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0111	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 10 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
204	On-Net Ethernet Access (Type 1) – 20 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0112	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 20 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
205	On-Net Ethernet Access (Type 1) – 30 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0113	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 30 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
206	On-Net Ethernet Access (Type 1) – 40 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0114	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 40 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

•	,		Distribute	
	Feature Name	Feature Description	Bidder's Product Identifier	
207	On-Net Ethernet Access (Type 1) – 50 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0115	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 50 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
208	On-Net Ethernet Access (Type 1) – 60 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0116	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 60 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
209	On-Net Ethernet Access (Type 1) – 70 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0117	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 70 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
	On-Net Ethernet Access (Type 1) – 80 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0118	
210	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 80 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product
	Feature Name	Feature Description	Identifier
211	On-Net Ethernet Access (Type 1) – 90 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 90 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0119
		<b>n:</b> Access (Type 1) service, Ethernet service provided at 90 Mbps on a 1000 BaseTX, 1000 Base LX Uni H	
212	On-Net Ethernet Access (Type 1) – 100 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0120
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 100 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
213	On-Net Ethernet Access (Type 1) – 200 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 200 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0122
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 200 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		
	On-Net Ethernet Access (Type 1) – 300 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 300 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0123
214	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 300 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier	
215	On-Net Ethernet Access (Type 1) – 400 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 400 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0124	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 400 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
216	On-Net Ethernet Access (Type 1) – 500 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 500 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0125	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 500 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
217	On-Net Ethernet Access (Type 1) – 600 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 600 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0126	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 600 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
218	On-Net Ethernet Access (Type 1) – 700 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 700 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0127	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 700 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
219	On-Net Ethernet Access (Type 1) – 800 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 800 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0128	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 800 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
220	On-Net Ethernet Access (Type 1) – 900 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 900 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0129	
	Bidder's Product Description:  Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 900 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
221	On-Net Ethernet Access (Type 1) – 1000 Mbps – GigE UNI Speed – CA Central Offices ELRICAXF / SNMNCAXG / THOKCAXF	Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1000 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.	EAON0130	
	Bidder's Product Description: Verizon will provide Ethernet Access (Type 1) service, Ethernet service provided on Verizon provider designated facilities at 1000 Mbps on a 1000 BaseTX, 1000 Base LX Uni Handoff or a 1000BaseSX Uni Handoff.			
221 a	Off-Net OC3 Access - 155 Mbps UNI Speed	Off-Net OC3 Access - 155 Mbps UNI Speed provides customer a connection to MPLS Port only service.	ACOC0003	
221 b	Off-Net OC12 Access - 622 Mbps UNI Speed	Off-Net OC12 Access - 622 Mbps UNI Speed provides customer a connection to MPLS Port only service.	ACOC0012	
221 c	Off-Net OC48 Access - 2.488 Gbps UNI Speed	Off-Net OC48 Access - 2.488 Gbps UNI Speed provides customer a connection to MPLS Port only service.	ACOC0048	
221 d	Off-Net OC192 Access - 9.953 Gbps UNI Speed	Off-Net OC192 Access - 9.953 Gbps UNI Speed provides customer a connection to MPLS Port only service.	ACOC0192	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
221 e	Off-Net Ethernet Access - 1 Mbps UNI Speed	Off-Net Ethernet Access - 1 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EA0F0001
221 f	Off-Net Ethernet Access - 2 Mbps UNI Speed	Off-Net Ethernet Access - 2 Mbps UNI Speed provides customer a connection to MPLS Port only service	EAOF0002
221 g	Off-Net Ethernet Access - 3 Mbps UNI Speed	Off-Net Ethernet Access - 3 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0003
221 h	Off-Net Ethernet Access - 4 Mbps UNI Speed	Off-Net Ethernet Access - 4 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0004
221i	Off-Net Ethernet Access - 5 Mbps UNI Speed	Off-Net Ethernet Access - 5 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0005
221j	Off-Net Ethernet Access - 6 Mbps UNI Speed	Off-Net Ethernet Access - 6 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0006
221 k	Off-Net Ethernet Access - 7 Mbps UNI Speed	Off-Net Ethernet Access - 7 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0007
2211	Off-Net Ethernet Access - 8 Mbps UNI Speed	Off-Net Ethernet Access - 8 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0008
221 m	Off-Net Ethernet Access - 9 Mbps UNI Speed	Off-Net Ethernet Access - 9 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0009
221 n	Off-Net Ethernet Access - 10 Mbps UNI Speed	Off-Net Ethernet Access - 10 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0010
221 0	Off-Net Ethernet Access - 20 Mbps UNI Speed	Off-Net Ethernet Access - 20 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0020
		Requires Virtual Contact Center (VCC) Agent Package and Supervisor Package.	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's
	Feature Name	Feature Description	Product Identifier
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221 p	Off-Net Ethernet Access - 30 Mbps UNI Speed	Off-Net Ethernet Access - 30 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0030
		Requires Virtual Contact Center (VCC) Agent Package and Supervisor Package.	
221 q	Off-Net Ethernet Access - 40 Mbps UNI Speed	Off-Net Ethernet Access - 40 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0040
		Requires Virtual Contact Center (VCC) Agent Package and Supervisor Package.	
221 r	Off-Net Ethernet Access - 50 Mbps UNI Speed	Off-Net Ethernet Access - 50 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0050
		Requires Virtual Contact Center (VCC) Agent Package and Supervisor Package.	
221 s	Off-Net Ethernet Access - 60 Mbps UNI Speed	Off-Net Ethernet Access - 60 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0060
221 t	Off-Net Ethernet Access - 70 Mbps UNI Speed	Off-Net Ethernet Access - 70 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0070
221 u	Off-Net Ethernet Access - 80 Mbps UNI Speed	Off-Net Ethernet Access - 80 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0080
221 v	Off-Net Ethernet Access - 90 Mbps UNI Speed	Off-Net Ethernet Access - 90 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0090
221 w	Off-Net Ethernet Access - 100 Mbps UNI Speed	Off-Net Ethernet Access - 100 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0100
221 x	Off-Net Ethernet Access - 150 Mbps UNI Speed	Off-Net Ethernet Access - 150 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0150
221 y	Off-Net Ethernet Access - 200 Mbps UNI Speed	Off-Net Ethernet Access - 200 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0200



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
221 z	Off-Net Ethernet Access - 300 Mbps UNI Speed	Off-Net Ethernet Access - 300 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0300
221 aa	Off-Net Ethernet Access - 400 Mbps UNI Speed	Off-Net Ethernet Access - 400 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0400
221 bb	Off-Net Ethernet Access - 500 Mbps UNI Speed	Off-Net Ethernet Access - 500 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0500
221 cc	Off-Net Ethernet Access - 600 Mbps UNI Speed	Off-Net Ethernet Access - 600 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0600
221 dd	Off-Net Ethernet Access - 700 Mbps UNI Speed	Off-Net Ethernet Access - 700 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0700
221 ee	Off-Net Ethernet Access - 800 Mbps UNI Speed	Off-Net Ethernet Access - 800 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0800
221 ff	Off-Net Ethernet Access - 900 Mbps UNI Speed	Off-Net Ethernet Access - 900 Mbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF0900
221 99	Off-Net Ethernet Access - 1 Gbps UNI Speed	Off-Net Ethernet Access - 1 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF1000
221 hh	Off-Net Ethernet Access - 1.5 Gbps UNI Speed	Off-Net Ethernet Access - 1.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF1005
221i i	Off-Net Ethernet Access - 2 Gbps UNI Speed	Off-Net Ethernet Access - 2 Gbps UNI Speed provides customer a connection to MPLS Port only service	EAOF2000
221j j	Off-Net Ethernet Access - 2.5 Gbps UNI Speed	Off-Net Ethernet Access - 2.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF2005
221 kk	Off-Net Ethernet Access - 3 Gbps UNI Speed	Off-Net Ethernet Access - 3 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF3000
221I I	Off-Net Ethernet Access - 3.5 Gbps UNI Speed	Off-Net Ethernet Access - 3.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF3005



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
221 mm	Off-Net Ethernet Access - 4 Gbps UNI Speed	Off-Net Ethernet Access - 4 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF4000
221 nn	Off-Net Ethernet Access - 4.5 Gbps UNI Speed	Off-Net Ethernet Access - 4.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF4005
221 00	Off-Net Ethernet Access - 5 Gbps UNI Speed	Off-Net Ethernet Access - 5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF5000
221 pp	Off-Net Ethernet Access - 5.5 Gbps UNI Speed	Off-Net Ethernet Access - 5.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF5005
221 qq	Off-Net Ethernet Access - 6 Gbps UNI Speed	Off-Net Ethernet Access - 6 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF6000
221 rr	Off-Net Ethernet Access - 6.5 Gbps UNI Speed	Off-Net Ethernet Access - 6.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF6005
221 ss	Off-Net Ethernet Access - 7 Gbps UNI Speed	Off-Net Ethernet Access - 7 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF7000
221 tt	Off-Net Ethernet Access - 7.5 Gbps UNI Speed	Off-Net Ethernet Access - 7.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF7005
221 uu	Off-Net Ethernet Access - 8 Gbps UNI Speed	Off-Net Ethernet Access - 8 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF8000
221 vv	Off-Net Ethernet Access - 8.5 Gbps UNI Speed	Off-Net Ethernet Access - 8.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF8005
221 ww	Off-Net Ethernet Access - 9 Gbps UNI Speed	Off-Net Ethernet Access - 9 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF9000
221 xx	Off-Net Ethernet Access - 9.5 Gbps UNI Speed	Off-Net Ethernet Access - 9.5 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOF9005
221 yy	Off-Net Ethernet Access - 10 Gbps UNI Speed	Off-Net Ethernet Access - 10 Gbps UNI Speed provides customer a connection to MPLS Port only service.	EAOO0010



## **Virtual Private LAN Service (VPLS)**

## Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

Feature Name	Feature Description	Bidder's Product Identifier
VPLS Standard / Transparent Flow – 1 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 1 Mbps.	VPST0001

## **Bidder's Product Description:**

Verizon is proposing Virtual Private LAN Service (VPLS) as an Unsolicited Service Offering in section 1.2. VPLS is a private IP network that supports native Layer 2 protocols. Some State agencies require transport services that support native layer 2 protocol.

**Verizon VPLS general description** applies to the following VPLS line items.

Virtual Private LAN Service (VPLS) is a type of layer 2 VPN, based on Ethernet over a provider MultiProtocol Label Switching (MPLS) backbone. With VPLS, the customer's Ethernet LAN is extended to the service edge of the provider (Verizon) network. The provider network then emulates the function of a LAN switch or bridge to connect all of the customer's LANs to create a single bridged (Ethernet) LAN. VPLS makes all customer sites appear to be on the same LAN, regardless of their geographic locations.

VPLS provides true Layer 2 multipoint services, which constitutes its main difference from other types of VPNs, including Virtual Private Wire Service (VPWS) which provides a point-to-point service. Multipoint service connects two or more customer devices using Ethernet multipoint bridging techniques.

With VPLS, the forwarding is based on MAC addressing. This means that customers do not have to share their routing plans with the provider, which is a concern for some customers. In fact, customer routing can be independent of provider routing.

The customer connects to the VPLS network site by site with one circuit. With this single connection, the site is able to communicate to all sites within the customer VPLS domain. The customer hand-off to the WAN with VPLS is always Ethernet.

## VPLS features include:

- Multi-service Ethernet Access allows customers to receive multiple VPLS Flows and/or EVCs - MPLS, Internet Dedicated - Ethernet, and Ethernet Virtual Private Line (EVPL) through a single User Network Interface (UNI).
- VPLS supports four Classes of Service Real Time Data, Priority Data, Business Data, and Basic Data as defined under 802.1p.
- Real Time CoS is offered as optional Premium QoS feature while the other three CoS are standard with every VPLS service
- Ethernet Access with Service Multiplexed or All-to-one bundled UNIs over a Verizon global provisioning platform.
- MAC address forwarding supporting IP and non-IP based network protocol.
- Broadcast, Unicast, and Multicast traffic supported using Traffic Replication.

Virtual Private LAN Service (VPLS) provides any-to-any Ethernet virtual connections utilizing Ethernet Access (EA) terminating technology at the customer's designated premises. EA technology provides customers the ability to leverage a single EA port to support multiple network services. Virtual Local Area Network (VLAN) tags are employed to distinguish one flow from another.

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Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier			
	Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  VPLS Flow supports IEEE 802.1p by supporting three standard classes of service (CoS) and a Premium QoS Class for an additional charge. With 802.1p, the P-bits in the VLAN Tagged					
	Ethernet frame are used to define the priority of a frame. If Customer delivers untagged frames they are treated as the lowest class of service.  Standard. The Priority Data, Business Data, and Basic Data classes are standard and included as part of the monthly recurring charges ("MRCs") and non-recurring charges ("NRCs") of the VPLS Flow speed selected at each site. Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes.  Premium QoS. Premium QoS is offered as an option for an additional charge. Premium QoS provides an additional class of service: Real Time Data. Premium QoS has MRCs and NRCs based on the Premium QoS speed selected at each site. The Premium QoS charges are in					
	addition to the VPLS Flow characteristics and addition to the VPLS Standard / Trans	arges.  parent Flow is for a 1 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 2 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 2 Mbps.	VPST0002			
223	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 2 Mbps Ethernet flow.					



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 3 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 3 Mbps.	VPST0003		
224	Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for a 3 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 4 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 4 Mbps.	VPST0004		
225	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international warea networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classificated as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for an 4 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 5 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 5 Mbps.	VPST0005		
226	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 5 Mbps Ethernet flow.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

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	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 6 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 6 Mbps.	VPST0006		
227	Pidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 6 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 7 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 7 Mbps.	VPST0007		
228	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 7 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 8 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 8 Mbps.	VPST0008		
229	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for an 8 Mbps Ethernet flow.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Standard / Transparent Flow – 9 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 9 Mbps.	VPST0009
230	pility of rnational wide g customers to S is classified service by supporting		
	The Priority Data, Business D This VPLS Standard / Transp  VPLS Standard / Transparent Flow – 10	arent Flow is for a 9 Mbps Ethernet flow.  Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 10 Mbps.	VPST0010
	Mbps	Transparent Ethernet Flow at 10 Mbps.	
231	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.		
		arent Flow is for a 10 Mbps Ethernet flow.	
	VPLS Standard / Transparent Flow – 15 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 15 Mbps.	VPST0015
232	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 15 Mbps Ethernet flow.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Standard / Transparent Flow – 20 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 20 Mbps.	VPST0020	
233	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting			
	three standard classes of services. The Priority Data, Business D	vice (CoS):	, ., .	
	VPLS Standard / Transparent Flow – 25 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 25 Mbps.	VPST0025	
234	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):			
		ata, and Basic Data classes. arent Flow is for a 25 Mbps Ethernet flow.		
	VPLS Standard / Transparent Flow – 30 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 30 Mbps.	VPST0030	
235	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 30 Mbps Ethernet flow.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Standard / Transparent Flow – 35 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 35 Mbps.	VPST0035	
236	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting			
	three standard classes of sen The Priority Data, Business D This VPLS Standard / Transp			
	VPLS Standard / Transparent Flow – 40 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 40 Mbps.	VPST0040	
237	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting			
	three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for a 40 Mbps Ethernet flow.			
	VPLS Standard / Transparent Flow – 45 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 45 Mbps.	VPST0045	
238	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 45 Mbps Ethernet flow.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 50 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 50 Mbps.	VPST0050		
239	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 50 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 60 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 60 Mbps.	VPST0060		
240	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 60 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 70 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 70 Mbps.	VPST0070		
241	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for a 70 Mbps Ethernet flow.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 80 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 80 Mbps.	VPST0080		
242	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wid area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for an 80 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 90 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 90 Mbps.	VPST0090		
243	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 90 Mbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 100 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 100 Mbps.	VPST0100		
244	Pidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wi area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classific as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 100 Mbps Ethernet flow.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Standard / Transparent Flow – 150 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 150 Mbps.	VPST0150	
245	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 150 Mbps Ethernet flow.			
	VPLS Standard / Transparent Flow – 200 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 200 Mbps.	VPST0200	
246	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide			
	VPLS Standard / Transparent Flow – 300 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 300 Mbps.	VPST0300	
247	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 300 Mbps Ethernet flow.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Standard / Transparent Flow – 400 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 400 Mbps.	VPST0400
248	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 400 Mbps Ethernet flow.		
	VPLS Standard / Transparent Flow – 500 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 500 Mbps.	VPST0500
249	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 500 Mbps Ethernet flow.		
	VPLS Standard / Transparent Flow – 600 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 600 Mbps.	VPST0600
250	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 600 Mbps Ethernet flow.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
251	VPLS Standard / Transparent Flow – 700 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 700 Mbps.	VPST0700
	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting		
	three standard classes of services The Priority Data, Business D This VPLS Standard / Transp		
	VPLS Standard / Transparent Flow – 800 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 800 Mbps.	VPST0800
252	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting		
	three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for an 800 Mbps Ethernet flow.		
	VPLS Standard / Transparent Flow – 900 Mbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 900 Mbps.	VPST0900
253	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 900 Mbps Ethernet flow.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
	VPLS Standard / Transparent Flow – 1 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 1 Gbps.	VPST1000	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an internative area networking (WAN) solution. VPLS is IP protocol independent; thus allowing currun their own IP control protocol and their own IP address routing scheme. VPLS is as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) se definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by suthree standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 1 Gbps Ethernet flow.				
	VPLS Standard / Transparent Flow – 1.5 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 1.5 Gbps via an ICB.	VPCB0001	
255	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 1.5 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.			
	VPLS Standard / Transparent Flow – 2 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 2 Gbps via an ICB.	VPCB0002	
256	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 2 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

(conti			Bidder's
	Feature Name	Feature Description	Product Identifier
257	VPLS Standard / Transparent Flow – 2.5 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 2.5 Gbps via an ICB.	VPIC0002
	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting		
	three standard classes of service (CoS): The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for a 2.5 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.		
	VPLS Standard / Transparent Flow – 3 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 3 Gbps via an ICB.	VPCB0003
258	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 3 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

(contil	(continued)				
	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 4 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 4 Gbps via an ICB.	VPCB0004		
259	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 4 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.				
	VPLS Standard / Transparent Flow – 5 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 5 Gbps via an ICB.	VPCB0005		
260	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 5 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.				
	VPLS Standard / Transparent Flow – 6 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 6 Gbps via an ICB.	VPCB0006		
261	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	The Priority Data, Business Data, and Basic Data classes. This VPLS Standard / Transparent Flow is for a 6 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.			
	VPLS Standard / Transparent Flow – 7 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 7 Gbps via an ICB.	VPCB0007	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibilit MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an internal area networking (WAN) solution. VPLS is IP protocol independent; thus allowing control run their own IP control protocol and their own IP address routing scheme. VPLS is as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) set definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by sthree standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 7 Gbps Ethernet flow provided via Individual Case Basis (ICB) request.				
	VPLS Standard / Transparent Flow – 8 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 8 Gbps via an ICB.	VPCB0008	
263	MultiProtocol Label Switching area networking (WAN) solution run their own IP control protocol as an Ethernet LAN (E-LAN) definition.  Standard VLAN Tagged/Tranthree standard classes of senter the Priority Data, Business D	VPLS) is a Layer 2 VPN, which combines the flexible (MPLS) and the simplicity of Ethernet into an integrant on. VPLS is IP protocol independent; thus allowing col and their own IP address routing scheme. VPL service based on the Metro Ethernet Forum (MEF) sparent support IEEE 802.1p and a QoS feature by vice (CoS): Pata, and Basic Data classes.	rnational wide g customers to S is classified ) service	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	(conunided)				
	Feature Name	Feature Description	Bidder's Product Identifier		
	VPLS Standard / Transparent Flow – 9 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 9 Gbps via an ICB.	VPCB0009		
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibili MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an intern area networking (WAN) solution. VPLS is IP protocol independent; thus allowing a run their own IP control protocol and their own IP address routing scheme. VPLS as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 9 Gbps Ethernet flow provided via Individual Case Basis (ICB) request.					
	VPLS Standard / Transparent Flow – 10 Gbps	Virtual Private LAN Service (VPLS) Standard / Transparent Ethernet Flow at 10 Gbps via an ICB.	VPCB0010		
265	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Standard VLAN Tagged/Transparent support IEEE 802.1p and a QoS feature by supporting three standard classes of service (CoS):  The Priority Data, Business Data, and Basic Data classes.  This VPLS Standard / Transparent Flow is for a 10 Gbps Ethernet flow provided via an Individual Case Basis (ICB) request.				
	VPLS Premium Quality of Service (QoS) – 64 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 64 Kbps	VPQK0064		
266	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 64 Kbps.				
	VPLS Premium Quality of Service (QoS) – 128 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 128 Kbps	VPQK0128		
267	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 128 Kbps.				
	VPLS Premium Quality of Service (QoS) – 256 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 256 Kbps	VPQK0256		
268	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 256 Kbps.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Premium Quality of Service (QoS) – 384 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 384 Kbps	VPQK0384	
269	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS			
	charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less to or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 384 Kbps			
	VPLS Premium Quality of Service (QoS) – 512 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 512 Kbps	VPQK0512	
270	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 512 Kbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product
	Feature Name	Feature Description	Identifier
	VPLS Premium Quality of Service (QoS) – 640 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 640 Kbps	VPQK0640
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international warea networking (WAN) solution. VPLS is IP protocol independent; thus allowing custome run their own IP control protocol and their own IP address routing scheme. VPLS is classif as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary account to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 640 Kbp			
	VPLS Premium Quality of Service (QoS) – 768 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 768 Kbps	VPQK768
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international area networking (WAN) solution. VPLS is IP protocol independent; thus allowing custom run their own IP control protocol and their own IP address routing scheme. VPLS is clas as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary ace to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 768 Kb.			
	VPLS Premium Quality of Service (QoS) – 864 Kbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data	VPQK0864
		- 864 Kbps	
273	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 864 Kbps.			
	VPLS Premium Quality of Service (QoS) – 1 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 1 Mbps	VPQS0001	
274	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.			
	VPLS Premium Quality of Service (QoS) – 2 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 2 Mbps	VPQS0002	
275	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary accord to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less the or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 2 Mbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product	
	Feature Name  VPLS Premium Quality of Service (QoS) – 3 Mbps	Feature Description  Optional Virtual Private LAN Service (VPLS)  Premium Quality of Service – Real Time Data  – 3 Mbps	Identifier VPQS0003	
276	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified.			
	VPLS Premium Quality of Service (QoS) – 4 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 4 Mbps	VPQS0004	
277	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.			
	VPLS Premium Quality of	Optional Virtual Private LAN Service (VPLS)	VPQS0005	
	Service (QoS) – 5 Mbps	Premium Quality of Service – Real Time Data – 5 Mbps		
278	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

Feature Name	Feature Description	Bidder's Product Identifier	
Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 5 Mbps.			
VPLS Premium Quality of Service (QoS) – 6 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 6 Mbps	VPQS0006	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.			
VPLS Premium Quality of Service (QoS) – 7 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 7 Mbps	VPQS0007	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 7 Mbps.			
	Premium QoS is an option proclasses of service which come to speed and are charged for transport through the MPLS-b charges are in addition to the or equal to the VPLS Flow bath This VPLS Premium Quality of Service (QoS) – 6 Mbps  Bidder's Product Description Virtual Private LAN Service (MultiProtocol Label Switching area networking (WAN) solution their own IP control protocas an Ethernet LAN (E-LAN) definition.  Premium QoS is an option proclasses of service which come to speed and are charged for transport through the MPLS-b charges are in addition to the or equal to the VPLS Flow bath This VPLS Premium Quality of Service (QoS) – 7 Mbps  Bidder's Product Description Virtual Private LAN Service (MultiProtocol Label Switching area networking (WAN) solution their own IP control protocas an Ethernet LAN (E-LAN) solution.  Premium QoS is an option proclasses of service which come to speed and are charged for transport through the MPLS-b charges are in addition to the or equal to the VPLS Flow bath or equal to t	Premium QoS is an option providing an additional class of service, Real Time D classes of service which come with the standard/transparent VPLS Flow. MRCs to speed and are charged for each Premium QoS installed on a VPLS Flow. An transport through the MPLS-based core is included in the monthly charge. Pren charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of Service (QoS) – 6 Mbps    Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data — 6 Mbps    Bidder's Product Description:	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product	
	Feature Name  VPLS Premium Quality of Service (QoS) – 8 Mbps	Feature Description  Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 8 Mbps	Identifier VPQS0008	
281	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified.			
	VPLS Premium Quality of Service (QoS) – 9 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 9 Mbps	VPQS0009	
282	definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary accordito speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.			
	VPLS Premium Quality of Service (QoS) – 10 Mbps	Of Service (QoS) is for a Real Time Data at a rate of Optional Virtual Private LAN Service (VPLS)  Premium Quality of Service – Real Time Data  – 10 Mbps	VPQS0010	
283	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
	Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 10 Mbps.			
	VPLS Premium Quality of Service (QoS) – 15 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 15 Mbps	VPQS0015	
284	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 15 Mbps			
	VPLS Premium Quality of Service (QoS) – 20 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 20 Mbps	VPQS0020	
285	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an internati area networking (WAN) solution. VPLS is IP protocol independent; thus allowing cus run their own IP control protocol and their own IP address routing scheme. VPLS is as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) ser definition.  Premium QoS is an option providing an additional class of service, Real Time Data, classes of service which come with the standard/transparent VPLS Flow. MRCs var to speed and are charged for each Premium QoS installed on a VPLS Flow. Any rectanges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 20		rnational wide g customers to S is classified ) service  Data, to the s vary according y required nium QoS ust be less than	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Premium Quality of Service (QoS) – 25 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 25 Mbps	VPQS0025
286	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 25 Mbps.		
	VPLS Premium Quality of Service (QoS) – 30 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 30 Mbps	VPQS0030
287	MultiProtocol Label Switching area networking (WAN) soluti run their own IP control protocas an Ethernet LAN (E-LAN) definition.  Premium QoS is an option proclasses of service which combot to speed and are charged for transport through the MPLS-backarges are in addition to the or equal to the VPLS Flow ba	VPLS) is a Layer 2 VPN, which combines the flexible (MPLS) and the simplicity of Ethernet into an integen. VPLS is IP protocol independent; thus allowing col and their own IP address routing scheme. VPL service based on the Metro Ethernet Forum (MEF) coviding an additional class of service, Real Time Dewith the standard/transparent VPLS Flow. MRCs each Premium QoS installed on a VPLS Flow. An passed core is included in the monthly charge. PremivPLS Flow charges. Premium QoS bandwidth models.	rnational wide g customers to S is classified ) service  Pata, to the s vary according y required nium QoS ust be less than



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

(00//4//	nuea)		Distalanda
	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Premium Quality of Service (QoS) – 35 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 35 Mbps	VPQS0035
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international area networking (WAN) solution. VPLS is IP protocol independent; thus allowing custom run their own IP control protocol and their own IP address routing scheme. VPLS is class as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary act to speed and are charged for each Premium QoS installed on a VPLS Flow. Any require transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 35 Mbl.			
	VPLS Premium Quality of Service (QoS) – 40 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 40 Mbps	VPQS0040
289	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to the classes.		rnational wide g customers to S is classified ) service  Data, to the s vary according y required nium QoS ust be less than



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product	
	Feature Name	Feature Description	Identifier	
	VPLS Premium Quality of Service (QoS) – 45 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 45 Mbps	VPQS0045	
290	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 45 Mbps.			
	VPLS Premium Quality of Service (QoS) – 50 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 50 Mbps	VPQS0050	
291	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required			
	transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 50 Mbps.			
	VPLS Premium Quality of Service (QoS) – 60 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 60 Mbps	VPQS0060	
292	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 60 Mbps.			
	VPLS Premium Quality of Service (QoS) – 70 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 70 Mbps	VPQS0070	
293	Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary accord to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less the or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 70 Mbps.			
	VPLS Premium Quality of Service (QoS) – 80 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 80 Mbps	VPQS0080	
294	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international area networking (WAN) solution. VPLS is IP protocol independent; thus allowing custous run their own IP control protocol and their own IP address routing scheme. VPLS is of as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, classes of service which come with the standard/transparent VPLS Flow. MRCs vary to speed and are charged for each Premium QoS installed on a VPLS Flow. Any requirement through the MPLS-based core is included in the monthly charge. Premium charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 80.		ernational wide g customers to S is classified ) service  Data, to the s vary according by required inium QoS ust be less than	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

,	,		Bidder's
	Feature Name	Feature Description	Product Identifier
	VPLS Premium Quality of Service (QoS) – 90 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 90 Mbps	VPQS0090
295	pility of rnational wide g customers to S is classified ) service Data, to the s vary according y required nium QoS ust be less than of 90 Mbps		
	VPLS Premium Quality of Service (QoS) – 100 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 100 Mbps	VPQS0100
296	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 100 Mbps		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

`	,		Diddo"
	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Premium Quality of Service (QoS) – 150 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 150 Mbps	VPQS0150
297	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the		
	classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 150 Mbps		
	VPLS Premium Quality of Service (QoS) – 200 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 200 Mbps	VPQS0200
298	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international varea networking (WAN) solution. VPLS is IP protocol independent; thus allowing custome run their own IP control protocol and their own IP address routing scheme. VPLS is classias as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to the complex control of the complex control of the classes.		rnational wide g customers to S is classified ) service  Data, to the s vary according y required nium QoS ust be less than



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	VPLS Premium Quality of Service (QoS) – 300 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 300 Mbps	VPQS0300
299	Pidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 300 Mbps		
	VPLS Premium Quality of Service (QoS) – 400 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 400 Mbps	VPQS0400
300	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.		
	VPLS Premium Quality of Service (QoS) – 500 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 500 Mbps	VPQS0500
Virtual Private LAN Service (VPLS) is a Layer 2 VPN, whe MultiProtocol Label Switching (MPLS) and the simplicity area networking (WAN) solution. VPLS is IP protocol inder run their own IP control protocol and their own IP address as an Ethernet LAN (E-LAN) service based on the Metrodefinition.  Premium QoS is an option providing an additional class of classes of service which come with the standard/transpate to speed and are charged for each Premium QoS installed transport through the MPLS-based core is included in the charges are in addition to the VPLS Flow charges. Premior equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Private Private Premium Quality of Service (QoS) is for a Real Private Priv		VPLS) is a Layer 2 VPN, which combines the flexible (MPLS) and the simplicity of Ethernet into an interion. VPLS is IP protocol independent; thus allowing col and their own IP address routing scheme. VPL service based on the Metro Ethernet Forum (MEF) oviding an additional class of service, Real Time De with the standard/transparent VPLS Flow. MRCs each Premium QoS installed on a VPLS Flow. An passed core is included in the monthly charge. PremivPLS Flow charges. Premium QoS bandwidth mundwidth.	rnational wide g customers to S is classified ) service  Data, to the s vary according y required nium QoS ust be less than



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	Feature Name	Feature Description	Product Identifier	
	VPLS Premium Quality of Service (QoS) – 600 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 600 Mbps	VPQS0600	
302	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 600 Mbps			
	VPLS Premium Quality of Service (QoS) – 700 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 700 Mbps	VPQS0700	
303	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than			
	or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 700 Mbps			
	VPLS Premium Quality of Service (QoS) – 800 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 800 Mbps	VPQS0800	
304	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 800 Mbps			
	VPLS Premium Quality of Service (QoS) – 900 Mbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 900 Mbps	VPQS0900	
305	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.			
	VPLS Premium Quality of Service (QoS) – 1 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 1 Gbps	VPQL0001	
306	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 1 Gbps		rnational wide g customers to S is classified ) service  Data, to the s vary according y required nium QoS ust be less than	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	N		Bidder's Product	
	VPLS Premium Quality of Service (QoS) – 2 Gbps	Feature Description  Optional Virtual Private LAN Service (VPLS)  Premium Quality of Service – Real Time Data – 2 Gbps	Identifier VPQL0002	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international area networking (WAN) solution. VPLS is IP protocol independent; thus allowing custom run their own IP control protocol and their own IP address routing scheme. VPLS is class as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary act to speed and are charged for each Premium QoS installed on a VPLS Flow. Any require transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 2 Gbps				
	VPLS Premium Quality of Service (QoS) – 3 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 3 Gbps	VPQL0003	
308	Port.  (PLS) is a Layer 2 VPN, which combines the flexity (MPLS) and the simplicity of Ethernet into an integen. VPLS is IP protocol independent; thus allowing col and their own IP address routing scheme. VPL service based on the Metro Ethernet Forum (MEF oviding an additional class of service, Real Time Dewith the standard/transparent VPLS Flow. MRCs each Premium QoS installed on a VPLS Flow. An eased core is included in the monthly charge. PremivPLS Flow charges. Premium QoS bandwidth mondwidth.  Of Service (QoS) is for a Real Time Data at a rate of the control of the	ernational wide g customers to S is classified ) service  Data, to the s vary according by required inium QoS ust be less than		
	VPLS Premium Quality of Service (QoS) – 4 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 4 Gbps	VPQL0004	
309	Bidder's Product Description: Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	definition. Premium QoS is an option pr classes of service which com to speed and are charged for transport through the MPLS-k charges are in addition to the or equal to the VPLS Flow ba	as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 4 Gbps			
	VPLS Premium Quality of Service (QoS) – 5 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 5 Gbps	VPQL0005		
310	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary accord to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 5 Gbps				
	VPLS Premium Quality of Service (QoS) – 6 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 6 Gbps	VPQL0006		
311	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 6 Gbps				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product	
	Feature Name	Feature Description	Identifier	
	VPLS Premium Quality of Service (QoS) – 7 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 7 Gbps	VPQL0007	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibili MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an intern area networking (WAN) solution. VPLS is IP protocol independent; thus allowing or run their own IP control protocol and their own IP address routing scheme. VPLS as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) standing.  Premium QoS is an option providing an additional class of service, Real Time Data classes of service which come with the standard/transparent VPLS Flow. MRCs was to speed and are charged for each Premium QoS installed on a VPLS Flow. Any transport through the MPLS-based core is included in the monthly charge. Premium charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of				
	VPLS Premium Quality of Service (QoS) – 8 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 8 Gbps	VPQL0008	
313	Bidder's Product Description:  Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 8 Gbps			
	VPLS Premium Quality of Service (QoS) – 9 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 9 Gbps	VPQL0009	
314	Bidder's Product Description: Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

		Feature Name	Feature Description	Bidder's Product Identifier	
		as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less than or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 9 Gbps			
		VPLS Premium Quality of Service (QoS) – 10 Gbps	Optional Virtual Private LAN Service (VPLS) Premium Quality of Service – Real Time Data – 10 Gbps	VPQL0010	
	315	Virtual Private LAN Service (VPLS) is a Layer 2 VPN, which combines the flexibility of MultiProtocol Label Switching (MPLS) and the simplicity of Ethernet into an international wide area networking (WAN) solution. VPLS is IP protocol independent; thus allowing customers to run their own IP control protocol and their own IP address routing scheme. VPLS is classified as an Ethernet LAN (E-LAN) service based on the Metro Ethernet Forum (MEF) service definition.  Premium QoS is an option providing an additional class of service, Real Time Data, to the classes of service which come with the standard/transparent VPLS Flow. MRCs vary according to speed and are charged for each Premium QoS installed on a VPLS Flow. Any required transport through the MPLS-based core is included in the monthly charge. Premium QoS charges are in addition to the VPLS Flow charges. Premium QoS bandwidth must be less that or equal to the VPLS Flow bandwidth.  This VPLS Premium Quality of Service (QoS) is for a Real Time Data at a rate of 10 Gbps.			
		VPLS MAC Address Block	Virtual Private LAN Service (VPLS) customer domainMedia Access Control (MAC) address block charges	VPMC0000	
Bidder's Product Description:  Virtual Private LAN Service (VPLS) Standard MAC Address Block provides fifty 5 addresses (i.e., a MAC address block) for each set of 25 sites per Customer Dor Additional MAC Address Blocks may be ordered by CALNET III customers. Add of MAC addresses are used within a particular Customer Domain to supplement provided MAC Address Block.  MAC Address Blocks.  Standard MAC Address Block. Company provides fifty (50) Media Access Contro (MAC) (i.e., a MAC Address Block) for each set of 25 sites, per Customer Domain Additional MAC Address Blocks. Customer may order additional block(s) of MAC for use within a particular Customer Domain to supplement the Company provide Address Block. The MRC and NRC charges for each additional block are set fort Charges, below.		omain. Iditional block(s) In the company- rol addresses ain. I.C. Addresses Ided MAC			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
			Product	
	Feature Name	Feature Description	Identifier	
	VPLS Traffic Replication – 1 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 1 Mbps	VPTR0001	
317	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 1 Mbps.			
	VPLS Traffic Replication – 2 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 2 Mbps	VPTR0002	
318	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 2 Mbps.			
	VPLS Traffic Replication – 3 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 3 Mbps	VPTR0003	
319	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 3 Mbps.			
	VPLS Traffic Replication – 4 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 4 Mbps	VPTR0004	
320	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 4 Mbps.			
	VPLS Traffic Replication – 5 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 5 Mbps	VPTR0005	
321	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 5 Mbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	-		Diddow's	
			Bidder's Product	
	Feature Name	Feature Description	Identifier	
	VPLS Traffic Replication – 6 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 6 Mbps	VPTR0006	
322	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 6 Mbps.			
	VPLS Traffic Replication – 7 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 7 Mbps	VPTR0007	
323	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 7 Mbps.			
	VPLS Traffic Replication – 8 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 8 Mbps	VPTR0008	
324	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 8 Mbps.			
	VPLS Traffic Replication – 9 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 9 Mbps	VPTR0009	
325	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 9 Mbps.			
	VPLS Traffic Replication – 10 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 10 Mbps	VPTR0010	
326	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 10 Mbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,		Distalanta	
	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Traffic Replication – 15 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 15 Mbps	VPTR0015	
327	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 15 Mbps.			
	VPLS Traffic Replication – 20 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 20 Mbps	VPTR0020	
328	on: /PLS) Traffic Replication provides CALNET III cus unknown and multicast traffic up to 100% of a VPL ability and is only available at 20 Mbps.			
	VPLS Traffic Replication – 25 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 25 Mbps	VPTR0025	
329	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 25 Mbps.			
	VPLS Traffic Replication – 30 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 30 Mbps	VPTR0030	
330	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 30 Mbps.			
	VPLS Traffic Replication – 35 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 35 Mbps	VPTR0035	
331	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 35 Mbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's	
	N	<b>5</b>	Product	
	Feature Name	Feature Description	Identifier	
	VPLS Traffic Replication – 40 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 40 Mbps	VPTR0040	
332	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 40 Mbps.			
	VPLS Traffic Replication – 45 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 45 Mbps.	VPTR0045	
333	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 45 Mbps.			
	VPLS Traffic Replication – 50 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 50 Mbps	VPTR0050	
334	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 50 Mbps.			
	VPLS Traffic Replication – 60 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 60 Mbps	VPTR0060	
335	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 60 Mbps.			
	VPLS Traffic Replication – 65 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 65 Mbps	VPTR0065	
336	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET 3 customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's
	Facture Name	Footowa Dagawintian	Product
	Feature Name	Feature Description	Identifier
	VPLS Traffic Replication – 70 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 70 Mbps	VPTR0070
337	ability to transmit broadcast, uspeed.	on: /PLS) Traffic Replication provides CALNET III cus unknown and multicast traffic up to 100% of a VPL ability and is only available at 70 Mbps.	
	VPLS Traffic Replication – 80 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 80 Mbps	VPTR0080
338	on: /PLS) Traffic Replication provides CALNET III cus unknown and multicast traffic up to 100% of a VPL ability and is only available at 80 Mbps.		
	VPLS Traffic Replication – 90 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 90 Mbps	VPTR0090
339	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 90 Mbps.		
	VPLS Traffic Replication – 100 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 100 Mbps	VPTR0100
340	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 100 Mbps.		
	VPLS Traffic Replication – 150 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 150 Mbps	VPTR0150
341	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 150 Mbps.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's
	Feature Name	Feature Description	Product Identifier
	VPLS Traffic Replication – 200 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 200 Mbps	VPTR0200
342	ability to transmit broadcast, uspeed.	on: /PLS) Traffic Replication provides CALNET III cus unknown and multicast traffic up to 100% of a VPL ability and is only available at 200 Mbps.	stomers the LS standard flow
	VPLS Traffic Replication – 300 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 300 Mbps	VPTR0300
343	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 300 Mbps.		
	VPLS Traffic Replication – 400 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 400 Mbps	VPTR0400
344	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 400 Mbps.		
	VPLS Traffic Replication – 500 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 500 Mbps	VPTR0500
345	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 500 Mbps.		
	VPLS Traffic Replication – 600 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 600 Mbps	VPTR0600
346	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 600 Mbps.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Diddor's	
	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Traffic Replication – 700 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 700 Mbps	VPTR0700	
347	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 700 Mbps.			
	VPLS Traffic Replication – 800 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 800 Mbps	VPTR0800	
348	on:  VPLS) Traffic Replication provides CALNET III cus unknown and multicast traffic up to 100% of a VPL ability and is only available at 800 Mbps.			
	VPLS Traffic Replication – 900 Mbps	Virtual Private LAN Service (VPLS) Traffic Replication at 900 Mbps	VPTR0900	
349	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 900 Mbps.			
	VPLS Traffic Replication – 1 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 1 Gbps	VPTR1000	
350	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 1 Gbps.			
	VPLS Traffic Replication – 1.5 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 1.5 Gbps	VPTG0001	
351	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 1.5 Gbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,		5:11	
	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Traffic Replication – 2 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 2 Gbps	VPTG0002	
352	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 2 Gbps.			
	VPLS Traffic Replication – 2.5 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 2.5 Gbps	VPTI0002	
353	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 2.5 Gbps.			
	VPLS Traffic Replication – 3 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 3 Gbps	VPTG0003	
254	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 3 Gbps.			
	VPLS Traffic Replication – 4 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 4 Gbps	VPTG0004	
355	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 4 Gbps.			
	VPLS Traffic Replication – 5 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 5 Gbps	VPTG0005	
356	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 5 Gbps.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	VPLS Traffic Replication – 6 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 6 Gbps	VPTG0006	
357	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 6 Gbps.			
	VPLS Traffic Replication – 7 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 7 Gbps	VPTG0007	
358	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 7 Gbps.			
	VPLS Traffic Replication – 8 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 8 Gbps	VPTG0008	
359	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 8 Gbps.			
	VPLS Traffic Replication – 9 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 9 Gbps	VPTG0009	
360	Bidder's Product Description: Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed. This service has limited availability and is only available at 9 Gbps.			
	VPLS Traffic Replication – 10 Gbps	Virtual Private LAN Service (VPLS) Traffic Replication at 10 Gbps	VBPT0010	
361	Bidder's Product Description:  Virtual Private LAN Service (VPLS) Traffic Replication provides CALNET III customers the ability to transmit broadcast, unknown and multicast traffic up to 100% of a VPLS standard flow speed.  This service has limited availability and is only available at 10 Gbps.			



### **Managed MPLS Wireless**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Managed MPLS Wireless 5GB Usage Shared Extra Small Bridge	Managed Wireless MPLS 5GB Shared Usage Shared Extra Small Service includes a wireless access bridge device, monitoring, and a shared 5GB wireless data plan.	MWRX0000	
Bidder's Product Description:  Verizon is proposing MPLS Managed Wireless Service as an Unsolicited Service Offering section 1.2. Managed Wireless Service provides a backup solution to MPLS Services frequently requested by many agencies to satisify redundancy and resilience requirement Managed MPLS Wireless provides the interface requested as a capability of the MPLS requirements.  Managed Wireless MPLS 5GB Shared Usage Shared Extra Small Service requires a MPI connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GE month per connection. Overage charges above 5GB will apply for exceeding 5GB per situ unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, instant monitor a wireless access bridge device to connect to an existing managed (Extra Sna)				
	router.  Managed MPLS Wireless 5GB Usage Shared Small Bridge	Managed MPLS Wireless 5GB Shared Usage Shared Small Service includes a wireless access bridge device, monitoring, and a shared 5GB wireless data plan.	MWRS0000	
363	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Small Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access bridge device to connect to an existing managed (Small) router.			
364	Managed MPLS Wireless 5GB Usage Shared Medium Bridge	Managed MPLS Wireless 5GB Shared Usage Shared Medium Service includes a wireless access bridge device, monitoring, and a shared 5GB wireless data plan.	MWRM0000	
	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Medium Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access bridge device to connect to an existing managed (Medium) router.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Managed MPLS Wireless 5GB Usage Shared Large Bridge	Managed MPLS Wireless 5GB Shared Usage Shared Large Service includes a wireless access bridge device, monitoring, and a shared 5GB wireless data plan.	MWRL0000	
365	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Large Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access bridge device to connect to an existing managed (Large) router.			
	Managed MPLS Wireless 5GB Usage Shared Extra Small Card	Managed MPLS Wireless 5GB Shared Usage Shared Extra Small Service includes a wireless access card, monitoring, and a shared 5GB wireless data plan.	MWAX0000	
366	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Extra Small Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access card for an existing managed (Extra Small) router.			
367	Managed MPLS Wireless 5GB Usage Shared Small Card	Managed MPLS Wireless 5GB Shared Usage Shared Small Service includes a wireless access card, monitoring, and a shared 5GB wireless data plan.	MWSS0000	
	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Small Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access card for an existing managed (Small) router.			
368	Managed MPLS Wireless 5GB Usage Shared Medium Card	Managed MPLS Wireless 5GB Shared Usage Shared Medium Service includes a wireless access card, monitoring, and a shared 5GB wireless data plan.	PWAM0000	
	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Medium Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
		aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access card for an existing managed (Medium) router.			
	Managed MPLS Wireless 5GB Usage Shared Large Card	Managed MPLS Wireless 5GB Shared Usage Shared Large Service includes a wireless access card, monitoring, and a shared 5GB wireless data plan.	PWAL0000		
369	Bidder's Product Description:  Managed MPLS Wireless 5GB Shared Usage Shared Large Service requires a MPLS connection bundle with fully managed router. The 5GB wireless usage plan includes 5 GB per month per connection. Overage charges above 5GB will apply for exceeding 5GB per site unless there are multiple sites in 1GB increments. Customers with multiple sites will share aggregate usage across all locations before overage would apply. Verizon will provide, install and monitor a wireless access card for an existing managed (Large) router.				
	Managed MPLS Wireless Overage	Managed MPLS Wireless Overage	MWOV0000		
370	Bidder's Product Description: Usage is measured in GB Usage over the subscribed allotment. This is measured and charged on a per GB basis.				
	Managed MPLS Wireless - PWG Port Setup	Managed MPLS Wireless – PWG Port Setup is for the Network to Network Interface (NNI) between the Verizon Wireless network and the Verizon MPLS.	PWAP0000		
371	Bidder's Product Description:  Managed MPLS Wireless – PWG Port Setup is for the Network to Network Interface (NNI) between the Verizon Wireless network and the Verizon MPLS. It provides:  PWG Port Setup Extension to MPLS Wireless Access Traffic flows over the MPLS Wireless Gateway (PWG). This is the Network to Network Interface (NNI) between the Verizon Wireless network and the Verizon MPLS network and is ordered separately. Sized per Port.				
	Managed MPLS Wireless  – Static IP Address Set Up&Assignment	Managed MPLS Wireless – Static IP Address Set Up&Assignment is the set up and assignment of Static IP Addressing on the Verizon MPLS Network.	PWAI0000		
372	Bidder's Product Description:  Managed MPLS Wireless – Static IP Address Set Up & Assignment is the set up and assignment of Static IP Addressing on the Verizon MPLS Network. It provides:  Static IP Addressing Extension to MPLS Wireless Access  Set Up and Assignment of Static IP Addressing on the Verizon Private Network (required for MPLS - Wireless Access – Managed)				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Managed MPLS Wireless - DMNR	Managed MPLS Wireless Access - Dynamic Mobile Network Routing (DMNR) with extension to MPLS Wireless Access.	PWAD0000
373	to MPLS Wireless Access. It  Dynamic Mobile Network F  DMNR	cess - Dynamic Mobile Network Routing (DMNR) verovides: Routing (DMNR) Extension to MPLS Wireless Accordic routing protocol-ideal to leverage the any-to-an	ess

# **Secure Internet Gateway**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Secure Gateway – Universal Port 128 Kbps	Secure Gateway – Universal Port 128 Kbps is a Firewall (Standard) MPLS side port connection with 128Kbps.	SEGU0128
374	in section 1.2. SIG Service prequested by many agencies SIG provides the interface respective Gateway general descure Gateway - Firewall procustomer locations connected Secure Gateway - Firewall is Secure Gateway - Firewall by against a range of network set tracks all inbound and outbour match a known and authorized performance of more tradition data stream for the entire len Secure Gateway - Firewall is	Internet Gateway (SIG) Service as an Unsolicited provides an internet solution to MPLS Services free to satisfy the requirements of remote access into equested as a capability of the MPLS requirements escription applies to the following Secure Gatewovides enterprise employees secure access to the doto a Verizon network service via a network-based available with Private IP worldwide.  Includes Internet access with a "stateful firewall" to he courity threats. The network-based firewall (FW) in and data streams, allowing passage of only those passage. Stateful firewalls improve on the security and packet filters because they capture and hold at	quently MPLS securely.  way line items. Internet from d firewall.  ellp protect spects and backets that and tributes of each  Service (DoS)



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	users from accessing corporate resources. Secure Gateway - Firewall can also defend against IP spoofing, an attack that sends a system rogue packets that appear to originate from an authenticated source. These packets may induce a local host to execute commands that can compromise the security of an entire network or cause damage to valuable data resources. Secure Gateway - Firewall (Standard) is provided with only one available firewall configuration. Secure Gateway - Firewall (standard) is designed to support outbound web surfing and up to seven in-bound firewall policy/protocol settings administered by Verizon. Customers will be allocated seven public IP addresses per Secure Gateway Universal Port ordered with the Secure Gateway - Firewall (Standard) feature in addition to one address for standard outbound access. Customers are limited to seven in-bound public IP addresses. Secure Gateway - Universal Port 128 Kbps is a Firewall (Standard) MPLS				
375	Secure Gateway – Universal Port 256Kbps	Secure Gateway – Universal Port 256Kbps is a Firewall (Standard) - Universal MPLS side port with connection 256Kbps.	SEGU0256		
373	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 256Kbps is a Firewall (Standard) - Universal MPLS side port with connection 256Kbps.				
270	Secure Gateway – Universal Port 384 Kbps	Secure Gateway – Universal Port 384 Kbps is a Firewall (Standard) – Universal MPLS side port with connection 384Kbps.	SEGU0384		
376	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 384 Kbps is a Firewall (Standard) –  Universal MPLS side port with connection 384Kbps.				
077	Secure Gateway – Universal Port 512 Kbps	Secure Gateway – Universal Port 512 Kbps - Firewall (Standard) – Universal MPLS side port with connection 512Kbps.	SEGU0512		
377	Bidder's Product Description Verizon will provide Secure Goundary Universal MPLS side port with	Sateway – Universal Port 512 Kbps -Firewall (Star	ndard) –		
	Secure Gateway – Universal Port 768 Kbps	Secure Gateway – Universal Port 768 Kbps is a Firewall (Standard) – Universal - MPLS side port with connection 768Kbps.	SEGU0768		
378	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 768 Kbps is a Firewall (Standard) –  Universal - MPLS side port with connection 768Kbps.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Secure Gateway – Universal Port 1.024Mbps	Secure Gateway – Universal Port 1.024mbps is a Firewall (Standard) – Universal - MPLS side port with connection 1024Kbps.	SGUP0001
379	Bidder's Product Description Verizon will provide Secure Goundary Universal - MPLS side port w	Sateway – Universal Port 1.024mbps is a Firewall	(Standard) –
380	Secure Gateway – Universal Port 1.536 Mbps	Secure Gateway – Universal Port 1.536 Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 1.536Mbps.	SGUP0002
300	Bidder's Product Description Verizon will provide Secure Goundary Universal - MPLS side port w	Sateway - Universal Port 1.536 Mbps is a Firewa	II (Standard) –
381	Secure Gateway – Universal Port 3.072Mbps	Secure Gateway – Secure Gateway Universal Port 3.072Mbps is a Firewall (Standard) – Universal MPLS side port with connection 3072Kbps.	SGUP0003
	Bidder's Product Description:  Verizon will provide Secure Gateway – Secure Gateway Universal Port 3.072Mbps is a Firewall (Standard) – Universal MPLS side port with connection 3072Kbps.		
	Secure Gateway – Universal Port 4.608Mbps	Secure Gateway – Universal Port 4.608Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 4.608Mbps.	SGUP0004
382	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 4.608Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 4.608Mbps.		
202	Secure Gateway – Universal Port 6.144Mbps	Secure Gateway – Universal Port 6.144Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 6.144Mbps.	SGUP0006
383	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 6.144Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 6.144Mbps.		
384	Secure Gateway – Universal Port 7.680Mbps	Secure Gateway – Universal Port 7.680Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 7.680Mbps.	SGUP0007
	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 7.680Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 7.680Mbps.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Secure Gateway – Universal Port 9.216Mbps	Secure Gateway – Universal Port 9.216Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 9.216Mbps.	SGUP0009
385	Bidder's Product Description Verizon will provide Secure Goundary Universal - MPLS side port w	Sateway – Universal Port 9.216Mbps is a Firewall	(Standard) –
386	Secure Gateway – Universal Port 10.752Mbps	Secure Gateway – Secure Gateway Universal Port 10.752Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 10.752Mbps.	SGUP0010
	Bidder's Product Description Verizon will provide Secure Griewall (Standard) – University	on: Sateway – Secure Gateway Universal Port 10.752I sal - MPLS side port with connection 10.752Mbps.	Mbps is a
	Secure Gateway – Universal Port 12.288Mbps	Secure Gateway – Universal Port 12.288Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 12.288Mbps.	SGUP0012
387	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 12.288Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 12.288Mbps.		
	Secure Gateway – Universal Port 15 Mbps	Secure Gateway – Universal Port 15Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 15Mbps.	SGUP0015
388	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 15Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 15Mbps.		
	Secure Gateway – Universal Port 18Mbps	Secure Gateway – Universal Port 18Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 18Mbps.	SGUP0018
389	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 18Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 18Mbps.		
390	Secure Gateway – Universal Port 25Mbps	Secure Gateway – Universal Port 25Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 25Mbps.	SGUP0025
	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 25Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 25Mbps.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Secure Gateway – Universal Port 44.184Mbps	Secure Gateway – Universal Port 44.184Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 44.184Mbps.	SGUP0044
391	Bidder's Product Description Verizon will provide Secure Goundary Universal - MPLS side port w	Sateway – Universal Port 44.184Mbps is a Firewa	ıll (Standard) –
392	Secure Gateway – Universal Port 50Mbps	Secure Gateway – Universal Port 50Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 50Mbps.	SGUP0050
332	<b>Bidder's Product Description</b> Verizon will provide Secure Gound Universal - MPLS side port w	Sateway – Universal Port 50Mbps is a Firewall (S	tandard) –
000	Secure Gateway – Universal Port 60Mbps	Secure Gateway – Universal Port 60Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 60Mbps.	SGUP0060
393	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 60Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 60Mbps.		
204	Secure Gateway – Universal Port 70Mbps	Secure Gateway – Universal Port 70Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 70Mbps.	SGUP0070
394	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 70Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 70Mbps.		
225	Secure Gateway – Universal Port 80Mbps	Secure Gateway – Universal Port 80Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 80Mbps.	SGUP0080
395	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 80Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 80Mbps.		
396	Secure Gateway – Universal Port 90Mbps	Secure Gateway – Universal Port 90Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 90Mbps.	SGUP0090
	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 90Mbps is a Firewall (Standard) –  Universal - MPLS side port with connection 90Mbps.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
397	Secure Gateway – Universal Port 100Mbps	Secure Gateway – Universal Port 100Mbps is a Firewall (Standard) – Firewall- MPLS side port with connection 100Mbps.	SGUP0100
391	Bidder's Product Description Verizon will provide Secure Griewall- MPLS side port with	Sateway – Universal Port 100Mbps is a Firewall (	Standard) –
398	Secure Gateway – Universal Port 155Mbps	Secure Gateway – Universal Port 155Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 155Mbps.	SGUP0155
390	Bidder's Product Description Verizon will provide Secure Goundary Universal - MPLS side port w	Sateway – Universal Port 155Mbps is a Firewall (	Standard) –
399	Secure Gateway – Universal Port 622.100Mbps	Secure Gateway – Universal Port 622.100Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 622.100Mbps.	SGUP0622
	Bidder's Product Description:  Verizon will provide Secure Gateway – Universal Port 622.100Mbps is a Firewall (Standard) – Universal - MPLS side port with connection 622.100Mbps.		
	Secure Gateway Cisco 871/881 Mgmt Remote Install	Secure Gateway Cisco 871 / 881 - Management with Remote Installation	SGCR0871
400	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 871/881 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.		
	Secure Gateway Cisco 871 / 881 - Mgmt On-site Install	Secure Gateway Cisco 871 / 881 - Management with On-Site Installation	SGC00871
401	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 871/881 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Secure Gateway Cisco881EVDO Mgmt Remote Install	Cisco 881 with EVDO - Management with Remote Installation	SGCR0881		
402	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 881 with EVDO router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco881EVDO Mgmt On-Site Install	Secure Gateway Cisco 881 with EVDO - Management with On-Site Installation	SGCO0881		
Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user pactincludes the equipment (Cisco 881 with EVDO router), maintenance and managem Secure Gateway Remote Office. On-site installation is included. The customer is for providing the out-of-band remote management modem and the analog telephonic customer is also responsible for the providing the Internet connection.					
	Secure Gateway Cisco 891 Mgmt Remote Install	Secure Gateway Cisco 891 - Management with Remote Installation	SGCR0891		
404	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 891 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 891 Mgmt On-Site Install	Secure Gateway Cisco 891 - Management with On-Site Installation	SGCO0891		
405	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 891 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
406	Secure Gateway Cisco 1841 Mgmt Remote Install	Secure Gateway Cisco 1841 - Management with Remote Installation	SGCR1841		
	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1841 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco 1841 Mgmt On-Site Install	Secure Gateway Cisco 1841 - Management with On-Site Installation	SGCO1841	
407	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1841 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco 1941 Mgmt Remote Install	Secure Gateway Cisco 1941 - Management with Remote Installation	SGCR1941	
408	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1941 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco 1941 Mgmt On-Site Install	Secure Gateway Cisco 1941 - Management with On-Site Installation	SGCO1941	
409	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1941 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco1941EVDO Mgmt Remote Install	Secure Gateway Cisco 1941 with EVDO - Management with Remote Installation	SGER1941	
410	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1941 with EVDO router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,		5		
	Feature Name	Feature Description	Bidder's Product Identifier		
	Secure Gateway Cisco1941EVDO Mgmt On-Site Install	Secure Gateway Cisco 1941 with EVDO - Management with On-Site Installation	SGEI1941		
411	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 1941 with EVDO router), maintenance and management f Secure Gateway Remote Office. On-site installation is included. The customer is respor for providing the out-of-band remote management modem and the analog telephone line customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 2811 Mgmt Remote Install	Secure Gateway Cisco 2811 - Management with Remote Installation	SGCR2811		
412	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2811 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 2811 Mgmt On-Site Install	Secure Gateway Cisco 2811 - Management with On-Site Installation	SGCO2811		
Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. Thincludes the equipment (Cisco 2811 router), maintenance and man Gateway Remote Office. On-site installation is included. The custo providing the out-of-band remote management modem and the anacustomer is also responsible for the providing the Internet connection.			the Secure onsible for		
	Secure Gateway Cisco 2911 Mgmt Remote Install	Secure Gateway Cisco 2911 - Management with Remote Installation	SGCR2911		
414	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2911 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Secure Gateway Cisco 2911 Mgmt On-Site Install	Secure Gateway Cisco 2911 - Management with On-Site Installation	SGC02911	
415	This is an addition add to the includes the equipment (Cisc Gateway Remote Office. On providing the out-of-band rem	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2911 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.		
	Secure Gateway Cisco 2851 Mgmt Remote Install	Secure Gateway Cisco 2851 - Management with Remote Installation	SGCR2851	
416	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2851 router), maintenance and management for the Secur Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco 2851 Mgmt On-Site Install	Secure Gateway Cisco 2851 - Management with On-Site Installation	SGCO2851	
417	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2851 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			
	Secure Gateway Cisco 2951 Mgmt Remote Install	Secure Gateway Cisco 2951 - Management with Remote Installation	SGCR2951	
418	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2951 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Secure Gateway Cisco 2951 Mgmt On-Site Install	Secure Gateway Cisco 2951 - Management with On-Site Installation	SGCO2951		
419	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 2951 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 3845 Mgmt Remote Install	Secure Gateway Cisco 3845 - Management with Remote Installation	SGCR3845		
420	His is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 3845 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible providing the out-of-band remote management modem and the analog telephone line, customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 3845 Mgmt On-Site Install	Secure Gateway Cisco 3845 - Management with On-Site Installation	SGCO3845		
421	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 3845 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 3945 Mgmt Remote Install	Secure Gateway Cisco 3945 - Management with Remote Installation	SGCR3945		
422	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 3945 router), maintenance and management for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's Product		
	Feature Name	Feature Description	Identifier		
	Secure Gateway Cisco 3945 Mgmt On-Site Install	Secure Gateway Cisco 3945 - Management with On-Site Installation	SGCO3945		
423	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the equipment (Cisco 3945 router), maintenance and management for the Secure Gateway Remote Office. On-site installation is included. The customer is responsible for providing the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 8xx Series Router Mgmt w/Remote Install	Cisco 8xx Series Router Management with Remote Installation (Customer Provided Router)	CCPR0800		
424	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the maintenance and management of a Customer provided Cisco 8xx series router fo the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the Cisco 8xx series router and the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 1xxx/2xxx Router Mgmt w/Remote Install	Secure Gateway Cisco 1xxx/2xxx Series Router Management with Remote Installation (Customer Provided Router)	CCPR1000		
425	Bidder's Product Description:  This is an addition add to the Secure Gateway Firewall Service. This end user package includes the maintenance and management of a Customer provided Cisco 1xxx/2xxx series router for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the Cisco 1xxx/2xxx series router and the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				
	Secure Gateway Cisco 3xxx/4xxx Router Mgmt/w Remote Install	Secure Gateway Cisco 3xxx/4xxx Series Router Management with Remote Installation (Customer Provided Router)	CCPR3000		
426	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes the maintenance and management of a Customer provided Cisco 3xxx/4xxx series router for the Secure Gateway Remote Office. Remote installation is included. The customer is responsible for providing the Cisco 3xxx/4xxx series router and the out-of-band remote management modem and the analog telephone line. The customer is also responsible for the providing the Internet connection.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
427	Secure Gateway OOB Modem with analog line	Secure Gateway OOB Modem with analog line	OOBM0002
	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes is the Out-Of-Band (OOB) management modem plus the analog line.		
428	Secure Gateway OOB Modem without analog line	Secure Gateway OOB Modem without analog line	OOBM0001
	Bidder's Product Description: This is an addition add to the Secure Gateway Firewall Service. This end user package includes is the Out-Of-Band (OOB) management modem without the analog line.		



# **DSL Internet**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
429	DSL Internet Solo 384kbps	DSL Internet Solo 384kbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (up to 384 kbps download and up to 128 kbps upload)	DSLS0001
	Bidder's Product Description:  Verizon is proposing DSL Internet Service as an Unsolicited Service Offering in section 1.2.  DSL Internet Service provides a internet access to the MPLS Secure Internet Gateway Service frequently requested by many agencies to satisify the requirements of remote access into MPLS.  Verizon DSL Internet general description applies to the following DSL Internet line items.  DSL Internet services in general provide customers with reliable, high-bandwidth communications using standard copper telephone lines. For remote workers and small branch offices, where leased-line costs would be difficult to justify, DSL enables rich, multi-media communication, including voice, video, and high-speed access to information and corporate LAN resources.  DSL Internet Solo 384kbps is a single-user service provided via DSL modem using asymmetric		
	bandwidth DSL (ADSL) line-sharing technology, or, at Verizon's discretion, a dedicated loop (up to 384 kbps download and up to 128 kbps upload). Static, pre-assigned IP addressing is provided. Customer is responsible for operation and configuration of its own computer. Customer must provide ILEC analog voice (also known as "plain old telephone service" or "POTS") for use with the service. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
	DSL Internet Solo 1.5Mbps	DSL Internet Solo 1.5Mbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (up to 1.5Mbps download and up to 384kbps upload)	DSLS0003
430	Bidder's Product Description:  DSL Internet Solo 1.5Mbps is a single-user service provided via DSL modem using asymmetric bandwidth DSL (ADSL) line-sharing technology, or, at Verizon's discretion, a dedicated loop (up to 1.5Mbps download and up to 384kbps upload). Static, pre-assigned IP addressing is provided. Customer is responsible for operation and configuration of its own computer. Customer must provide ILEC analog voice (also known as "plain old telephone service" or "POTS") for use with the service. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
431	DSL Internet Solo 3Mbps	DSL Internet Solo 3Mbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (up to 3Mbps download and up to 512kbps upload)	DSLS0004
	Bidder's Product Description:  DSL Internet Solo 3Mbps is a single-user service provided via DSL modem using asymmetric bandwidth DSL (ADSL) line-sharing technology, or, at Verizon's discretion, a dedicated loop		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	(up to 3Mbps download and up to 512kbps upload). Static, pre-assigned IP addressing is provided. Customer is responsible for operation and configuration of its own computer. Customer must provide ILEC analog voice (also known as "plain old telephone service" or "POTS") for use with the service. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.			
	DSL Internet Solo 6Mbps	DSL Internet Solo 6Mbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (up to 6Mbps download and up to 768kbps upload)	DSLS0005	
432	Bidder's Product Description:  DSL Internet Solo 6Mbps is a single-user service provided via DSL modem using asymmetric bandwidth DSL (ADSL) line-sharing technology, or, at Verizon's discretion, a dedicated loop (up to 6Mbps download and up to 768kbps upload). Static, pre-assigned IP addressing is provided. Customer is responsible for operation and configuration of its own computer. Customer must provide ILEC analog voice (also known as "plain old telephone service" or "POTS") for use with the service. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.			
	DSL Internet Office 128Kbps	DSL Internet Office 128Kbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 128kbps)	DSLO0001	
433	Bidder's Product Description:  DSL Internet Office (DSL Office) 128Kbps is a multi-user service provided via DSL modem or DSL router in symmetric bandwidth at (128kbps). DSL local loop connections between Customer's location and Verizon will be arranged by Verizon, and are provided through an ILEC. Service components include static, pre-assigned IP addressing, up to 128 IP addresses per location, up to 20 Hosted POP3 e-mail boxes and up to five (5) concurrent Newsreader accounts (USENET news Servers) per location This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.			
434	DSL Internet Office 192Kbps	DSL Internet Office 192Kbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 192kbps)	DSLO0002	
	Bidder's Product Description:  DSL Internet Office (DSL Office) 192Kbps is a multi-user service provided via DSL modem or DSL router in symmetric bandwidth (at 192kbps). DSL local loop connections between Customer's location and Verizon will be arranged by Verizon, and are provided through an ILEC. Service components include static, pre-assigned IP addressing, up to 128 IP addresses per location, up to 20 Hosted POP3 e-mail boxes and up to five (5) concurrent Newsreader accounts (USENET news Servers) per location. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

			Bidder's
	Feature Name	Feature Description	Product Identifier
	DSL Internet Office 384Kbps	DSL Internet Office 384Kbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 384kbps)	DSLO0003
435	Bidder's Product Description:  DSL Internet Office (DSL Office) 384Kbps is a multi-user service provided via DSL modem or DSL router in symmetric bandwidth at 384kbps). DSL local loop connections between Customer's location and Verizon will be arranged by Verizon, and are provided through an ILEC. Service components include static, pre-assigned IP addressing, up to 128 IP addresses per location, up to 20 Hosted POP3 e-mail boxes and up to five (5) concurrent Newsreader accounts (USENET news Servers) per location. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
	DSL Internet Office 768Kbps	DSL Internet Office 768Kbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 768 kbps)	DSLO0004
436	Bidder's Product Description:  DSL Internet Office (DSL Office) 768Kbps is a multi-user service provided via DSL modem or DSL router in symmetric bandwidth at 768 kbps. DSL local loop connections between Customer's location and Verizon will be arranged by Verizon, and are provided through an ILEC. Service components include static, pre-assigned IP addressing, up to 128 IP addresses per location, up to 20 Hosted POP3 e-mail boxes and up to five (5) concurrent Newsreader accounts (USENET news Servers) per location. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
	DSL Internet Office 1Mbps	DSL Internet Office 1Mbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 1Mbps)	DSLO0005
437	Bidder's Product Description:  DSL Internet Office (DSL Office) 1Mbps is a multi-user service provided via DSL modem or DSL router in symmetric bandwidth at 1Mbps. DSL local loop connections between Customer's location and Verizon will be arranged by Verizon, and are provided through an ILEC. Service components include static, pre-assigned IP addressing, up to 128 IP addresses per location, up to 20 Hosted POP3 e-mail boxes and up to five (5) concurrent Newsreader accounts (USENET news Servers) per location. This Service excludes DSL modem. DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	DSL Internet Office 1.5Mbps	DSL Internet Office 1.5Mbps provides Internet access via Digital Subscriber Line (DSL) using broadband technologies (symmetric bandwidth at 1.5Mbps)	DSLO0006
438	in symmetric bandwidth at 1.5 and Verizon will be arranged components include static, pr up to 20 Hosted POP3 e-mail (USENET news Servers) per	ce) is a multi-user service provided via DSL mode of the service provided via DSL mode of the service provided via DSL mode of the service of	omer's location ervice sper location, accounts Internet
400	DSL Internet Solo 384 Kbps Modem	DSL Internet Solo 384 Kbps Modem. Required for DSL Solo Service.	DSLE0001
439	Bidder's Product Description: DSL Internet Solo 384 Kbps Modem required to terminate DSL Service.		
	DSL Internet Solo, 1.5,3,6M Router&Self- install Kit (Covad)	DSL Internet Solo, 1.5Mbps, 3Mbps, and 6Mbps Router and Self-install Kit (Covad). Required for DSL Solo Service	DSLE0003
440	Bidder's Product Description:  DSL Internet Solo, 1.5Mbps, 3Mbps, and 6Mbps Router and Self-install Kit (Covad). DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
	DSL Internet Office Modem/Bridge	DSL Internet Office Modem/Bridge to terminate DSL Office Service (Optional)	DSLE0005
441	Bidder's Product Description:  DSL Internet Office Modem/Bridge to terminate DSL Office Service (Optional) DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		
442	DSL Internet Office Router	DSL Internet Office Router to terminate DSL Office Service (Optional)	DSLE0006
	Bidder's Product Description:  DSL Office Router to terminate DSL Office Service (Optional) DSL Internet Solo/Office service geographic coverage is limited to Verizon's Covad footprint areas in CA.		



#### **Managed Application Assurance**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

Feature Name	Feature Description	Bidder's Product Identifier
MAAS Customer Setup	Managed Application Assurance Service (MAAS) Customer Setup is a charge that provides the following features: Startup, Setup, and Configuration of Customer Domain.	MAAC0000

#### **Bidder's Product Description:**

Verizon is proposing Managed Application Assurance Services (MAAS) as an Unsolicited Service Offering in section 1.2. Managed Application Assurance Services (MAAS) utilizes application protocol level detail over the MPLS Service. Several State agenices require additional visiblility to further identify and manage application utilization over MPLS Service. Managed Application Assurance Services (MAAS) general description applies to the following MAAS line items.

Application Assurance is a monthly subscription service that provides network and application utilization and performance monitoring, troubleshooting and reporting. Utilizing Application Flows, Active Testing, and Deep Packet Inspection, this service provides comprehensive visibility of application and network performance and reliability.

Application Assurance provides the following distinct Feature Sets:

Application Flow Analysis is a standard feature offered by Application Assurance. This feature is available by enabling NetFlow (Cisco NetFlow v5, v7, v9; J-Flow; sFlow v2, v4, v5; IPFIX) on the customer's routers and switches. The NetFlow records must be forwarded by the customer's network devices to a Collector hosted by Verizon. The NetFlow is utilized to discover all network traffic, provide Application and Network utilization metrics, identify top talkers per network connection, and show bandwidth consumption, class of service settings, protocols, port addresses, source and destination IP addresses for all traffic.

Active Testing is a standard feature supported by the deployment of Windows based Test Agents that simulate end user actions for voice and data applications. The Test Agents can measure application accessibility, end user experience, and transaction response times. The Test Agents forward their performance metrics to the Verizon hosted Application Assurance Server.

Advanced Analysis is an extended feature offered through the Application Assurance hardware option. This feature is supported by the deployment of VMware based soft-probes that are deployed at strategic locations within the customer's network. The probes can be installed on customer provided hardware that must be certified by Verizon or on specially designed Analysis Service Elements (ASE's), which are purpose-built devices that can be connected inline or via SPAN ports to network routers and switches. This feature provides deep packet inspection with the ability to measure application response times and VoIP call quality with full analysis of call details and identification of the root cause of call degradation factors. With the additional ability to capture and save raw packet data, the Advanced Analysis probe can act as a remotely controlled packet sniffer to identify even the most complex application performance issues.

The Customer Care Option can be added to new or existing Application Assurance customer sites to reduce the burden on existing IT staff, while improving overall responsiveness. Verizon will provide expertise to collect, organize and analyze each customer's application performance data in order to provide monthly utilization summaries, performance benchmarks, trending and recommendations for improvement. This feature supplements the customer's

443



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	resources with a Verizon operational team, providing access to additional expertise when it's needed most. This option can be added to all sites being monitored by Application Assurance or to only the most troublesome locations.  Managed Application Assurance (MAAS) Customer Setup Fee - This a one-time setup charge required for all new Application Assurance customers. This fee includes the setup of the customer's domain, user logins, reports, alarms and alerts, dashboards, etc.				
	MAAS ≤2Mbps	MAAS ≤2Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0002		
444	Bidder's Product Description:  Managed Application Assurance Service ≤ 2 Mbps - Provides NetFlow collection and active testing for sites with less than 3 Mbps WAN connectivity. This service includes the basic monitoring and troubleshooting dashboards, reports, and alert threshold notifications that are available with Application Assurance.				
	MAAS 3-14 Mbps	MAAS 3-14 Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0003		
445	Bidder's Product Description:  Managed Application Assurance Service 3-14 Mbps – Provides everything provided by Application Assurance Service ≤2 Mbps for WAN connectivity greater than or equal to 3 Mbps and less than 15 Mbps.				
440	MAAS 15-24 Mbps	MAAS 15-24 Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0014		
446	Bidder's Product Description:  Managed Application Assurance Service 15-24 Mbps – Provides everything provided by Application Assurance Service 3-14 Mbps for WAN connectivity greater than or equal to 15 Mbps and less than 25 Mbps.				
447	MAAS 25-39 Mbps	MAAS 25-39 Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0025		
	Bidder's Product Description:  Managed Application Assurance Service 25-39 Mbps - Provides everything provided by Application Assurance Service 15-24 Mbps for WAN connectivity greater than or equal to 25 Mbps and less than 40 Mbps.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
448	MAAS 40-60 Mbps	MAAS 40-60 Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0040
	Bidder's Product Description:  Managed Application Assurance Service 40-60 Mbps - Provides everything provided by Application Assurance Service 25-39 Mbps for WAN connectivity greater than or equal to 40 Mbps and less than 61 Mbps.		
449	MAAS 61-100 Mbps	MAAS 61-100 Mbps features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MAAS0060
	Bidder's Product Description:  Managed Application Assurance Service 61 - 100 Mbps - Provides everything provided by Application Assurance Service 40-60 Mbps for WAN connectivity greater than or equal to 61 Mbps and less than or equal to 100 Mbps.		
450	MAAS Probe Monitoring	MAAS Probe Monitoring features include: Application Flow Analysis, Active Testing, Advanced Application Analysis and Visual Performance Manager	MASP0000
	Bidder's Product Description:  Managed Application Assurance Service Probe Monitoring - Provides the ability to collect Layers 3-7 IP Packet Data from the network for Advanced Analysis. The Advanced Analysis feature set includes one second granularity of network and application performance with deep packet inspection and remote packet capture. Additional benefits include client and server application response times, VoIP metrics (including MOS, Jitter, Packet Loss, and Round Trip Delay), Burst Analysis, and IP Data Captures that can be saved in PCAP format for additional analysis. Hardware is required to support this option. The customer may provide their own compatible hardware certified by Verizon or may select from any of the listed ASE device options.		
451	MAAS Customer Care 10 Sites	MAAS Customer Care 10 Sites features include: Professional Review and Analysis of Network Performance	MACC0010
	Bidder's Product Description:  Managed Application Assurance Service Customer Care 10 Sites - Provides Customer Care for 1-10 Application Assurance sites. The Customer Care Option can be added to new or existing Application Assurance customers to reduce the burden on existing IT staff, while improving overall responsiveness. Verizon will provide monthly utilization summaries, performance benchmarks, trending and recommendations for improvement. This feature supplements the customer's resources with a Verizon operational team, providing access to additional expertise when it's needed most. This option can only be added to sites being		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	monitored by Application Ass most troublesome locations.	monitored by Application Assurance. The customer can choose to include all sites or only the most troublesome locations.		
	MAAS Customer Care 20 Sites	MAAS Customer Care 20 Sites features include: Professional Review and Analysis of Network Performance	MACC0020	
452		on: nce Service Customer Care 20 Sites– Provides the rvice Customer Care 10 except scaled 11-20 Appl		
	MAAS Customer Care 400 Sites	MAAS Customer Care 400 Sites features include: Professional Review and Analysis of Network Performance	MACC0400	
453	Bidder's Product Description:  Managed Application Assurance Service Customer Care 400 - Provides the same services as Application Assurance Service Customer Care 10 except scaled for 21-400 Application Assurance sites.			
	MAAS Customer Care 800 Sites	MAAS Customer Care 800 Sites features include: Professional Review and Analysis of Network Performance	MACC0800	
454	Bidder's Product Description:  Managed Application Assurance Service Customer Care 800 - Provides the same services as Application Assurance Service Customer Care 10 except scaled for 401-800 Application Assurance sites.			
	MAAS Probe – T1/E1	MAAS Probe – T1/E1 - Select T1/E1 G703 Inline ASE Model 807-0113 features include: Deep Packet Inspection, Remote Packet Capture	MASP0001	
455	Bidder's Product Description:  Managed Application Assurance Service Probe T1/E1 - Select T1/E1 G703 Inline ASE Model 807-0113 - Analysis Service Element (ASE) Device that supports the Application Assurance Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for inline T1 or E1 connections. This device is deployed inline on a customer's WAN connection and monitors performance of Layers 1-7 of the network. Automatic "SafeLink" feature insures that the connection stays open in the event of a device failure, so the data circuit is never interrupted. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MAAS Probe - 10/100 Ethernet	MAAS Probe - 10/100 Ethernet - Select 10/100 Ethernet Inline ASE Model 807-0122 features include: Deep Packet Inspection, Remote Packet Capture	MASP0002	
456	Bidder's Product Description:  Managed Application Assurance Service Probe 10/100 Ethernet - Select 10/100 Ethernet Inline ASE Model 807-0122 - Analysis Service Element (ASE) Device that supports the Application Assurance Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for inline 10/100 Ethernet connections or SPAN connections. This device is deployed inline or via a SPAN port on a customer's WAN connection and monitors performance of Layers 1-7 of the network. Automatic "SafeLink" feature insures that the connection stays open in the event of a device failure, so the data circuit is never interrupted. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.			
	MAAS Probe - DS3/E3	MAAS Probe - DS3/E3- Select DS3/E3 Inline ASE Model 807-0204 features include: Deep Packet Inspection, Remote Packet Capture	MASP0003	
457	Bidder's Product Description:  Managed Application Assurance Service Probe - DS3/E3- Select DS3/E3 Inline ASE Mod 807-0204 - Analysis Service Element (ASE) Device that supports the Application Assurant Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for DS3 or E3 connections. This device is deployed inline on a customer's WAN connection monitors performance of Layers 1-7 of the network. Automatic "SafeLink" feature insure the connection stays open in the event of a device failure, so the data circuit is never interrupted. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.			
	MAAS Probe - 100/1000 Ethernet - 4 Port SFP	MAAS Probe - 100/1000 Ethernet - 4 Port SFP - Select 4 Port 100/1000 SFP ASE Model 807-0410 features include: Deep Packet Inspection, Remote Packet Capture	MASP0004	
458	Bidder's Product Description:  Managed Application Assurance Service 100/1000 Ethernet – 4 Port SFP - Select 4 Port 100/1000 SFP ASE Model 807-0410 - Analysis Service Element (ASE) Device that supports the Application Assurance Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for up to 4 SPAN Gigabit Ethernet connections. This device is deployed via SPAN ports on a customer WAN device and monitors performance of Layers 1-7 of the network. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,		Bidder's
	Feature Name	Feature Description	Product Identifier
	MAAS Probe - 1 GBPS - RJ45	MAAS Probe - 1 GBPS - RJ45- Select 1 GBPS RJ45 Inline ASE Model 807-0401 features include: Deep Packet Inspection, Remote Packet Capture	MASP0005
Bidder's Product Description:  Managed Application Assurance Service Probe - 1 GBPS - RJ45- Select 1 GBPS RJ4 ASE Model 807-0401 -  Analysis Service Element (ASE) Device that supports the Application Assurance Hard Option with additional Layer 1 and Layer 2 network connectivity monitoring for an inling SPAN RJ45 based Gigabit Ethernet connection. This device is deployed inline or via port on a customer's WAN connection and monitors performance of Layers 1 7 of the Automatic "SafeLink" feature insures that the connection stays open in the event of a failure, so the data circuit is never interrupted. Built-in power capacitors provide a "La feature that notifies the Application Assurance Platform when power is lost to the ASE This feature can be setup for automatic customer notification for remote locations that prone to power failures.			
	MAAS Probe - 1 GBPS - SFP	MAAS Probe - 1 GBPS - SFP- Select 1 GBPS SFP ASE Model 807-0411 features include: Deep Packet Inspection, Remote Packet Capture	MASP0006
460	Bidder's Product Description:  Managed Application Assurance MAAS Probe - 1 GBPS - SFP- Select 1 GBPS SFP ASE Model 807-0411 - Analysis Service Element (ASE) Device that supports the Application Assurance Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for a single Gigabit Ethernet SPAN connection. This device is deployed via a SPAN port on a customer WAN device and monitors performance of Layers 1-7 of the network. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.		
	MAAS Probe - OC3/OC12 - SFP	MAAS Probe - OC3/OC12 - SFP- Select POS, Optical SFP, Single Mode OC3/OC12 Inline ASE Model 807-0420 features include: Deep Packet Inspection, Remote Packet Capture	MASP0007
461	Bidder's Product Description:  Managed Application Assurance Service MAAS Probe - OC3/OC12 - SFP - Select POS, Optical SFP, Single Mode OC3/OC12 Inline ASE Model 807-0420 - Analysis Service Element (ASE) Device that supports the Application Assurance Hardware Option with additional Layer 1 and Layer 2 network connectivity monitoring for an inline Single Mode Fiber OC3 or OC12 connection. This device is deployed inline on a customer's WAN connection and monitors performance of Layers 1-7 of the network. Built-in power capacitors provide a "Last Cry" feature that notifies the Application Assurance Platform when power is lost to the ASE unit. This feature can be setup for automatic customer notification for remote locations that may be prone to power failures.		



## Managed WAN (MWAN)

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MWAN Monitor and Notify - Small	Managed Wide Area Network (MWAN) Monitor and Notify – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWMS0000
462	Bidder's Product Description:  Verizon is proposing Managed Wide Area Network (MWAN) Service as an Unsolicited Offering in section 1.2. MWAN Service supports the agencies ability to successfully implement MPLS service on customer provided routers. Smaller agencies require additechnical support to provide this assistance configuring and manging the implemention MPLS service. Managing router configuration and routes would be an example of this intregration support.  Managed WAN Services general description applies to the following Managed WAN items.  Verizon's Managed WAN Services represents a comprehensive network manager was a comprehensive network manager was a comprehensive fault isolation.		sfully re additional nention of of this type of ed WAN line a management olation, of WAN anaged WAN Certified ated on a n request. ent must have provided ce. naged device. espond to polls to access, and the on of the
	MWAN Monitor and Notify - Medium	MWAN Monitor and Notify – Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWMM0000
463	Bidder's Product Description:  Managed WAN Monitor & Notify - Medium provides everything provided by Managed WAN Monitor & Notify Small except for a Medium class device.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
464	MWAN Monitor and Notify - Large	MWAN Monitor and Notify – Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWML0000	
	Bidder's Product Description Managed WAN Monitor & No Monitor & Notify Small excep	tify - Large provides everything provided by Manaç	ged WAN	
465	MWAN Physical - Small	MWAN Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWPH0000	
405	Monitory & Notify Small as we	on: nall provides all of the monitoring features of Mana ell as Verizon owning the resolution of any physica sibility for resolving all logical CPE issues.		
	MWAN Physical - Medium	MWAN Physical - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWPM0000	
466	Bidder's Product Description:  Managed WAN Physical - Medium provides all of the monitoring features of Managed WAN Monitory & Notify Medium as well as Verizon owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical CPE issues.			
	MWAN Physical - Large	MWAN Physical - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWPL0000	
467	Bidder's Product Description:  Managed WAN Physical - Large provides all of the monitoring features of Managed WAN Monitory & Notify Large as well as Verizon owning the resolution of any physical CPE issues.  The customer retains responsibility for resolving all logical CPE issues.			
468	MWAN Full - Small	MWAN Full - Small Full features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWFS0000	
	Bidder's Product Description:  Managed WAN Full - Small provides all of the monitoring features of Managed WAN Physical - Small as well as Verizon owning the resolution of any logical CPE issues.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
469	MWAN Full - Medium	MWAN Full - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWFM0000
		on: n provides all of the monitoring features of Manage Verizon owning the resolution of any logical CPE	
470	MWAN Full - Large	MWAN Full - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MWFL0000
		on: all of the monitoring features of Managed WAN Pheresolution of any logical CPE issues.	ysical – Large
4-4	MWAN Device Installation	MWAN Device Installation features include: Installation of a device to be managed at turn up.	MWND0001
471	Bidder's Product Description:  Managed WAN Device Installation provides for the process of installing, implementing, and activating a new device under management		
472	MWAN Takeover of Existing Device	MWAN Takeover of Existing Device features include: Takeover of existing device for management.	MWTO0001
472	Bidder's Product Description:  Managed WAN Takeover of Existing Device provides for the takeover process of previously installed and working device for management.		
	MWAN Order Expedite	MWAN Order Expedite: Add-on service for expediting installation of WAN device.	MROX0000
473	Bidder's Product Description:  MWAN Order Expedite provides for an expedited process for activating a WAN device in fifteen (15) days or less This service is solely for the purposes of expediting the CPE installation process and does not affect circuit installation and activation.		
474	MWAN Report - Threshold Proactive Performance Monitoring	MWAN Report - Threshold Proactive Performance Monitoring features include: Add-on service to Managed WAN for proactively monitoring specific predefined performance thresholds.	MWER0000
	Bidder's Product Description	•	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Managed WAN Reporting general description applies to the following line items 16 – 22. Managed WAN Reporting provides optional reporting capabilities that are in addition to the standard reporting included with Managed WAN Services.  Managed WAN Threshold Proactive Performance Monitoring - This feature uses a standard performance profile to monitor and analyze a managed network for subtle performance problems. Performance related threshold alerts result in automatic trouble ticket generation and notifies Managed Network Service engineers of performance exceptions. This service is not a stand-alone service and does not provide for any graphical reports. It is in addition to the standard reporting (included with the basic service) or any of the enhanced reporting features such as Managed WAN Analysis – ETM Reporting and Managed WAN Analysis – ETM Select with Netflow.			
	MWAN - Analysis - ETM Reporting	MWAN - Analysis – ETM Reporting features include: Enhanced Traffic Management reports of QoS, NBAR, and response times	MWAE0001	
475	Bidder's Product Description:  Managed WAN Analysis – ETM Reporting – This feature includes all of the benefits from the basic reporting included with the managed service. ETM reporting adds the ability to report or QoS, CE-CE path performance, and high-level application data. CE-CE path performance allows reports of information, such as latency, for up to ten (10) paths per managed device. CE network performance allows for monitoring and detailed reporting on traffic volumes for up to twenty (20) Customer defined and selected network protocols. QoS performance reports can be generated on the quality and performance of DSCP and CoS on managed devices. Customer may generate At-a-Glance, Top-N, and Trend reports with PE elements.			
	MWAN Reporting Analysis ETM Select w/Netflow≤100Mb	MWAN Reporting Analysis ETM Select w/Netflow≤100Mb features include: Live Health reporting and collection and reporting from netflow data.	MWAE0002	
476	Bidder's Product Description:  Managed WAN Analysis – ETM Select With Netflow ≤ 100Mb – This feature includes all of the benefits from Managed WAN Analysis – ETM reporting. ETM Select with Netflow adds near real-time CE performance exceptions and alarms, near real-time trending, and CE network status maps as well as data collection and reporting from IPFIX/NetFlow/j-Flow/sFlow (collectively known as "netflow"). Live Status provides a single console for viewing performance exceptions and performance related faults for key CPE elements. Live Status provides drill down to Live Exceptions, Live Trend, and historical reports. Live Exceptions is a live interface that provides near real-time display of exceptions as they are detected and can be customized to monitor many different logical arrangements of CPE devices. Live Exceptions Notification can provide e-mail notifications for a limited subset of exceptions. Live Trend provides near real-time monitoring and charting of statistical data as it is collected. The netflow feature enables reporting on which hosts, protocols, and conversations are consuming bandwidth and on what interfaces and when. Configuration of the CE device may be required to enable this service and is not include. Any CPE configuration or remediation activity would be provided as an Optional Change Management Activity. This feature allows for the collection			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	and analysis of netflow data collected from interface/device/site speeds up to and including 100Mb/s.		
477	MWAN Reporting – Analysis ETM Select w/Netflow 101Mb<500Mb	MWAN Reporting – Analysis ETM Select w/Netflow 101Mb<500Mb features include: Live Health reporting and collection and reporting from netflow data.	MWAE0003
477		ΓM Select With Netflow 101Mb < 500Mb − This fear ETM Select With Netflow ≤ 100Mb except for intermiting Select With Netflow ≤ 100Mb except for intermiting Select With Netflow $Γ$	
478	MWAN Reporting - Analysis – ETM Select w/Netflow 500Mb<1Gb	MWAN Reporting - Analysis – ETM Select w/Netflow 500Mb<1Gb features include: Live Health reporting and collection and reporting from netflow data.	MWAE0004
470	Bidder's Product Description:  Managed WAN Analysis – ETM Select With Netflow 500Mb/s < 1Gb/s – This feature is identical to Managed WAN Analysis – ETM Select With Netflow ≤ 100Mb except for interface/device/site speeds equal to and greater than 500Mb/s and less than 1Gb/s.		
470	MWAN Reporting - Analysis ETM Select w/Netflow 1Gb≤10Gb	MWAN Reporting - Analysis ETM Select w/Netflow 1Gb≤10Gb features include: Live Health reporting and collection and reporting from netflow data.	MWAE0005
479	Bidder's Product Description:  Managed WAN Analysis – ETM Select With Netflow 1Gb ≤ 10Gb – This feature is identical to Managed WAN Analysis – ETM Select With Netflow ≤ 100Mb except for interface/device/site speeds equal to and greater than 1Gb/s and up to and including 10Gb/s.		
	MWAN Reporting - Network Analysis	MWAN Reporting - Network Analysis features include: Analysis, summarization, and recommendations for resolution of network issues discovered through Managed Services reporting tools.	MWNA0000
480	Bidder's Product Description:  Managed WAN Network Analysis - Is an optional service that provides for a Verizon Analysis Professional to review the Customer entitled reports and provides a monthly summarization of issues and provides recommendations to improve network performance. The analyst will analyze the network performance based on key variables such as, but not limited to, utilization, queue drops, and error conditions from the perspective of the Verizon managed device. With a preliminary report established, the analyst has the capability to utilize other Verizon tools and reporting systems, as required, to validate finds and further clarify the nature of the identified issue in finalizing the report. This service also includes a monthly review of the post monthly network performance report with Customer and Verizon account team as well as notification to		



ntinued)				
Feature Name	Feature Description	Bidder's Product Identifier		
Customer and/or the appropriate Verizon organization to isolate and resolve performance anomalies discovered outside of the reporting cycle.  The monthly report will include up to thirty (30) performance affecting issues as well as volum statistics for the Verizon managed network. The monthly report is based on the prior month's performance data, further investigation of any indentified issues, incorporation of relevant and factual information, and recommendation to resolve identified issues. The target date of the first monthly report, upon initiation of the service, is between 60-90 days.  A prearranged and schedule conference call will be held between the Verizon Analyst, Verizon Account Team, and Customer to review each month's report. The Verizon Analyst is available between the hours of 8:00 AM to 5:00 PM Pacific Time Monday through Friday.  For consistent support, this service should be applied to all sites/devices under management A minimum of twenty (20) devices under any of the Managed xAN Network Analysis support required for this service.		well as volume prior month's of relevant and et date of the analyst, Verizon lyst is available management.		
MWAN Network Engineering – Small Router	MWAN Network Engineering – Small Router	MWNS0000		
Bidder's Product Description:  Managed WAN Network Engineering Services general description applies to the following line items 23 – 25. Verizon's Managed WAN Network Engineering (NE) Services provide additional support and on-going engineering advice, and is a premium architecture and engineering service that augments the services provided by Verizon's Managed WAN service Network Engineering is an offering that includes on-going supplemental architectural, design, and engineering support for Managed Services with a minimum of twenty (20) devices under the Full level of service.  The Verizon NE will assist with design planning based on customer provided network reports as well as reports from the optional Managed WAN Network Analysis service. The NE will ac as a technical adviser for issues related to the customer's network. At the customer's requesting the content of the customer's network.		rovide ure and I WAN services. ctural, design, levices under etwork reports The NE will act omer's request, ate the benefit		
	Customer and/or the approprianomalies discovered outside. The monthly report will include statistics for the Verizon man performance data, further inversity factual information, and recordirect monthly report, upon initial Aprearranged and schedule Account Team, and Custome between the hours of 8:00 AMFor consistent support, this is A minimum of twenty (20) derequired for this service.  MWAN Network Engineering – Small Router  Bidder's Product Description Managed WAN Network Engineering service that augrent Network Engineering service that augrent Network Engineering is an of and engineering support for Methe Full level of service. The Verizon NE will assist with as well as reports from the opas a technical adviser for issist the NE will assess the current service.	Customer and/or the appropriate Verizon organization to isolate and resolve per anomalies discovered outside of the reporting cycle.  The monthly report will include up to thirty (30) performance affecting issues as statistics for the Verizon managed network. The monthly report is based on the performance data, further investigation of any indentified issues, incorporation of factual information, and recommendation to resolve identified issues. The targetirst monthly report, upon initiation of the service, is between 60-90 days.  A prearranged and schedule conference call will be held between the Verizon Anabetween the hours of 8:00 AM to 5:00 PM Pacific Time Monday through Friday For consistent support, this service should be applied to all sites/devices under A minimum of twenty (20) devices under any of the Managed xAN Network Anarequired for this service.  MWAN Network  Engineering – Small Router  MWAN Network Engineering Services general description applies to the items 23 – 25. Verizon's Managed WAN Network Engineering (NE) Services prodditional support and on-going engineering advice, and is a premium architect engineering service that augments the services provided by Verizon's Managed Network Engineering is an offering that includes on-going supplemental architect and engineering support for Managed Services with a minimum of twenty (20) of the Full level of service.  The Verizon NE will assist with design planning based on customer provided neas well as reports from the optional Managed WAN Network Analysis service.		

architecture and business requirements. Additionally, the NE can recommend end-of-life remediation solutions for managed devices as well as evaluate and recommend technology upgrades fitting with the customer's design goals and requirements.

Along with reviewing change management requirements against the on-going network requirements, the Verizon NE can represent, via conference call, scheduled changes at the customer's internal change management meetings. The Verizon NE will work with the customer to define requirements, design, document, and work with Verizon Operations to implement changes on managed devices. In many cases the Verizon NE can perform Optional Change Management (OCM) activities as a part of the NE service. The Verizon NE service allows for one (1) OCM per two (2) managed devices per year.

In addition to the device types listed below, additional devices type can be placed under NE support on an individual case bases (ICB). In addition to additional device types, custom NE activities and support for other managed services can also be provided under an ICB. Managed WAN Network Engineering - Small Router - Places a small sized router under NE support.

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MWAN Network Engineering – Medium Router	MWAN Network Engineering – Medium Router features include: Design Planning, Support Services, and Change Management Support.	MWNM0000
482	Bidder's Product Description Managed WAN Network Eng NE support.	on: ineering – Medium Router – Places a medium size	ed router under
483	MWAN Network Engineering – Large Router	MWAN Network Engineering – Large Router	MWNL0000
403	Bidder's Product Description Managed WAN Network English support.	on: ineering – Large Router – Places a large sized rou	iter under NE
484	MWAN – Opt Change Mgmt - DHCP IP Helper Configuration	MWAN – Opt Change Mgmt - DHCP IP Helper Configuration – Add, modify, and/or delete Dynamic Host Configuration Protocol (DHCP) Internet Protocol (IP) Helper configuration.	IPMW0012
	Bidder's Product Description:  Verizon Managed WAN– Optional Change Management Activities general description applies to the following line items 26 – 43. Optional change management activities are available for configuration changes on devices under Managed WAN.  Managed WAN Optional Change Management - DHCP IP Helper Configuration - This optional service provides configuration on an existing fully managed WAN device for adding, deleting, or modifying DHCP IP Helper information. This service is performed remotely.		
	MWAN – Opt Change Mgmt - IP NAT Configuration	MWAN – Opt Change Mgmt - IP NAT Configuration – Add, modify, and/or delete IP Network Address Translation (NAT) configuration	IPMW0013
485	Bidder's Product Description:  Managed WAN Optional Change Management IP NAT Configuration - This optional service provides router configuration on an existing fully managed WAN device for adding, deleting, or modifying IP NAT configurations entries. This service is performed remotely.		
486	MWAN – Opt Change Mgmt Network Routed Protocol Configuration	MWAN – Opt Change Mgmt Network Routed Protocol Configuration - Add, modify, and/or delete a routed protocol configuration	IPMW0014
	Bidder's Product Description:  Managed WAN Optional Change Management Network Routed Protocol Configuration - This optional service provides router configuration on an existing fully managed router for adding,		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	deleting, or modifying routed protocol entries such as IPX, DLSW, RTP, SIP, HSRP, etc. This service is performed remotely.			
	MWAN – Opt Change Mgmt - MSO IP Address Chg	MWAN – Opt Change Mgmt - MSO IP Address Chg – Add, modify, and/or delete IP addressing information.	IPMW0015	
487	service provides router config	nge Management MSO IP Address Change – This guration on an existing fully managed router for add or Mask per the Managed Services Operations (M	ding, deleting,	
	MWAN – Opt Change Mgmt - Virtual Circuit Chg	MWAN – Opt Change Mgmt - Virtual Circuit Chg – Add, modify, and/or delete virtual circuits.	IPMS0016	
488	Bidder's Product Description:  Managed WAN Optional Change Management Virtual Circuit Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying virtual circuit configurations. This service is performed remotely.			
	MWAN – Opt Change Mgmt- Routing Protocol Chg	MWAN – Opt Change Mgmt- Routing Protocol Chg – Add, modify, and/or delete routing protocol information.	IPMS0017	
489	Bidder's Product Description:  Managed WAN Optional Change Management Routing Protocol Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying routing protocol configuration and entries (static, EIGRP, OSPF, RIP, BGP, etc.). This service is performed remotely.			
	MWAN – Opt Change Mgmt - VPN Tunnel Change	MWAN – Opt Change Mgmt - VPN Tunnel Change – Add, modify, and/or delete a VPN tunnel configuration	IPMW0018	
490	Bidder's Product Description:  Managed WAN Optional Change Management VPN Tunnel Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying Virtual Private Network (VPN) tunnel configuration. This service is performed remotely.			
491	MWAN – Opt Change Mgmt- Bandwidth Change-Physical	MWAN – Opt Change Mgmt- Bandwidth Change-Physical – A configuration change of a router to support an increase or decrease in bandwidth.	IPMW0001	
	Bidder's Product Description:			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
		nge Management Bandwidth Change-Physical – 1 CSU/DSU or router module required to support a c sting router.	
	MWAN – Opt Change Mgmt - Hardware Module Upgrade	MWAN – Opt Change Mgmt - Hardware Module Upgrade – The addition, swap, or removal of a hardware module	IPMW0002
492		on: nge Management Hardware Module Upgrade – Thors swapping of a hardware module on an existing r	
	MWAN – Opt Change Mgmt - Device Move	MWAN – Opt Change Mgmt - Device Move – Relocation of a WAN device between two different locations.	IPMX0004
493	Bidder's Product Description:  Managed WAN Optional Change Management Device Move – This on-site service provides for the relocation of an existing router between two different buildings up to thirty (30) miles apart. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design changes.		
	MWAN – Opt Change Mgmt - Memory Upgrade	MWAN – Opt Change Mgmt - Memory Upgrade – Upgrade memory on an existing router	IPMW0005
494	Bidder's Product Description:  Managed WAN Optional Change Management Memory Upgrade – This on-site service is for upgrading memory capacity on an existing router by adding or swapping flash or RAM modules.		
405	MWAN – Opt Change Mgmt - Device Exchange	MWAN – Opt Change Mgmt - Device Exchange – Substitute a router for another at a given site	IPMW0006
495	Bidder's Product Description:  Managed WAN Optional Change Management Device Exchange – This on-site service provides for swapping out an existing router for another.		
	MWAN – Opt Change Mgmt - IOS Change Support New Features	MWAN – Opt Change Mgmt - IOS Change Support New Features – Install a different version and/or IOS feature set.	IPMW0007
496	Bidder's Product Description:  Managed WAN Optional Change Management IOS Change Support New Features – This service provides for the installation of a new version or feature set of router software in order to support a new feature.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MWAN – Opt Change Mgmt- Traffic Shaping & Queuing Config	MWAN – Opt Change Mgmt- Traffic Shaping & Queuing Config – Add, delete, and/or modify traffic shaping, policing and queuing policies.	IPMW0008
497	Bidder's Product Description:  Managed WAN Optional Change Management Traffic Shaping & Queuing Configuration – This service provides for the addition, deletion, and/or modification of traffic shaping, policing and queuing policies on an existing router. All policies and classification maps will be built on customer provided specification.		
498	MWAN – Opt Change Mgmt - Traffic Filter Design	MWAN – Opt Change Mgmt - Traffic Filter Design – Add, delete, or modify traffic filters	IPMW0009
	Bidder's Product Description:  Managed WAN Optional Change Management Traffic Filter Design – This service provides for the addition, deletion, and/or modification of traffic filters on an existing router.		



## **Managed WAN Optimization (MWOpt)**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MWOpt Accelerator Monitor & Notify - Small	Managed WAN Optimization (MWOpt) Accelerator Monitor & Notify – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification	OPMS0000	
499	Bidder's Product Description:  Verizon is proposing Managed WAN Optimization (MWOpt) to compliment the Managed Wide Area Network (MWAN) Service as an Unsolicited Service Offering in section 1.2. MWOpt Service supports the agencies ability to implement optimization and application accelerators over the MPLS network. State agenices require additional technical support to provide this level of efficency over the MPLS network to maximize data throughput.  Managed WAN Optimization general description applies to the following Managed WAN Optimization line items.  Managed WAN Optimization Services (MWOpt) is an enhancement to Managed WAN Services and is a managed service supporting CPE based application accelerator solutions. Verizon's MWOpt provides monitoring, fault isolation, trouble resolution,			
	MWOpt Accelerator Monitor & Notify - Medium	MWOpt Accelerator Monitor & Notify - Medium	OPMM0000	
500		on: & Notify - Medium provides everything provided ba - Small except for a Medium class of WAN acceler		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MWOpt Accelerator Monitor & Notify - Large	MWOpt Accelerator Monitor & Notify - Large	OPML0000
501		on: & Notify – Large provides everything provided bay - Small except for a Large class of WAN accelerate	
502	MWOpt Accelerator Monitor & Notify – X Large	MWOpt Accelerator Monitor & Notify – X Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification	OPMX0000
		on: & Notify - X Large provides everything provided ba - Small except for an X Large class of WAN accele	
503	MWOpt Accelerator Physical - Small	MWOpt Accelerator Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Physical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification	OPPS0000
	Bidder's Product Description:  MWOpt Accelerator Physical – Small provides all of the monitoring features of MWOpt  Monitory & Notify - Small as well as Verizon owning the resolution of any physical CPE issues.  The customer retains responsibility for resolving all logical CPE issues.		
504	MWOpt Accelerator Physical - Medium	MWOpt Accelerator Physical – Medium features include: Device Availability and Health Monitoring, Fault Isolation, Physical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification	OPPM0000
	Bidder's Product Description:  MWOpt Accelerator Physical – Medium provides all of the monitoring features of MWOpt Monitory & Notify - Medium as well as Verizon owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical CPE issues.		
505	MWOpt Accelerator Physical - Large	MWOpt Accelerator Physical – Large features include: Device Availability and Health Monitoring, Fault Isolation, Physical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification	OPPL0000
	Bidder's Product Description:  MWOpt Accelerator Physical – Large provides all of the monitoring features of Managed WAN Monitory & Notify - Large as well as Verizon owning the resolution of any physical CPE issues.  The customer retains responsibility for resolving all logical CPE issues.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
506	MWOpt Accelerator Physical – X Large	MWOpt Accelerator Physical – X Large features include: Device Availability and Health Monitoring, Fault Isolation, Physical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification	OPPX0000
	Monitory & Notify - X Large a	on:  - X Large provides all of the monitoring features on the second of any physics responsibility for resolving all logical CPE issues.	sical CPE
507	MWOpt Accelerator Full – Small	MWOpt Accelerator Full – Small features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, Proactive Outage Notification, and Application Analysis.	OPFS0000
	Bidder's Product Description:  MWOpt Accelerator Full – Small provides all of the monitoring features of MWOpt Physical - Small as well as Verizon owning the resolution of any logical CPE issues.		
508	MWOpt Accelerator Full – Medium	MWOpt Accelerator Full – Medium features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, Proactive Outage Notification, and Application Analysis.	OPFM0000
	Bidder's Product Description:  MWOpt Accelerator Full – Medium provides all of the monitoring features of MWOpt Physical -  Medium as well as Verizon owning the resolution of any logical CPE issues.		
	MWOpt Accelerator Full – Large	MWOpt Accelerator Full – Large features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, Proactive Outage Notification, and Application Analysis.	OPFL0000
509	Bidder's Product Description:  MWOpt Accelerator Full – Large provides all of the monitoring features of MWOpt Physical -  Large as well as Verizon owning the resolution of any logical CPE issues.		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	-		Bidder's
	Feature Name	Feature Description	Product Identifier
510	MWOpt Accelerator Full – X Large	MWOpt Accelerator Full – X Large features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, Proactive Outage Notification, and Application Analysis.	OPFX0000
		on: Large provides all of the monitoring features of MV wning the resolution of any logical CPE issues.	VOpt Physical –
511	MWOpt Management Console - Small	MWOpt Management Console - Small features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.	OPCS0000
	Bidder's Product Description:  MWOpt Management Console - Small provides management of Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.		
512	MWOpt Management Console – Medium	MWOpt Management Console - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.	ОРСМ0000
	Bidder's Product Description:  MWOpt Management Console - Medium provides management of Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.		
513	MWOpt Management Console – Large	MWOpt Management Console - Large features include: Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.	OPCL0000
	Bidder's Product Description:  MWOpt Management Console - Large provides management of Device Availability and Health Monitoring, Fault Isolation, Physical and Logical Fault Resolution, Trouble Ticket Generation, and Proactive Outage Notification.		
514	MWOpt Managed Implementation	MWOpt Managed Implementation provides customers implementation of new networks to be managed by Verizon.	OPMI0000
	Bidder's Product Description:		



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MWOpt Managed Implementation provides customers implementation of new networks to be managed by Verizon and who 1) do not have existing equipment, and will need to procure new hardware or 2) have existing equipment and want Verizon to reuse existing equipment, reconfigure equipment and provide a design. Customers are required to have their own hardware maintenance agreement.				
515	MWOpt Managed Take- Over	MWOpt Managed Take-Over	OPTO0000		
อาอ	Bidder's Product Description MWOpt Managed Take-Over				
	MWOpt Order Expedite	MWOpt Order Expedite is an add-on service for expediting installation of MWOpt device.	OPOX0000		
516	Bidder's Product Description:  MWOpt Order Expedite provides for an expedited process for activating a MWOpt Full Management option only device in Forty Five (45) days or less.				
	MWOpt OS Change Support New Features	MWOpt OS Change Support New Features – Upgrade OS for supporting new features	OPOS0000		
517	Bidder's Product Description:  MWOpt OS Change Support New Features - This optional service provides resources on an existing fully managed WLAN device for changing or upgrading OS for new features. This service is performed remotely.				
	MWOpt Intra-building Move	MWOpt Intra-building Move – Relocation of a WAN accelerator or management console within a building	OPIB0000		
Bidder's Product Description:  MWOpt Intra-building Move - This optional service provides resources on an eximanaged MWOpt device for relocating an existing WAN accelerator or manager within a given building. This includes dispatching a technician for on-site support management and configuration support and assumes no design change.			ment console		
	MWOpt Device Move	MWOpt Device Move – Relocation of a WAN accelerator or management console between buildings	OPDM0000		
519	Bidder's Product Description:  MWOpt Device Move - This optional service provides resources on an existing fully managed MWOpt device for relocating the WAN accelerator or management console between buildings up to thirty (30) miles apart. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.				



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MWOpt Device Exchange	MWOpt Device Exchange – Swapping out of an existing WAN accelerator or management console	OPDX0000	
520	Bidder's Product Description:  MWOpt Device Exchange - This optional service provides resources on an existing fully managed MWOpt device for swapping the WAN accelerator or management console with a substitute device. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.			
	MWOpt Field Services Dispatch Normal	MWOpt Field Services Dispatch Normal – An hourly service for on-site services during normal business hours.	OPDN0000	
521	Bidder's Product Description:  MWOpt Field Services Dispatch Normal - In lieu of the optional change management per occurrence services described with on premise activities for truck rolls, customers have the option to utilize the established hourly rate. Labor charges will commence upon arrival at customer site. Only the highest single NRC will be charged per device. This optional service provides for dispatch a technician to perform on-site managed services on a time basis at the level of a journeyman during normal business hours. Exclusive of Verizon recognized holidays, Normal Business hours are defined as M-F 8:00 AM to 5:00 PM Pacific Time.			
	MWOpt Field Services Dispatch Off Hours	MWOpt Field Services Dispatch Off Hours – An hourly service for on-site services outside of normal business hours.	OPD00000	
522	Bidder's Product Description:  MWOpt Field Services Dispatch Off Hours - In lieu of the optional change management per occurrence services described with on premise activities for truck rolls, customers have the option to utilize the established hourly rate. Labor charges will commence upon arrival at customer site. Only the highest single NRC will be charged per device. This optional service provides for dispatch a technician to perform on-site managed services on a time basis at the level of a journeyman outside of normal business hours. Exclusive of Verizon recognized holidays, outside of Normal Business hours defined as M-F 8:00 AM to 5:00 PM Pacific Time.			



## **Support Services**

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MPLS Technical Junior Analyst	MPLS Technical Junior Analyst will assist the senior analyst in delivery of all aspects of computing (Layer 4 through Layer 7) to Layer 3 MPLS service. MPLS Technical Junior Analyst will provide specific scope of work to cover the specific requirements as requested by the State.	SSJC0000	
523	Bidder's Product Description			
	MPLS Technical Junior Analyst will assist the senior analyst in delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Junior Analyst will provide specific scope of work to cover the specific requirements as requested by the State. The MPLS Technical Junior Analyst will have 1-3 years' related work experience and 1 or more years of technical experience.			
	MPLS Technical Analyst	MPLS Technical Analyst will assist the senior analysis in delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Analysis will provide specific scope of work to cover the specific requirements as requested by the State.	SSCN0000	
524	Bidder's Product Description:  MPLS Technical Analyst will assist the senior analysis in delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Analyst will provide specific scope of work to cover the specific requirements as requested by the State. The MPLS Technical Analyst will have 2-5 years' related work experience and 3 or more years of technical experience.			
	MPLS Technical Senior Analyst	MPLS Technical Sr Analyst will assist the senior analyst in delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Sr Analyst will provide specific scope of work to cover the specific requirements as requested by the State.	SSSC0000	
525	Bidder's Product Description:  MPLS Technical Sr Analyst will assist the senior analysis in delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Sr Analyst w provide specific scope of work to cover the specific requirements as requested by the Sta The MPLS Technical Sr Analyst will have 5 years' related work experience and 8 or more years of technical experience.			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
526	MPLS Technical Executive Analyst	MPLS Technical Executive Analyst will lead delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Executive Analyst will provide specific scope of work to cover the specific requirements as requested by the State.	SSEC0000		
	Bidder's Product Description:  MPLS Technical Executive Analyst will lead delivery of all aspects of computing (Layer 4 thru Layer 7) to Layer 3 MPLS service. MPLS Technical Executive Analyst will provide specific scope of work to cover the specific requirements as requested by the State. The MPLS Technical Executive Analyst will have 10+ years' of technical experience.				
MPLS	Ancillary Services Regular F	lours			
527	Staging Customer Sw/Rtr/Sec Equip LO Regular Hours	Labor Only (LO) Regular Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate precutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SRSA0000		
		Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/ Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature			



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
		code. Multiple occurrences may be IPR'ed based on volume.	
528	Installation Customer Sw/Rtr/Sec Equip of Device LO Regular Hours	Labor Only (LO) Regular Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed after customer has confirmed devices are onsite and accessible to perform this work.	RSTD0000
		Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
529	Customer Switch Basic On-Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or UPS). Standard Layer 2 configuration with non-default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SWOB0000
3-0		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
530	Customer Switch Advance On-Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access listsRemediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	SWOA0000
531	Customer Router Basic On-Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	RTOB0000
532	Customer Router Advanced On-Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex	RTOA0000



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

,	,		Diddo"
	Feature Name	Feature Description	Bidder's Product Identifier
		Network Address Translation (NAT), complex access lists, Policy-Based Routing (PBR), and non-default security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
533	Customer Security Appliance Basic On-Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.	SAOB0000
534	Customer Security Appliance Advance On- Site Test and Turn-Up LO Regular Hours	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging,	SAOA0000



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Facture Name	Footure Description	Bidder's Product
	Feature Name	Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	Identifier
535	Customer Switch/Router Configuration Support LO Regular Hours	Labor Only (LO) Regular Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), pre-defined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy-Based Routing (PBR), and non-default security. Configuration support will provide industry best practices and align with customer compliancy requirements.  Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	SWRC0000
536	Customer Security Appliance Configuration Support LO Regular Hours	Labor Only (LO) Regular Hours provide customer configuration support related to design assistance for Security Appliance activities to include simple access lists, and Network Address Translation (NAT), Complex access list, extensive Port Address Translation (PAT), Next Generation Security Appliances, IDS, IPS, Policy-Based Routing (PBR). Configuration support will provide industry best practices and align with customer compliancy requirements.  Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	SACS0000



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Technical PM Support Customer Equip LO Regular Hours	Labor Only (LO) Regular Hours Technical Project Management Support provides for installation of devices supporting ancillary services efforts to develop and implement comprehensive project processes and plans. Verizon project manager will coordinate all project resources including customer staff and other resources related to completing the effort.  • Develop and coordinate schedule for	
537		configuration and deployment of customer provided devices.  • Provide periodic status reports and updates to project schedule throughout duration of project.  • Act as liaison between customer point of contact and other resources required to include but not limited to staging, rack and stack, on-site test and turn-up, and configuration support of devices.	PMSP0000
		Provide customer final documentation for final close-out.  Must be ordered in conjunction with CALNET services. Not to exceed 48 hours per project.	
MPLS	Ancillary Services Overtime	IPR may be available based on scope.  Hours	
538	Staging Customer Sw/Rtr/Sec Equip LO Overtime Hours	Labor Only (LO) Overtime Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate precutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and	SRSA0001



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
		hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/ Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
539	Installation Customer Sw/Rtr/Sec Equip of Device LO Overtime Hours	Labor Only (LO) Overtime Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed after customer has confirmed devices are onsite and accessible to perform this work.	RSTD0001
		Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
540	Customer Switch Basic On-Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or	SWOB0001



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

(COIIII			Diddenie
	Feature Name	Feature Description	Bidder's Product Identifier
		UPS). Standard Layer 2 configuration with non-default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
541	Customer Switch Advance On-Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access listsRemediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SWOA0001
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
542	Customer Router Basic On-Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	RTOB0001



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
543	Customer Router Advanced On-Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex Network Address Translation (NAT), complex access lists, Policy-Based Routing (PBR), and non-default security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	RTOA0001
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
544	Customer Security Appliance Basic On-Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SAOB0001
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
545	Customer Security Appliance Advance On- Site Test and Turn-Up LO Overtime Hours	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SAOA0001
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
546	Customer Switch/Router Configuration Support LO Overtime Hours	Labor Only (LO) Overtime Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), pre-defined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy-Based Routing (PBR), and non-default security. Configuration support will provide industry best practices and align with customer compliancy requirements.	SWRC0001
		Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
547	Customer Security Appliance Configuration Support LO Overtime Hours	Labor Only (LO) Overtime Hours provide customer configuration support related to design assistance for Security Appliance activities to include simple access lists, and Network Address Translation (NAT), Complex access list, extensive Port Address Translation (PAT), Next Generation Security Appliances, IDS, IPS, Policy-Based Routing (PBR). Configuration support will provide industry best practices and align with customer compliancy requirements.  Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	SACS0001
548	Technical PM Support Customer Equip LO Overtime Hours	Labor Only (LO) Overtime Hours Technical Project Management Support provides for installation of devices supporting ancillary services efforts to develop and implement comprehensive project processes and plans. Verizon project manager will coordinate all project resources including customer staff and other resources related to completing the effort.  • Develop and coordinate schedule for configuration and deployment of customer provided devices.  • Provide periodic status reports and updates to project schedule throughout duration of project.  • Act as liaison between customer point of contact and other resources required to include but not limited to staging, rack and stack, on-site test and turn-up, and configuration support of devices.  Provide customer final documentation for final close-out.  Must be ordered in conjunction with CALNET services. Not to exceed 48 hours per project. IPR may be available based on scope.	PMSP0001



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Eggture Name	Eggturo Description	Bidder's Product
549	Staging Customer Sw/Rtr/Sec Equip LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holilday Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate precutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/ Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	Identifier SRSA0002
550	Installation Customer Sw/Rtr/Sec Equip of Device LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed	RSTD0002



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	,		Diddor's
	Feature Name	Feature Description	Bidder's Product Identifier
		after customer has confirmed devices are onsite and accessible to perform this work.  Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
551	Customer Switch Basic On-Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or UPS). Standard Layer 2 configuration with non-default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	SWOB0002
552	Customer Switch Advance On-Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sundya and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access listsRemediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of	SWOA0002



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
		device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
553	Customer Router Basic On-Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	RTOB0002
554	Customer Router Advanced On-Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex Network Address Translation (NAT), complex access lists, Policy-Based Routing (PBR), and non-default security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.  Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature	RTOA0002



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
555	Customer Security Appliance Basic On-Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SAOB0002
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.	
556	Customer Security Appliance Advance On- Site Test and Turn-Up LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required.	SAOA0002
		Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may be IPR'ed based on volume.	
557	Customer Switch/Router Configuration Support LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access	SWRC0002



Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

`	,		Bidder's
	Feature Name	Feature Description	Product Identifier
		lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), pre-defined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy-Based Routing (PBR), and non-default security. Configuration support will provide industry best practices and align with customer compliancy requirements.  Must be ordered in conjunction with CALNET	
		services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	
558	Customer Security Appliance Configuration Support LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours provide customer configuration support related to design assistance for Security Appliance activities to include simple access lists, and Network Address Translation (NAT), Complex access list, extensive Port Address Translation (PAT), Next Generation Security Appliances, IDS, IPS, Policy-Based Routing (PBR). Configuration support will provide industry best practices and align with customer compliancy requirements.	SACS0002
		Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may be IPR'ed based on scope.	
559	Technical PM Support Customer Equip LO Sunday and Holiday Hours	Labor Only (LO) Sunday and Holiday Hours Technical Project Management Support provides for installation of devices supporting ancillary services efforts to develop and implement comprehensive project processes and plans. Verizon project manager will coordinate all project resources including customer staff and other resources related to completing the effort.	PMSP0002
		<ul> <li>Develop and coordinate schedule for configuration and deployment of customer provided devices.</li> <li>Provide periodic status reports and updates to project schedule throughout duration of project.</li> </ul>	

Table 1.2.2.8.3.b Unsolicited MPLS Port, Access and Router Bundled Transport Speeds (continued)

Feature Name	Feature Description	Bidder's Product Identifier
	Act as liaison between customer point of contact and other resources required to include but not limited to staging, rack and stack, on-site test and turn-up, and configuration support of devices.  Provide customer final documentation for final close-out.	
	Must be ordered in conjunction with CALNET services. Not to exceed 48 hours per project. IPR may be available based on scope.	

# 1.2.2.8.4 MPLS Port, Access and Router Bundled On-Net Transport Speeds Table 1.2.2.8.4.a, MPLS Port, Access and Router Bundled On-Net Transport Speeds

	Requirement		dder ees? N	Bidder's Product Identifier	
1	MPLS port, access and router on-net Transport service at minimum line rate of 155 Mbps (OC3)	Υ		MONN0155	
Bidder's Product Description:  Verizon's MPLS network will provide an On-Net transport services at a minimum line rate of 15 Mbps (OC3). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
2	MPLS port, access and router on-net Transport service at minimum line rate of 625 Mbps (OC12	Y		MONN0625	
	Bidder's Product Description:  Verizon's MPLS network will provide an On-Net transport services at a minimum line rate of 625 Mbps (OC12). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



	Bidder Agrees? Requirement Y N		ees?	Bidder's Product Identifier	
3	MPLS port, access and router on-net Transport service at minimum line rate of 2.5 Gbps (OC48)	Y		MONN2500	
Bidder's Product Description:  Verizon's MPLS network will provide an On-Net transport services at a minimum line rate of 2.5 Gbps (OC48). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
4	MPLS port, access and router on-net Transport service at minimum line rate of 10 Gbps (OC192)	Υ		MONN1000	
	Bidder's Product Description:  Verizon's MPLS network will provide an On-Net transport services at a minimum line rate of 10 Gbps (OC192). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				

The Contractor may offer additional unsolicited MPLS Port, Access and Router Bundled On-Net Transport Speeds in Table 1.2.2.8.4.b.



#### Table 1.2.2.8.4.b Unsolicited MPLS Port, Access and Router Bundled On-Net Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier
1			
Ľ	Bidder's Product Desc	cription:	
2			
	Bidder's Product Desc	cription:	
3			
3	Bidder's Product Desc	cription:	

#### 1.2.2.8.5 MPLS Port, Access and Router Bundled Off-Net Transport Speeds Table 1.2.2.8.5.a, MPLS Port, Access and Router Bundled Off-Net Transport Speeds

	Requirement		dder rees? N	Bidder's Product Identifier
1	MPLS port, access and router off-net Transport service at minimum line rate of 155 Mbps (OC3)	Υ		MOFN0155
Bidder's Product Description:  Verizon's MPLS network will provide an Off-Net transport services at a minimum line rate of 155 Mbps (OC3). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
2	MPLS port, access and router off-net Transport service at minimum line rate of 625 Mbps (OC12)	Υ		MOFN0625
Bidder's Product Description:  Verizon's MPLS network will provide an Off-Net transport services at a minimum line rate of 625 Mbps (OC12). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
3	MPLS port, access and router off-net Transport service at minimum line rate of 2.5 Gbps (OC48)	Υ		MOFN2500
Bidder's Product Description:  Verizon's MPLS network will provide an Off-Net transport services at a minimum line rate of 2.5 Gbps (OC48). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



Table 1.2.2.8.5.a, MPLS Port, Access and Router Bundled Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier	
4	MPLS port, access and router off-net Transport service at minimum line rate of 10 Gbps (OC192)	Υ		MOFN1000	
	Bidder's Product Description:  Verizon's MPLS network will provide an Off-Net transport services at a minimum line rate of 10 Gbps (OC192). Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				

The Contractor may offer additional unsolicited MPLS Port, Access and Router Bundled Off-Net Transport Speeds in Table 1.2.2.8.5.b.

Table 1.2.2.8.5.b Unsolicited MPLS Port, Access and Router Bundled Off-Net Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier				
1							
	Bidder's Product Desc	cription:					
2							
2	Bidder's Product Desc	cription:					
	Bidder's Product Description:						



## 1.2.2.8.6 MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds

Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds

	Requirement		idder rees? N	Bidder's Product Identifier	
1	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of one (1) Mbps	Y		MONT0001	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one (1) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
2	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of two (2) Mbps	Y		MONT0002	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of two (2) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
3	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of three (3) Mbps	Y		MONT0003	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service three (3) Mbps. Verizon will provide the required bundled router, n MPLS Port and Access.				
4	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of four (4) Mbps	Υ		MONT0004	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of four (4) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
5	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of five (5) Mbps	Υ		MONT0005	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service (5) Mbps. Verizon will provide the required bundled router, managand Access.				



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

_		Bi	idder	Bidder's	
	Requirement		rees?	Product Identifier	
6	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of six (6) Mbps	Υ		MONT0006	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of six (6) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
7	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of seven (7) Mbps	Υ		MONT0007	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of seven (7) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
8	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of eight (8) Mbps	Υ		MONT0008	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service (8) Mbps. Verizon will provide the required bundled router, managand Access.				
9	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of nine (9) Mbps	Υ		MONT0009	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of nine (9) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
10	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 10 Mbps	Υ		MONT0010	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 10 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier	
11	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 20 Mbps	Υ		MONT0020	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.				
12	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 30 Mbps	Y		MONT0030	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 30 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
13	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 40 Mbps	Y		MONT0040	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.				
14	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 50 Mbps	Υ		MONT0050	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 50 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
15	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 60 Mbps	Υ		MONT0060	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.				



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement	Bidder Agrees? Y N		Bidder's Product Identifier	
16	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 70 Mbps	Y		MONT0070	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 70 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
17	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 80 Mbps	Υ		MONT0080	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 80 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
18	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 90 Mbps	Y		MONT0090	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.				
19	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 100 Mbps	Y		MONT0100	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 100 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
20	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 150 Mbps	Y		MPAE0150	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.				



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		idder rees? N	Bidder's Product Identifier		
21	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 200 Mbps	Y		MONT0200		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 200 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
22	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 250 Mbps	Y		MPAE0250		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 250 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
23	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 300 Mbps	Y		MONT0300		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.	eat a n	ninimum the route	line rate of 300 er, MPLS Port		
24	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 400 Mbps	Y		MONT0400		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 400 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
25	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 450 Mbps	Y		MPAE0450		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 450 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



### Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
26	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 500 Mbps	Y		MONT0500		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 500 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
27	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 600 Mbps	Y		MONT0600		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 600 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
28	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 700 Mbps	Υ		MONT0700		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service Mbps. Verizon will provide the required bundled router, management and Access.					
29	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 800 Mbps	Y		MPAE0800		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 800 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
30	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 900 Mbps	Y		MONT0900		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of 900 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		idder rees? N	Bidder's Product Identifier		
31	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of one (1) Gbps	Y		MONT1000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service (1) Gbps. Verizon will provide the required bundled router, manag and Access.					
32	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 2 Gbps	Υ		MPRE2000		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
33	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 2.5 Gbps	Υ		MPRE2005		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 2.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
34	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 3 Gbps	Υ		MPRE3000		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service Gbps. Verizon will provide the required bundled router, management and Access.	at a ment of	ninimum the route	line rate of one 3 er, MPLS Port		
35	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 3.5 Gbps	Υ		MPRE3005		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 3.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
36	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 4 Gbps	Υ		MPRE4000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 4 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



### Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		idder rees? N	Bidder's Product Identifier		
37	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 4.5 Gbps	Y		MPRE4005		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service 4.5 Gbps. Verizon will provide the required bundled router, manage Port and Access.	at a n emen	ninimum t of the r	line rate of one outer, MPLS		
38	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 5 Gbps	Υ		MPRE5000		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
39	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 5.5 Gbps	Υ		MPRE5005		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 5.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
40	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 6 Gbps	Y		MPRE6000		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service Gbps. Verizon will provide the required bundled router, management and Access.					
41	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 6.5 Gbps	Υ		MPRE6005		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 6.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
42	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 7 Gbps	Υ		MPRE7000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 7 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.6.a, MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (continued)

	Requirement		idder rees? N	Bidder's Product Identifier		
43	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 7.5 Gbps	Υ		MPRE7005		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service 7.5 Gbps. Verizon will provide the required bundled router, manage Port and Access.					
44	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 8 Gbps	Υ		MPRE8000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 8 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
45	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 8.5 Gbps	Υ		MPRE8005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 8.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
46	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 9 Gbps	Υ		MPRE9000		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service Gbps. Verizon will provide the required bundled router, management and Access.	at a n	ninimum the route	line rate of one 9 er, MPLS Port		
47	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 9.5 Gbps	Y		MPRE9005		
	Bidder's Product Description: Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 9.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
48	MPLS port, access and router Ethernet on-net Transport service at minimum line rate of 10 Gbps	Y		MPEO1000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet on-net Transport service at a minimum line rate of one 10 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



The Contractor may offer additional unsolicited MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds in Table 1.2.2.8.6.b.

Table 1.2.2.8.6.b Unsolicited MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier					
1								
	Bidder's Product Desc							
2								
_	Bidder's Product Desc	cription:						
3	Bidder's Product Description:							

### 1.2.2.8.7 MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds

### Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds

	Requirement		dder rees? N	Bidder's Product Identifier		
1	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one (1) Mbps	Υ		MOFT0001		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one (1) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
2	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of two (2) Mbps	Υ		MOFT0002		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of two (2) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



#### Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
3	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of three (3) Mbps	Υ		MOFT0003		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of three (3) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
4	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of four (4) Mbps	Y		MOFT0004		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of four (4) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
5	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of five (5) Mbps	Υ		MOFT0005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service (5) Mbps. Verizon will provide the required bundled router, manage Port and Access.					
6	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of six (6) Mbps	Υ		MOFT0006		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of six  (6) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
7	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of seven (7) Mbps	Υ		MOFT0007		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of seven (7) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	,	Bi	dder	Bidder's	
	Requirement		rees?	Product Identifier	
8	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of eight (8) Mbps	Y		MOFT0008	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of eight (8) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
9	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of nine (9) Mbps	Y		MOFT0009	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of nine (9) Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
10	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 10 Mbps	Y		MOFT0010	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service and Mbps. Verizon will provide the required bundled router, manageme and Access.				
11	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 20 Mbps	Y		MOFT0020	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 20 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
12	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 30 Mbps	Υ		MOFT0030	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 30 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

		Bi	dder	Bidder's	
	Requirement		rees?	Product Identifier	
13	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 40 Mbps	Y		MOFT0040	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 40 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
14	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 50 Mbps	Y		MOFT0050	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 50 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
15	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 60 Mbps	Υ		MOFT0060	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service Mbps. Verizon will provide the required bundled router, manageme and Access.				
16	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 70 Mbps	Υ		MOFT0070	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 70 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
17	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 80 Mbps	Υ		MOFT0080	
	at minimum line rate of 80 Mbps  Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 80 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
18	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 90 Mbps	Y		MOFT0090		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 90 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
19	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 100 Mbps	Y		MOFT0100		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 100 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
20	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 150 Mbps	Υ		MPBO0150		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service Mbps. Verizon will provide the required bundled router, manageme and Access.					
21	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 200 Mbps	Υ		MOFT0200		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 200 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
21a	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 250 Mbps	Υ		MOFT0250		
	Bidder's Product Description:  MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 250 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
22	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 300 Mbps	Υ		MOFT0300		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 300 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.						
23	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 400 Mbps	Υ		MOFT0400		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 400 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
24	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 450 Mbps	Υ		MPBO0450		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service Mbps. Verizon will provide the required bundled router, manageme and Access.					
25	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 500 Mbps	Υ		MOFT0500		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 500 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
26	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 600 Mbps	Υ		MOFT0600		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 600 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier	
27	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 700 Mbps	Υ		MOFT0700	
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 700 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
28	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 800 Mbps	Υ		MPBO0800	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of 800 Mbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
29	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of 900 Mbps	Υ		MOFT0900	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service  Mbps. Verizon will provide the required bundled router, manageme and Access.				
30	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one (1) Gbps	Υ		MOFT1000	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one (1) Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				
31	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 2 Gbps	Υ		MPBO2000	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 2 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				



#### Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

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	Requirement		dder rees? N	Bidder's Product Identifier				
32	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 2.5 Gbps	Y		MPBO2005				
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 2.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.							
33	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 3 Gbps	Y		MPBO3000				
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 3 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.							
34	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 3.5 Gbps	Y		MPBO3005				
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 3.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.							
35	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 4 Gbps	Υ		MPBO4000				
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 4 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.							
36	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 4.5 Gbps	Y		MPBO4005				
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 4.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.							



#### Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
37	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 5 Gbps	Υ		MPBO5000		
Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Por and Access.						
38	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 5.5 Gbps	Y		MPBO5005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 5.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
39	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 6 Gbps	Y		MPBO6000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at 6 Gbps. Verizon will provide the required bundled router, management and Access.					
40	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 6.5 Gbps	Υ		MPBO6005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 6.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
41	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 7 Gbps	Υ		MPBO7000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 7 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement		dder rees? N	Bidder's Product Identifier		
42	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 7.5 Gbps	Υ		MPBO7005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of or 7.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
43	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 8 Gbps	Υ		MPBO8000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 8 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Por and Access.					
44	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 8.5 Gbps	Υ		MPBO8005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 8.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
45	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 9 Gbps	Υ		MPBO9000		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 9 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					
46	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 9.5 Gbps	Y		MPBO9005		
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 9.5 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.					



Table 1.2.2.8.7.a, MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (continued)

	Requirement			Bidder's Product Identifier	
47	MPLS port, access and router Ethernet off-net Transport service at minimum line rate of one 10 Gbps	Y		MPEB1000	
	Bidder's Product Description:  Verizon's MPLS will provide an Ethernet off-net Transport service at a minimum line rate of one 10 Gbps. Verizon will provide the required bundled router, management of the router, MPLS Port and Access.				

The Contractor may offer additional unsolicited MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds in Table 1.2.2.8.7.b.

Table 1.2.2.8.7.b Unsolicited MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds

	Feature Name	Feature Description	Bidder's Product Identifier			
1						
	Bidder's Product Description:					
2						
	Bidder's Product Description:					
3	Bidder's Product Description:					



#### 1.2.2.8.8 MPLS VSAT Service

Table 1.2.2.8.8 MPLS VSAT Service

	Feature Name	Feature Description	Bidder's Product Identifier		
VSAT	Terminal Antenna				
1	VSAT Site Pre- Qualification	VSAT Site Pre-Qualification conducted by Verizon field personnel. This exercise is required to provide a valid quote to scope the VSAT Terminal Antenna and Antenna Mounts and system that will vary based on the site location environment (i.e. size of antenna, high-wind and de-Ice options). This effort includes, but not limited to, satellite line of site confirmation, outdoor antenna placement, mount type selection, Inter Facility Link (IFL) cable placement, cable run length requirements between outdoor equipment and the indoor satellite router. This activity is required before a valid quote is assembled for any location.	VSRV0000		
	Bidder's Product Description:  VSAT Site Pre-Qualification conducted by Verizon field personnel. This exercise is required to provide a valid quote to scope the VSAT Terminal Antenna and Antenna Mounts and system that will vary based on the site location environment (i.e. size of antenna, high-wind and de-Ice options). This effort includes, but not limited to, satellite line of site confirmation, outdoor antenna placement, mount type selection, Inter Facility Link (IFL) cable placement, cable run length requirements between outdoor equipment and the indoor satellite router. This activity is required before a valid quote is assembled for any location.				
	Site Ready Installation Standard – .98 Meter Antenna 3w Kit	A fixed VSAT system with a .98m antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 256Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSIU0001		
2	Noise Block Converte Site Pre-Qualification of outdoor antenna, a cable placement from (grounding included o 32Kbps to 256Kbps th	cription: with a .98m antenna, 3 Watt Block Up Converter (BUC), Spar (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (I is required and includes confirmation of satellite line of site, intenna mount selection type, confirm customer provided pat roof/pole to Router/Modem room closet and location for rounn antenna and BUC). This system supports transmission spinat connects to the Wireline service (MPLS Network). VSAT width and Site Pre-Qualification is ordered separately.	FL) Cable. VSAT define placement h for RG6 IFL ter/modem eeds between		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Site Ready Installation Standard – .98 Meter Antenna 4w Kit	A fixed VSAT system with a .98m antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSIU0003
3	Noise Block Converte Site Pre-Qualification of outdoor antenna, at cable placement from (grounding included o 32Kbps to 512Kbps th	cription: with a .98m antenna, 4 Watt Block Up Converter (BUC), Spar (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (I is required and includes confirmation of satellite line of site, ntenna mount selection type, confirm customer provided path roof/pole to Router/Modem room closet and location for routing antenna and BUC). This system supports transmission spart connects to the Wireline service (MPLS Network). VSAT width and Site Pre-Qualification is ordered separately.	FL) Cable. VSAT define placement h for RG6 IFL ter/modem eeds between
	Site Ready Installation Standard – .98 Meter Deice Antenna 3w Kit	A fixed VSAT system with a .98m antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 256Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSIU0002
4	· · · · · · · · · · · · · · · · · · ·		
5	Site Ready Installation Standard – .98 Meter Deice Antenna 4w Kit	A fixed VSAT system with a .98m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSIU0004



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier			
	Bidder's Product Description: A fixed VSAT system with a .98m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					
	Site Ready Installation Standard – 1.2 Meter Antenna 3w Kit	A fixed VSAT system with a 1.2m antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTI0003			
6	Bidder's Product Description: A fixed VSAT system with a 1.2m antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSA Site Pre-Qualification is required and includes confirmation of satellite line of site, define placeme of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					
	Site Ready Installation Standard – 1.2 Meter Antenna 4w Kit	A fixed VSAT system with a 1.2m antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTI0004			
7	Bidder's Product Description: A fixed VSAT system with a 1.2m antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Site Ready Installation Standard – 1.2 Meter Antenna 6w Kit	A fixed VSAT system with a 1.2m antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately	VSTI0006
8	Noise Block Converte Site Pre-Qualification of outdoor antenna, a cable placement from (grounding included o 32Kbps to 1.5Mbps th	cription: with a 1.2m antenna, 6 Watt Block Up Converter (BUC), Spar (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (I is required and includes confirmation of satellite line of site, intenna mount selection type, confirm customer provided pat roof/pole to Router/Modem room closet and location for round antenna and BUC). This system supports transmission spart connects to the Wireline service (MPLS Network). VSAT width and Site Pre-Qualification is ordered separately.	FL) Cable. VSAT define placement h for RG6 IFL ter/modem eeds between
	Site Ready Installation Standard – 1.2 Meter Antenna 8w Kit	A fixed VSAT system with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTI0008
9	Noise Block Converte Site Pre-Qualification of outdoor antenna, a cable placement from (grounding included o 32Kbps to 2Mbps that	cription: with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Spar (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (I is required and includes confirmation of satellite line of site, intenna mount selection type, confirm customer provided pat roof/pole to Router/Modem room closet and location for rourn antenna and BUC). This system supports transmission spate connects to the Wireline service (MPLS Network). VSAT Arwidth and Site Pre-Qualification is ordered separately.	FL) Cable. VSAT define placement h for RG6 IFL ter/modem eeds between
10	Site Ready Installation High- Wind – 1.2 Meter Antenna 3w Kit	A fixed VSAT system with a 1.2m High-Wind antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSHW0003



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier			
	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					
	Site Ready Installation High- Wind – 1.2 Meter Antenna 4w Kit	A fixed VSAT system with a 1.2m High-Wind antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSHW0004			
11	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna, 4 Watt Block Up Converter (BUC), Spa BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IF Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site define placement of outdoor antenna, antenna mount selection type, confirm customer provide path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSA Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					
	Site Ready Installation High- Wind – 1.2 Meter Antenna 6w Kit	A fixed VSAT system with a 1.2m High-Wind antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSHW0006			
12	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.					



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Site Ready Installation High- Wind – 1.2 Meter Antenna 8w Kit	A fixed VSAT system with a 1.2m High-Wind antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSHW0008
13	BUC, Low Noise Bloc Cable. VSAT Site Pre define placement of o path for RG6 IFL cable router/modem (ground speeds between 32Kb	cription: with a 1.2m High-Wind antenna, 8 Watt Block Up Converter k Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Fac-Qualification is required and includes confirmation of satellicutdoor antenna, antenna mount selection type, confirm custon e placement from roof/pole to Router/Modem room closet are ding included on antenna and BUC). This system supports trops to 2Mbps that connects to the Wireline service (MPLS Ner/Modem, Bandwidth and Site Pre-Qualification is ordered service.	cility Link (IFL) te line of site, omer provided nd location for ansmission etwork). VSAT
	Site Ready Installation Standard – 1.2 Meter Deice Antenna 3w Kit	A fixed VSAT system with a 1.2m antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTD0003
Bidder's Product Description: A fixed VSAT system with a 1.2m antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confir satellite line of site, define placement of outdoor antenna, antenna mount selection type, customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem ro and location for router/modem (grounding included on antenna and BUC). This system st transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is separately.			
15	Site Ready Installation Standard – 1.2 Meter Deice Antenna 4w Kit	A fixed VSAT system with a 1.2m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTD0004



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: A fixed VSAT system with a 1.2m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room close and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
	Site Ready Installation Standard – 1.2 Meter Deice Antenna 6w Kit	A fixed VSAT system with a 1.2m antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTD0006		
16	Bidder's Product Description: A fixed VSAT system with a 1.2m antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room clos and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is orderer separately.				
17	Site Ready Installation Standard – 1.2 Meter Deice Antenna 8w Kit	A fixed VSAT system with a 1.2m antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSTD0008		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: A fixed VSAT system with a 1.2m antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
18	Site Ready Installation High- Wind- 1.2 Meter Deice Antenna 3w Kit	A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHWD0003
	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
19	Site Ready Installation High- Wind– 1.2 Meter Deice Antenna 4w Kit	A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHWD0004



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
20	Site Ready Installation High- Wind– 1.2 Meter Deice Antenna 6w Kit	A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHWD0006
	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
21	Site Ready Installation High- Wind– 1.2 Meter Deice Antenna 8w Kit	A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHWD0008



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: A fixed VSAT system with a 1.2m High-Wind antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
22	Site Ready Installation Standard – 1.8 Meter Antenna 3w Kit	A fixed VSAT system with a 1.8m antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSNI0003
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
23	Site Ready Installation Standard – 1.8 Meter Antenna 4w Kit	A fixed VSAT system with a 1.8m antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSNI0004
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Site Ready Installation Standard – 1.8 Meter Antenna 6w Kit	A fixed VSAT system with a 1.8m antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSNI0006
24	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
25	Site Ready Installation Standard – 1.8 Meter Antenna 8w Kit	A fixed VSAT system with a 1.8m antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSNI0008
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
26	Site Ready Installation High- Wind – 1.8 Meter Antenna 3w Kit	A fixed VSAT system with a 1.8m High-Wind antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHNI0003



Table 1.2.2.8.8 MPLS VSAT Service (continued)

			Bidder's
	Feature Name	Feature Description	Product Identifier
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
27	Site Ready Installation High- Wind – 1.8 Meter Antenna 4w Kit	A fixed VSAT system with a 1.8m High-Wind antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHNI0004
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		
28	Site Ready Installation High- Wind – 1.8 Meter Antenna 6w Kit	A fixed VSAT system with a 1.8m High-Wind antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHNI0006
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
29	Site Ready Installation High- Wind – 1.8 Meter Antenna 8w Kit	A fixed VSAT system with a 1.8m High-Wind antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHNI0008	
	Bidder's Product Description:  A fixed VSAT system with a 1.8m High-Wind antenna, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.			
30	Site Ready Installation Standard – 1.8 Meter Deice Antenna 3w Kit	A fixed VSAT system with a 1.8m antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately	VSND0003	
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.			
31	Site Ready Installation Standard – 1.8 Meter Deice Antenna 4w Kit	A fixed VSAT system with a 1.8m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSND0004	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
	Site Ready Installation Standard – 1.8 Meter Deice Antenna 6w Kit	A fixed VSAT system with a 1.8m antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSND0006		
32	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
33	Site Ready Installation Standard – 1.8 Meter Deice Antenna 8w Kit	A fixed VSAT system with a 1.8m antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VSND0008		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: A fixed VSAT system with a 1.8m antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
34	Site Ready Installation High- Wind– 1.8 Meter Deice Antenna 3w Kit	A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHND0003		
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 3 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 512Kbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
35	Site Ready Installation High- Wind– 1.8 Meter Deice Antenna 4w Kit	A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. V This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHND0004		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 4 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
36	Site Ready Installation High- Wind– 1.8 Meter Deice Antenna 6w Kit	A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHND0006		
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 6 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 1.5Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
37	Site Ready Installation High- Wind – 1.8 Meter Deice Antenna 8w Kit	A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.	VHND0008		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: A fixed VSAT system with a 1.8m High-Wind antenna with automatic deice system, 8 Watt Block Up Converter (BUC), Spare BUC, Low Noise Block Converter (LNB), Spare LNB, 250 Feet Dual RG6 Inter Facility Link (IFL) Cable. VSAT Site Pre-Qualification is required and includes confirmation of satellite line of site, define placement of outdoor antenna, antenna mount selection type, confirm customer provided path for RG6 IFL cable placement from roof/pole to Router/Modem room closet and location for router/modem (grounding included on antenna and BUC). This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). VSAT Antenna Mount, Router/Modem, Bandwidth and Site Pre-Qualification is ordered separately.				
VSAT	Antenna Mounts (req	uired with VSAT Terminal Antenna)			
38	Mount, Non- Penetrating, for 1.2m Antenna = 37.5 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 6.25' x 6.00' = 37.5 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast (2 - Ballast Trays/ 16 Blocks ). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAN0037		
30	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 6.25' x 6.00' = 37.5 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast (2 - Ballast Trays/ 16 Blocks ). VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Non- Penetrating, for 1.2m Antenna = 54.2 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 6.25' x 8.67' = 54.2 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast (4 - Ballast Trays/ 32 Blocks ). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAN0054		
39	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 6.25' x 8.67' = 54.2 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast (4 - Ballast Trays/ 32 Blocks ). VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Non- Penetrating, for 1.2m High-Wind Antenna = 118.8 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 10.9' x 10.9' = 118.8 sq.ft. w/Pad's for 1.2m High-Wind antenna w/2.88" O.D. x 36" Mast (1 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAN0118		
40	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 10.9' x 10.9' = 118.8 sq.ft. w/Pad's for 1.2m  High-Wind antenna w/2.88" O.D. x 36" Mast (1 - Ballast Tray per Leg ). VSAT Site Pre-  Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT  Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Mount, Non- Penetrating, for 1.2m High-Wind Antenna = 182.3 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 13.5' x 13.5' = 182.3 sq.ft. w/Pad's for 1.2m High-Wind antenna w/2.88" O.D. x 36" Mast (2 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAN0182	
41	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 13.5' x 13.5' = 182.3 sq.ft. w/Pad's for 1.2m  High-Wind antenna w/2.88" O.D. x 36" Mast (2 - Ballast Tray per Leg ). VSAT Site Pre-  Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT  Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
42	Mount, Non- Penetrating, for 1.8m Antenna = 118.8 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 10.9' x 10.9' = 118.8 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast (1 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNP0118	
42	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 10.9' x 10.9' = 118.8 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast (1 - Ballast Tray per Leg ). VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
40	Mount, Non- Penetrating, for 1.8m Antenna = 182.3 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 13.5' x 13.5' = 182.3 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast (2 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNP0182	
43	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 13.5' x 13.5' = 182.3 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast (2 - Ballast Tray per Leg ). VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
44	Mount, Non- Penetrating, for 1.8m High-Wind Antenna = 244.61 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 15.64' x 15.64' = 244.61 sq.ft. w/Pad's for 1.8m High-Wind antenna w/6.62" O.D. x 36" Mast (3 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNH0244	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	ubic 1.2.2.0.0 km 20 VOAT Oct Vioc (continued)				
	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: VSAT Antenna Mount includes a Non-Penetrating, 15.64' x 15.64' = 244.61 sq.ft. w/Pad's for 1.8m High-Wind antenna w/6.62" O.D. x 36" Mast (3 - Ballast Tray per Leg ). VSAT Site Pre- Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
45	Mount, Non- Penetrating, for 1.8m High-Wind Antenna = 313.3 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating, 17.7' x 17.7' = 313.3 sq.ft. w/Pad's for 1.8m High-Wind antenna w/6.62" O.D. x 36" Mast (4 - Ballast Tray per Leg). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNH0313		
	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating, 17.7' x 17.7' = 313.3 sq.ft. w/Pad's for 1.8m  High-Wind antenna w/6.62" O.D. x 36" Mast (4 - Ballast Tray per Leg ). VSAT Site Pre-  Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT  Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
46	Mount, Non- Penetrating Ridgemount, for 1.2m Antenna = 53.7 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 6.4' x 8.4' = 53.7 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAR0053		
	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 6.4' x 8.4' = 53.7 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
47	Mount, Non- Penetrating Ridgemount, for 1.2m Antenna = 107 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 10' x 10.7' = 107 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTAR0107		
	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 10' x 10.7' = 107 sq.ft. w/Pad's for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
48	Mount, Non- Penetrating Ridgemount, for 1.8m Antenna = 107 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 10' x 10.7' = 107 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTNR0107		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 10' x 10.7' = 107 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Non- Penetrating Ridgemount, for 1.8m Antenna = 170.2 sq.ft.	VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 13.3' x 12.8' = 170.2 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VTNR0170		
49	Bidder's Product Description:  VSAT Antenna Mount includes a Non-Penetrating Ridgemount, 13.3' x 12.8' = 170.2 sq.ft. w/Pad's for 1.8m antenna w/4.00" O.D. x 36" Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Wall Mount, for 1.2m antenna	VSAT Antenna Mount includes a Wall Mount for 1.2m antenna w/2.88" O.D. Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMWM0000		
50	Bidder's Product Description: VSAT Antenna Mount includes a Wall Mount for 1.2m antenna w/2.88" O.D. Mast. VSAT Site Pre- Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Universal Beam Mount for 1.2m antenna	VSAT Antenna Mount includes a Universal I-Beam Mount for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMUB0000		
51	Bidder's Product Description: VSAT Antenna Mount includes a Universal I-Beam Mount for 1.2m antenna w/2.88" O.D. x 36" Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
52	Mount, Wall Mount w/23" offset from wall for 1.8m antenna	VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 23" Offset from the wall. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMWL0023		
	Bidder's Product Description:  VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 23" Offset from the wall. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				



Table 1.2.2.8.8 MPLS VSAT Service (continued)

		,	Diddor'o	
	Feature Name	Feature Description	Bidder's Product Identifier	
	Mount, Wall Mount w/36" offset from wall for 1.8m antenna	Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 36" Offset from the wall. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMWL0036	
53	Bidder's Product Description: Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 36" Offset from the wall. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
	Mount, Wall Mount w/48" offset from wall for 1.8m antenna	VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 48" Offset from the wall. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMWL0048	
54	Bidder's Product Description: VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 48" Offset from the wall. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
	Mount, Wall Mount w/60" offset from wall for 1.8m antenna	VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 60" Offset from the wall. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMWL0060	
55	Bidder's Product Description: VSAT Antenna Mount includes a Wall Mount for 1.8m antenna w/4.00" O.D. Mast with 60" Offset from the wall. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
56	Mount, Ground Pole, for 1.2m Antenna	VSAT Antenna Mount includes a Ground Pole Mount for 1.2m antenna w/2.88" O.D. x 8' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMGP0000	
	Bidder's Product Description:  VSAT Antenna Mount includes a Ground Pole Mount for 1.2m antenna w/2.88" O.D. x 8' Mast.  VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.			
57	Mount, Ground Pole, for 1.8m Antenna	VSAT Antenna Mount includes a Ground Pole Mount for 1.8m antenna w/4.00" O.D. x 9' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNG0000	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: VSAT Antenna Mount includes a Ground Pole Mount for 1.8m antenna w/4.00" O.D. x 9' Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Ground Pole, for 1.8m High- Wind Antenna	VSAT Antenna Mount includes a Ground Pole Mount for 1.8m High-Wind antenna w/6.62" O.D. x 10.5' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMHW0000		
58	Bidder's Product Description: VSAT Antenna Mount includes a Ground Pole Mount for 1.8m High-Wind antenna w/6.62" O.D. x 10.5' Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
	Mount, Ground Pole Stabilizer w/23" Offset from wall	VSAT Antenna Mount includes a Ground Pole Mount Stabilizer with 23" Offset from the wall. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VGPS0000		
59	Bidder's Product Description: VSAT Antenna Mount includes a Ground Pole Mount Stabilizer with 23" Offset from the wall. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
00	Mount, Pedestal Mount for 1.2m Antenna	VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.2m antenna w/2.88" O.D. (S40) x 3' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMPM0000		
60	Bidder's Product Description: VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.2m antenna w/2.88" O.D. (S40) x 3' Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
61	Mount, Pedestal Mount for 1.8m Antenna	VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.8m antenna w/4.00" O.D. (S40) x 4' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMPD0000		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description:  VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.8m antenna w/4.00"  O.D. (S40) x 4' Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
62	Mount, Pedestal Mount for 1.8m High-Wind Antenna	VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.8m High-Wind antenna w/6.62" O.D. (S80) x 6' Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VPHW0000		
	Bidder's Product Description:  VSAT Antenna Mount includes a Pedestal Mount w/mounting hardware for 1.8m High-Wind antenna w/6.62" O.D. (S80) x 6' Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
63	Mount, Mast Adapter, Converts from 4.00" to 2.88" O.D. Mast	VSAT Antenna Mount includes a Mast Adapter to convert a 4.00" O.D. Mast Mount down to a 2.88" O.D. Mast for 1.2m antenna w/2.88" O.D. Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMMA0000		
	Bidder's Product Description: VSAT Antenna Mount includes a Mast Adapter to convert a 4.00" O.D. Mast Mount down to a 2.88" O.D. Mast for 1.2m antenna w/2.88" O.D. Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
64	Mount, Mast Adapter, Converts from 6.62" to 2.88" O.D. Mast	VSAT Antenna Mount includes a Mast Adapter to convert a 6.62" O.D. Mast Mount down to a 2.88" O.D. Mast for 1.2m antenna w/2.88" O.D. Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMNA0000		
64	Bidder's Product Description:  VSAT Antenna Mount includes a Mast Adapter to convert a 6.62" O.D. Mast Mount down to a 2.88"  O.D. Mast for 1.2m antenna w/2.88" O.D. Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
65	Mount, Mast Adapter, Converts from 6.62" to 4.00" O.D. Mast	VSAT Antenna Mount includes a Mast Adapter to convert a 6.62" O.D. Mast Mount down to a 4.00" O.D. Mast for 1.8m antenna w/4.00" O.D. Mast. VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.	VMAC0000		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: VSAT Antenna Mount includes a Mast Adapter to convert a 6.62" O.D. Mast Mount down to a 4.00" O.D. Mast for 1.8m antenna w/4.00" O.D. Mast. VSAT Site Pre-Qualification is required to determine correct mount type antenna (Feature ID VSRV0000). VSAT Terminal Antenna, Router/Modem and Bandwidth and Site Pre-Qualification are ordered separately.				
Post	Installation / Optional	Services			
66	.98 Meter and 1.2 Meter VSAT Retermination consist of De-Install, Move, Re-Install within 50 miles of original location) Within 50 Miles of Original Location	This includes the de-install, move and re-installation of .98 or 1.2m fixed antenna system both the outdoor and indoor satellite components within 50 miles of original location. The move includes shipping and handling of the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units.	VRTM0000		
	outdoor and indoor sa shipping and handling relevant to the outdoo components: Block up	cription: Install, move and re-installation of .98 or 1.2m fixed antenna stall, move and re-installation of .98 or 1.2m fixed antenna statellite components within 50 miles of original location. The magnetic of the outdoor and indoor satellite systems. This includes the unit: antenna main reflector, antenna mount, and all RF "rate Converter and Low noise block converter. The indoor unit or. In addition, the Inter Facility Link (IFL) cables that connect	nove includes ne following items adio frequency" consists of		
67	.98 Meter and 1.2 Meter VSAT De- installation Only Greater then 50 miles of Original Location	This includes the de-installation of .98 or 1.2m fixed antenna system both the outdoor and indoor satellite components. The de-installation includes both the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units. Customer is responsible for shipping and/or storage of this equipment.	VRDM0000		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: This includes the de-installation of .98 or 1.2m fixed antenna system both the outdoor satellite components. The de-installation includes both the outdoor and indoor satellite. This includes the following items relevant to the outdoor unit: antenna main reflector, a mount, and all RF "radio frequency" components: Block up Converter and Low noise to converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Fac (IFL) cables that connects the outdoor and indoor units. Customer is responsible for stand/or storage of this equipment.		
68	.98 Meter and 1.2 Meter VSAT Re- installation Only Greater then 50 miles of Original Location	This includes the re-installation of .98 or 1.2m fixed antenna system both the outdoor and indoor satellite components. The re-installation includes both the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units. Customer is responsible to provide equipment on-site prior to re-installation.	VSDN0000
	Bidder's Product Description: This includes the re-installation of .98 or 1.2m fixed antenna system both the outdoor and indoor satellite components. The re-installation includes both the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units. Customer is responsible to provide equipment on-site prior to re-installation.		
1.8 Meter VSAT VSAT with deice: Retermination consist of De-Install, Move, Re-Install within 50 miles of original location) Within 50 Miles of Original Location sat		This includes the de-install, move and re-installation of 1.8m fixed antenna system with deice both the outdoor and indoor satellite components within 50 miles of original location. The move includes shipping and handling the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units.	VRTD0000



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: This includes the de-install, move and re-installation of 1.8m fixed antenna system with deice both the outdoor and indoor satellite components within 50 miles of original location. The move includes shipping and handling the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units.				
70	1.8 Meter VSAT De- installation Greater then 50 Miles of Original Location	This includes the de-installation of 1.8m fixed antenna system both the outdoor and indoor satellite components. The de-installation includes both the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units. Customer is responsible for shipping and/or storage of this equipment.	VDNS0000		
	Bidder's Product Description: This includes the de-installation of 1.8m fixed antenna system both the outdoor and incomponents. The de-installation includes both the outdoor and indoor satellite systems includes the following items relevant to the outdoor unit: antenna main reflector, anten and all RF "radio frequency" components: Block up Converter and Low noise block co indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) connects the outdoor and indoor units. Customer is responsible for shipping and/or sto equipment.				
71	1.8 Meter VSAT Reinstallation Greater then 50 Miles of Original Location	This includes the re-installation of 1.8m fixed antenna system both the outdoor and indoor satellite components. The re-installation includes both the outdoor and indoor satellite systems. This includes the following items relevant to the outdoor unit: antenna main reflector, antenna mount, and all RF "radio frequency" components: Block up Converter and Low noise block converter. The indoor unit consists of: satellite modem/router. In addition, the Inter Facility Link (IFL) cables that connects the outdoor and indoor units. Customer is responsible to provide equipment on-site prior to re-installation.	VRIN0000		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	components. The re-in includes the following and all RF "radio frequindoor unit consists of	cription: Installation of 1.8m fixed antenna system both the outdoor and installation includes both the outdoor and indoor satellite systems relevant to the outdoor unit: antenna main reflector, as usency" components: Block up Converter and Low noise bloc: satellite modem/router. In addition, the Inter Facility Link (If and indoor units. Customer is responsible to provide equipment.	tems. This ntenna mount, k converter. The FL) cables that
72	Moving VSAT Antenna on the Same Roof. (.98, 1.2, 1.8 and 2.4m)	This charge is for moving .98, 1.2, 1.8 or 2.4m satellite outdoor antenna assembly from one location to another on the same roof. This would include moving of the standard non-penetrating antenna system, re-pointing of the antenna and moving existing cables (additional cable can be provided at additional cost). This excludes moving the customer provided AC outlet used for the electric deice.	VMAS0000
	Bidder's Product Describes of this charge is for move location to another on antenna system, re-portional electric deice.	on-penetrating I cable can be	
73	VSAT System Antenna Repoint	This charge is for Repointing a .98, 1.2, 1.8 or 2.4m satellite outdoor antenna assembly from one satellite to another based on customer requested network move/change. This would include testing and recommissioning the system onto the new satellite network.	VSAR0000
	Bidder's Product Description: This charge is for Repointing a .98, 1.2, 1.8 or 2.4m satellite outdoor antenna assembly from one satellite to another based on customer requested network move/change. This would include testing and recommissioning the system onto the new satellite network.		
74	VSAT Install Canceling Fee 48 Hour Notice	Cancelling fee for install or Maintenance of service. Remote site cancellation policy is 48 hours (2 Business Day) in advance of scheduled installation.	VCNF0000
		cription: all or Maintenance of service. Remote site cancellation polic ance of scheduled installation.	y is 48 hours (2



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
75	VSAT Field Service Rep Installation labor to complete other on-site work	This field service rep is certified on complete installation of VSAT systems. Installation labor fee to complete other On-Site work such as external customer provided router and/or other customer provided protocol translation equipment. This hourly rate also applies to additional installations for those occasions when a VSAT Field Service Rep is required after the standard VSAT Terminal CPE installation for the truck roll (drive time).	VFSR0000	
	Bidder's Product Description: This field service rep is certified on complete installation of VSAT systems. Installation labor fee to complete other On-Site work such as external customer provided router and/or other customer provided protocol translation equipment. This hourly rate also applies to additional installations for those occasions when a VSAT Field Service Rep is required after the standard VSAT Terminal CPE installation for the truck roll (drive time).			
70	VSAT Change Management Fee	This is a Service Fee to upgrade or downgrade satellite link bandwidth (within antenna capability).	VBND0000	
76	Bidder's Product Description: This is a Service Fee to upgrade or downgrade satellite link bandwidth (within antenna capability).			
77	Custom Mount Configuration with Installation	This custom mount configuration would be designed to meet customer specifications outside the defined mounts. This item is only for VSAT installation to support this service.	VCMN0000	
	Bidder's Product Description: This custom mount configuration would be designed to meet customer specifications outside the defined mounts. This item is only for VSAT installation to support this service.			
78	Dual RG6 PVC Inter Facility Link (IFL) Cable	Dual RG6 PVC IFL Cable. Standard VSAT CPE Options service includes cable and installation up to 250 feet. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE. This item is only for VSAT installation to support this service.	VPVC0006	
	to 250 feet. This price	cription: able. Standard VSAT CPE Options service includes cable ar per foot includes labor, connectors, tie-wraps and cable at t T Terminal CPE. This item is only for VSAT installation to so	ime of	
79	Dual RG6 Plenum Inter Facility Link (IFL) Cable	Dual RG6 Plenum IFL Cable. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.	VPLN0006	



## Table 1.2.2.8.8 MPLS VSAT Service (continued)

		<u> </u>		
	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Dual RG6 Plenum IFL Cable. Standard VSAT CPE Options service includes cable and installation up to 250 feet. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.			
	Dual RG11 PVC Inter Facility Link (IFL) Cable	Dual RG11 PVC (IFL) Cable This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.	VOVC0011	
80	Bidder's Product Description:  Dual RG11 PVC (IFL) Cable. Standard VSAT CPE Options service includes cable and installation up to 250 feet. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.			
	Dual RG11 Plenum PVC Inter Facility Link (IFL) Cable	Dual RG11 Plenum PVC IFL Cable. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.	VPLN0011	
81	Bidder's Product Description: Dual RG11 Plenum PVC IFL Cable. Standard VSAT CPE Options service includes cal installation up to 250 feet. This price per foot includes labor, connectors, tie-wraps and time of installation of the VSAT Terminal CPE.			
00	Custom Inter Facility Link (IFL) Cable	This is for custom IFL cable for extended ranges from VSAT external to internal unit. This price per foot includes labor, connectors, tie-wraps and cable at time of installation of the VSAT Terminal CPE.	VCIF0000	
82	VSAT CPE Options se	cription: cable for extended ranges from VSAT external to internal undervice includes cable and installation up to 250 feet. This price tors, tie-wraps and cable at time of installation of the VSAT	ce per foot	
	PVC Conduit – 1.5 inch. Dia	This is for PVC conduit - 1.5 inch diameter for external to internal unit.	VPCN0000	
83	Bidder's Product Description: This is for PVC conduit - 1.5 inch diameter for external to internal unit.			
84	Rack-Mount Kit, 19" Rack-Mount Kit for iDirect 3000, 5000, and X5 Series IDU's (2RU)	Rack Mount Kit with installation for iDirect 3100 / 5100 19" Rack-mount kit (2 Rack Units or 3 1/2 Inches) at time of installation of the VSAT Terminal CPE.	VRMN0019	
		cription: nstallation for iDirect 3100 / 5100 19" Rack-mount kit (2 Rack allation of the VSAT Terminal CPE.	Cunits or 3 1/2	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
85	iDirect 3125 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 3125 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0001		
	Replacement Spare's damaged while in the	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 3125 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
86	iDirect 3125 Indoor Satellite Router w/4- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 3125 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0002		
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 3125 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).				
87	iDirect 5350 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 5350 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0009		
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 5350 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).				
88	iDirect 5350 Indoor Satellite Router w/4- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 5350 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0010		
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 5350 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).				
89	iDirect 7350 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 7350 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0011		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 7350 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
90	iDirect 7350 Indoor Satellite Router w/4- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 7350 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	VIDR0012	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect 7350 Satellite Router, 4-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
91	iDirect X1 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X1 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDIS0000	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X1 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
92	iDirect X1 Outdoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X1 Outdoor Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDOS0000	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X1 Outdoor Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
93	iDirect X5 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X5 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDNS0003	
	damaged while in the	cription: Kit to replace Verizon supplied spares that end up being los customers possession. The kit consists of an iDirect X5 Sato Jp Converter (BUC), and Low Noise Block Converter (LNB).	ellite Router, 3-	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
94	iDirect X5 Indoor Satellite Router w/6- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X5 Satellite Router, 6-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDNS0006	
	damaged while in the	cription: Kit to replace Verizon supplied spares that end up being los customers possession. The kit consists of an iDirect X5 Saturation Converter (BUC), and Low Noise Block Converter (LNB).		
95	iDirect X5 Indoor Satellite Router w/8- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X5 Satellite Router, 8-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDNS0008	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, sto damaged while in the customers possession. The kit consists of an iDirect X5 Satellite Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
96	iDirect X7 Indoor Satellite Router w/3- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7 Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDSR0003	
	damaged while in the	cription: Kit to replace Verizon supplied spares that end up being los customers possession. The kit consists of an iDirect X7 Saturation Converter (BUC), and Low Noise Block Converter (LNB).		
97	iDirect X7 Indoor Satellite Router w/6- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7 Satellite Router, 6-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDSR0006	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7 Satellite Router, 6-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
98	iDirect X7 Indoor Satellite Router w/8- Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7 Satellite Router, 8-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDSR0008	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7 Satellite Router, 8-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
99	iDirect X7-ER Indoor Satellite Router w/3-Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7-ER Satellite Router, 3-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDER0003	
	damaged while in the	cription: Kit to replace Verizon supplied spares that end up being los customers possession. The kit consists of an iDirect X7-ER to Converter (BUC), and Low Noise Block Converter (LNB)	Satellite Router,	
100	iDirect X7-ER Indoor Satellite Router w/6-Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7-ER Satellite Router, 6-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDER0006	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7-ER Satellite Router, 6-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
101	iDirect X7-ER Indoor Satellite Router w/8-Watt BUC & LNB Spares Kit	Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7-ER Satellite Router, 8-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).	IDER0008	
	Bidder's Product Description: Replacement Spare's Kit to replace Verizon supplied spares that end up being lost, stolen or damaged while in the customers possession. The kit consists of an iDirect X7-ER Satellite Router, 8-Watt Ku-Band Block Up Converter (BUC), and Low Noise Block Converter (LNB).			
102	Custom Installation/Upgrade /Modification/ Retrofit	This will provide a custom VSAT capabilities as a upgrade or retrofit to an existing system. All pricing will be an Individual Case Bases (ICB). These could include but not limited to replacement of antenna, BUC, LNB, IFL cabling, deice, alternate antenna mount, indoor unit, mobile command center or other vehicle.	VCIR0000	
	Bidder's Product Description: This will provide a custom VSAT capabilities as a upgrade or retrofit to an existing system. All pricing will be an Individual Case Bases (ICB). These could include but not limited to replacement of antenna, BUC, LNB, IFL cabling, deice, alternate antenna mount, indoor unit, mobile command center or other vehicle.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
103	Snow Shield (Passive), for 1.2m Antenna, Full Reflector cover w/ PTEF Coating and Feed Cover	Walton Passive Gore-Tex® Snow Shield for the 1.2-meter round single reflector optics antenna consisting of reflector cover made from UV Stable PTFE Coated Gore-Tex® radome material with ports to add heater option at a later date. This includes installation of the Snow Shield at time of installation of the VSAT Terminal CPE. Feed Horn Cover also recommended.	SSPA0000		
	Walton Passive Gore- consisting of reflector ports to add heater op	Bidder's Product Description: Walton Passive Gore-Tex® Snow Shield for the 1.2-meter round single reflector optics antenna consisting of reflector cover made from UV Stable PTFE Coated Gore-Tex® radome material with ports to add heater option at a later date. This includes installation of the Snow Shield at time of installation of the VSAT Terminal CPE. Feed Horn Cover also recommended.			
104	Snow Shield (Passive), for 1.8m Antenna, Full Reflector cover w/ PTEF Coating and Feed Cover	Walton Passive Gore-Tex® Snow Shield for the 1.8-meter round single reflector optics antenna consisting of reflector cover made from UV Stable PTFE Coated Gore-Tex® radome material with ports to add heater option at a later date. This includes installation of the Snow Shield at time of installation of the VSAT Terminal CPE. Feed Horn Cover also recommended.	SNSP0000		
	Bidder's Product Description: Walton Passive Gore-Tex® Snow Shield for the 1.8-meter round single reflector optics antenna consisting of reflector cover made from UV Stable PTFE Coated Gore-Tex® radome material with ports to add heater option at a later date. This includes installation of the Snow Shield at time of installation of the VSAT Terminal CPE. Feed Horn Cover also recommended.				
105	Training for Quick / Auto Deploy and VSAT Terminal CPE System	One day on-site customer operational training fee for Quick / Auto Deploy and VSAT Terminal CPE Systems at time of service installation.	TRQA0000		
	Bidder's Product Desc One day on-site custo CPE Systems at time	cription: omer operational training fee for Quick / Auto Deploy and VS. of service installation. This training will include up to 3 partic	AT Terminal ipants.		
Required CPE - VSAT Fixed Router/Modem					
106	Router Bundle 11 - iDirect X1 Satellite Router, Spare iDirect X1 Satellite Router, Proactive Mgmt., 24x7 Maintenance and Installation	This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X1 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply).	RTBN0011		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	doi: 1.2.2.6.6 m 26 TOAT GOLVIGO (GOLULIGO)			
	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X1 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply). Customer will be notified of the maintenance plan (same day or next day) prior to order submission. Service areas include West Sacramento, Redding, Stockton, Concord, Oakland, Dublin, Hayward, San Jose, San Francisco, Santa Rosa, Salinas, Los Angeles, Sherman Oaks, Dominguez Hills, Irvine, San Diego, Bloomington, (Rialto), Fresno, Bakersfield. Next Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel is ordered separately.			
	Router Bundle 12 - iDirect X1 NEMA Satellite Router, Spare iDirect X1 NEMA Satellite Router, Proactive Mgmt., 24x7 Maintenance and Installation	This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X1 National Electrical Manufacturers Association (NEMA) 6 Outdoor rated Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply).	RTBN0012	
107	Bidder's Product Description: This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X1 National Electrical Manufacturers Association (NEMA) 6 Outdoor rated Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply). Customer will be notified of the maintenance plan (same day or next day) prior to order submission. Service areas include West Sacramento, Redding, Stockton, Concord, Oakland, Dublin, Hayward, San Jose, San Francisco, Santa Rosa, Salinas, Los Angeles, Sherman Oaks, Dominguez Hills, Irvine, San Diego, Bloomington, (Rialto), Fresno, Bakersfield. Next Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel is ordered separately.			
108	Router Bundle 13 - iDirect X5 Satellite Router, Spare iDirect X5 Satellite Router, Proactive Mgmt., 24x7 Maintenance and Installation	This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X5 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply).	RTBN0013	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

				Bidder's Product		
Į		Feature Name	Feature Description	Identifier		
		Bidder's Product Description: This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X5 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply). Customer will be notified of the maintenance plan (same day or next day) prior to order submission. Service areas include West Sacramento, Redding, Stockton, Concord, Oakland, Dublin, Hayward, San Jose, San Francisco, Santa Rosa, Salinas, Los Angeles, Sherman Oaks, Dominguez Hills, Irvine, San Diego, Bloomington, (Rialto), Fresno, Bakersfield. Next Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel is ordered separately.				
		Router Bundle 14 - iDirect X7 Satellite Router, Spare iDirect X7 Satellite Router, Proactive Mgmt., 24x7 Maintenance and Installation	This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X7 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply).	RTBN0014		
109	109	Bidder's Product Description: This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X7 Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply). Customer will be notified of the maintenance plan (same day or next day) prior to order submission. Service areas include West Sacramento, Redding, Stockton, Concord, Oakland, Dublin, Hayward, San Jose, San Francisco, Santa Rosa, Salinas, Los Angeles, Sherman Oaks, Dominguez Hills, Irvine, San Diego, Bloomington, (Rialto), Fresno, Bakersfield. Next Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel is ordered separately.				
	110	Router Bundle 15 - iDirect X7- Enhanced Router (ER) Satellite Router, Spare iDirect X7-ER Satellite Router, Proactive Mgmt., 24x7 Maintenance and Installation	This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X7-Enhanced Routing (ER) Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply).	RTBN0015		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: This is the Router/Modem bundle assembly that works in conjunction with the VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel. This bundle includes the iDirect X7-Enhanced Routing (ER) Satellite Router, Router Spare, Proactive InBand Management to the iDirect Router, Installation of the Router and 24x7 Same Day Maintenance (must be within 150 miles of the nearest service city otherwise next day maintenance will apply). Customer will be notified of the maintenance plan (same day or next day) prior to order submission. Service areas include West Sacramento, Redding, Stockton, Concord, Oakland, Dublin, Hayward, San Jose, San Francisco, Santa Rosa, Salinas, Los Angeles, Sherman Oaks, Dominguez Hills, Irvine, San Diego, Bloomington, (Rialto), Fresno, Bakersfield. Next Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. VSAT Terminal Antenna, VSAT Antenna Mount, and Bandwidth Line Rate Data Channel is ordered separately.				
VSAT	Quick Deploy / Auto-	Pointing Systems			
111	Quick Deploy 1.2 Meter Antenna, 8 watt BUC, LNB and iDirect X7	Quick Deploy VSAT system with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.	STQD0002		
	Bidder's Product Description: Quick Deploy VSAT system with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.				
112	Quick Deploy 1.2 Meter Antenna, 16 watt BUC, LNB and iDirect X7	Quick Deploy VSAT system with a 1.2m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.	STQD0006		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Quick Deploy VSAT system with a 1.2m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.			
113	Quick Deploy 1.8 Meter Antenna, 8 watt BUC, LNB and iDirect X7	Quick Deploy VSAT system with a 1.8m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.	STQD0004	
	Bidder's Product Description: Quick Deploy VSAT system with a 1.8m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.			
114	Quick Deploy 1.8 Meter Antenna, 16 watt BUC, LNB and iDirect X7	Quick Deploy VSAT system with a 1.8m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 8Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.	STQD0005	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: Quick Deploy VSAT system with a 1.8m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable, reusable transit cases and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 8Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is required for Quick Deploy with feature identifiers identified above TRQA0000 or TRCL0000.				
115	Auto Pointing (Vehicle Mount Ready) 1.2 Meter 1- Piece Antenna, 8 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system that is vehicle/trailer mountable ready with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 30 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	VMRD0001		
	Bidder's Product Description: Auto-Pointing VSAT system that is vehicle/trailer mountable ready with a 1.2m antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 30 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.				
116	Auto Pointing (Vehicle Mount Ready) 1.2 Meter 1- Piece Antenna, 16 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system that is vehicle/trailer mountable ready with a 1.2m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 30 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	VMRD0002		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Auto-Pointing VSAT system that is vehicle/trailer mountable ready with a 1.2m antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 30 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.			
117	Auto Pointing (Standard) 1.2 Meter 1-Piece Antenna, 8 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (1-Piece) antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	STAD0003	
	Bidder's Product Description: Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (1-Piece) antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.			
118	Auto Pointing (Standard) 1.2 Meter 1-Piece Antenna, 16 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (1-Piece) antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	STAD0004	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (1-Piece) antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.		
119	Auto Pointing (Rugged) 1.2 Meter 4-Piece Antenna, 8 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (4-Piece) antenna, 8 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Reflector Case, Outdoor Antenna Positioner Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	SADR0003
Bidder's Product Description: Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (4-Piece) antenna, Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna R Case, Outdoor Antenna Positioner Case, Indoor Electronics Case, and Next Business Da Maintenance. This system supports transmission speeds between 32Kbps to 2Mbps that to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00, 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day			Router, 100 foot tenna Reflector ness Day ps that connects pares kit are ay, 8:00AM to

is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or



TRCL0000.

Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
120	Auto Pointing (Rugged) 1.2 Meter 4-Piece Antenna, 16 watt BUC, LNB and iDirect X7	Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (4-Piece) antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Reflector Case, Outdoor Antenna Positioner Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.	SADR0004
	Bidder's Product Description: Auto-Pointing VSAT system with reusable shipping cases with a 1.2m (4-Piece) antenna, 16 Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, 100 foot Dual RG6 Inter Facility Link (IFL) Cable and antenna controller cable, Outdoor Antenna Reflector Case, Outdoor Antenna Positioner Case, Indoor Electronics Case, and Next Business Day Maintenance. This system supports transmission speeds between 32Kbps to 4Mbps that connects to the Wireline service (MPLS Network). Satellite Bandwidth and an Electronics spares kit are ordered separately. Next Business Day Maintenance Hours are Monday thru Friday, 8:00AM to 5:00PM local time only, excluding holidays. Trouble ticket must be in by 1:00PM prior day. Training is recommended for Auto-Pointing systems with feature identifiers identified above TRQA0000 or TRCL0000.		
121	Auto Pointing Mobile Vehicle Integration	Turn Key solution which includes design, installation and test of standard Auto Deploy system on customer provided vehicle. This line item requires one (1) feature identifiers VMRD0001, VMRD0002, STAD0003 and STAD0004.	ADMV0001
	Bidder's Product Description: Turn Key solution which includes design, installation and test of standard Auto Deploy system on customer provided vehicle. This line item requires one (1) feature identifiers VMRD0001, VMRD0002, STAD0003 and STAD0004. VSAT Site Pre-Qualification (VSRV0000) is required to define the scope of the work.		
122	QD/AP 8-Watt Spare's Kit with Transit Case	Quick-Deploy / Auto-Pointing transportable Electronics Spares Kit. The Kit includes 8-Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, Power Conditioner and Transit Case. One Spares Kit is recommended per system but at a minimum one (1) is "Required" to be available and onsite prior to maintenance dispatch.	QDAP0001



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Quick-Deploy / Auto-F Up Converter (BUC), Conditioner and Trans STQD0004, VMRD00	Bidder's Product Description: Quick-Deploy / Auto-Pointing transportable Electronics Spares Kit. The Kit includes 8-Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, Power Conditioner and Transit Case. This line item is used with feature identifiers STQD0002, STQD0004, VMRD0001, STAD0003 and SADR0003. One Spares Kit is recommended per system but at a minimum one (1) is "Required" to be available and onsite prior to maintenance dispatch.			
123	QD/AP 16-Watt Spare's Kit with Transit Case	Quick-Deploy / Auto-Pointing transportable Electronics Spares Kit. The Kit includes 16-Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, Power Conditioner and Transit Case. One Spares Kit is recommended per system but at a minimum one (1) is "Required" to be available and onsite prior to maintenance dispatch.	QDAP0002		
	Quick-Deploy / Auto-F Up Converter (BUC), Conditioner and Trans STQD0006, VMRD00	Bidder's Product Description: Quick-Deploy / Auto-Pointing transportable Electronics Spares Kit. The Kit includes 16-Watt Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect X7 Satellite Router, Power Conditioner and Transit Case. This line item is used with feature identifiers STQD0005, STQD0006, VMRD0002, STAD0004 and SADR0004. One Spares Kit is recommended per system but at a minimum one (1) is "Required" to be available and onsite prior to maintenance dispatch.			
12	Emergency Response Satellite Communication System Option 1 - Bumper Pull Trailer (Daily Use Rate)	Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a bumper pull trailer, ranging from single axle ~8ft trailers to larger ~20ft trailers with multiple workstations with roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps transmit x 2Mbps receive or higher Private MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERBD0001		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a bumper pull trailer, ranging from single axle ~8ft trailers to larger ~20ft trailers with multiple workstations with roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps transmit x 2Mbps receive or higher Private MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate. CALNET 3 Form 20 is required in advanced to gather network connectivity requirements to connect to the necessary MPLS sites and deployment environment to qualify the correct asset. Depart within a 24 Hour period based on request.			
125	Emergency Response Satellite Communication System Option 1 - Bumper Pull Trailer (Weekly Use Rate)	:Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a bumper pull trailer, ranging from single axle ~8ft trailers to larger ~20ft trailers with multiple workstations with VoIP Phones and data connections and a roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps transmit x 2Mbps receive or higher Private MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERBW0001	
	minimum a bumper pur multiple workstations or larger Auto-Pointing Noise Block Converte Private MPLS Satellite to/from the customers during the deploymen fueling. Use of the system a part of the daily reconnectivity requirements.	cription: I Emergency Response Satellite Communications System of all trailer, ranging from single axle ~8ft trailers to larger ~20ft with VoIP Phones and data connections and a roof mounted g Satellite system with an 8-Watt or Larger Block Up Conver (LNB), iDirect Satellite Router, 2Mbps transmit x 2Mbps received Data Connectivity, and Generator with fuel and transportate requested location with onsite / local area support staff avait period to maintain communications system and generator of stem is based asset availability at time of request. Day of travate. CALNET 3 Form 20 is required in advanced to gather needs to connect to the necessary MPLS sites and deploymentet. Depart within a 24 Hour period based on request.	trailers with 1.2m Antenna ter (BUC), Low ceive or higher ion of the asset ilable for support operation and vel and return will etwork	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
126	Emergency Response Satellite Communication System Option 2 - Gooseneck / Semi Trailer or RV (Daily Use Rate)	Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a larger dual axle gooseneck/semi trailer or RV style Command center with a minimum of 4 workstations with VoIP Phones and data connections and a roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERGD0002	
	Bidder's Product Description: Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a larger dual axle gooseneck/semi trailer or RV style Command center with a minimum of 4 workstations with VoIP Phones and data connections and a roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate. CALNET 3 Form 20 is required in advanced to gather network connectivity requirements to connect to the necessary MPLS sites and deployment environment to qualify the correct asset. Depart within a 24 Hour period based on request.			
127	Emergency Response Satellite Communication System Option 2 - Gooseneck / Semi Trailer or RV (Weekly Use Rate)	Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a larger dual axle gooseneck/semi trailer or RV style Command center with a minimum of 4 workstations with VoIP Phones and data connections and a roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERGW0002	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a larger dual axle gooseneck/semi trailer or RV style Command center with a minimum of 4 workstations with VoIP Phones and data connections and a roof mounted 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router, 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity, and Generator with fuel and transportation of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system and generator operation and fueling. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate. CALNET 3 Form 20 is required in advanced to gather network connectivity requirements to connect to the necessary MPLS sites and deployment environment to qualify the correct asset. Depart within a 24 Hour period based on request.		
128	Emergency Response Satellite Communication System Option 3 - Case Based Auto- Pointing System (Daily Use Rate)	Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a reusable case based 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router and 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity and shipment of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERCD0003
	Bidder's Product Description: Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a reusable case based 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router and 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity and shipment of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate. CALNET 3 Form 20 is required in advanced to gather network connectivity requirements to connect to the necessary MPLS sites and deployment environment to qualify the correct asset.		



Depart within a 24 Hour period based on request.

Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
129	Emergency Response Satellite Communication System Option 3 - Case Based Auto- Pointing System (Weekly Use Rate)	Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a reusable case based 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router and 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity and shipment of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate.	ERCW0003	
	Bidder's Product Description: Use of Verizon owned Emergency Response Satellite Communications System consisting of at a minimum a reusable case based 1.2m Antenna or larger Auto-Pointing Satellite system with an 8-Watt or Larger Block Up Converter (BUC), Low Noise Block Converter (LNB), iDirect Satellite Router and 2Mbps x 2Mbps or higher Private IP MPLS Satellite Data Connectivity and shipment of the asset to/from the customers requested location with onsite / local area support staff available for support during the deployment period to maintain communications system. Use of the system is based asset availability at time of request. Day of travel and return will be a part of the daily rate. CALNET 3 Form 20 is required in advanced to gather network connectivity requirements to connect to the necessary MPLS sites and deployment environment to qualify the correct asset. Depart within a 24 Hour period based on request.			
	Primary Bandwidth			
400	64 Kbps / 64 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0003	
130	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
131	64 Kbps / 128 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0005	
	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
132	64 Kbps / 256 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0008	
132	network management	cription: VSAT systems transmit and receive bandwidth for 1 end poincludes notification of outage, trouble ticket generation and its required to complete this connection to the VSAT bandwin	l escalations.	
133	128 Kbps / 128 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0006	
133	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
134	128 Kbps / 256 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0009	
134	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
405	128 Kbps / 512 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0016	
135	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
136	256 Kbps / 256 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0013	
	network management	cription: VSAT systems transmit and receive bandwidth for 1 end poincludes notification of outage, trouble ticket generation and is required to complete this connection to the VSAT bandon.	l escalations.	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
407	256 Kbps / 512 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0018	
137	network management	cription: VSAT systems transmit and receive bandwidth for 1 end poincludes notification of outage, trouble ticket generation and is required to complete this connection to the VSAT bandon.	l escalations.	
138	256 Kbps / 1024 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0030	
130	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
	512 Kbps / 512 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0025	
139	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
140	512 Kbps / 1024 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0033	
140	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
141	512 Kbps / 2048 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0049	
	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			



## Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
142	768 Kbps / 768 Kbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0034	
142	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
143	1 Mbps / 1 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0041	
143	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
444	1 Mbps / 2 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0052	
144	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
445	1 Mbps / 4 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP1004	
145	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
146	1.5 Mbps / 1.5 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0053	
	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			



## Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
4.47	1.5 Mbps / 3 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP1503	
147	network management	cription: VSAT systems transmit and receive bandwidth for 1 end point includes notification of outage, trouble ticket generation and on is required to complete this connection to the VSAT bandwin	d escalations.	
148	1.5 Mbps / 6 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP1506	
140	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
149	2 Mbps / 2 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSPB0055	
149	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
450	2 Mbps / 4 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP2004	
150	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
151	2 Mbps / 8 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP2008	
	network management	cription: VSAT systems transmit and receive bandwidth for 1 end poi includes notification of outage, trouble ticket generation and on is required to complete this connection to the VSAT bands	l escalations.	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
450	3 Mbps / 3 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP3003		
152	This service includes network management	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.			
153	3 Mbps / 6 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP3006		
155	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.				
154	3 Mbps / 12 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP3012		
154	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.				
455	4 Mbps / 4 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP4004		
155	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.				
156	4 Mbps / 8 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP4008		
	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.				



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
157	4 Mbps / 16 Mbps	This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations.	VSTP4016
	Bidder's Product Description: This service includes VSAT systems transmit and receive bandwidth for 1 end point. Reactive network management includes notification of outage, trouble ticket generation and escalations. Host MPLS Connection is required to complete this connection to the VSAT bandwidth.		
	10% Backup Ratio Bar mit / Receive	ndwidth	
158	64 Kbps / 64 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0003
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
159	64 Kbps / 128 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0005



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.				
160	64 Kbps / 256 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0008		
	Bidder's Product Description:  Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.				
161	128 Kbps / 128 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0006		
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.				



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
162	128 Kbps / 256 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0009
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
163	128 Kbps / 512 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0016
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
164	256 Kbps / 256 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0013
	Bidder's Product Description:  Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
165	256 Kbps / 512 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0018
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
166	256 Kbps / 1024 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0030
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
167	512 Kbps / 512 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0025
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
168	512 Kbps / 1024 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0033
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
169	512 Kbps / 2048 Kbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0049
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
170	1 Mbps / 1 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0041
	Bidder's Product Description:  Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
171	1 Mbps / 2 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0052
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
172	1 Mbps / 4 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB1004
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
173	1.5 Mbps / 1.5 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0053
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
174	1.5 Mbps / 3 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB1503
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
175	1.5 Mbps / 6 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB1506
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
176	2 Mbps / 2 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0055
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
177	2 Mbps / 4 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB2004
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
178	2 Mbps / 6 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB2006
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
179	2 Mbps / 8 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB2008
179	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
180	3 Mbps / 3 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB3003
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
181	3 Mbps / 6 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB3006
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
182	3 Mbps / 12 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB3012
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
183	4 Mbps / 4 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB4004
	Bidder's Product Description:  Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
184	4 Mbps / 8 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB4008
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		
185	4 Mbps / 16 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB4016
	Bidder's Product Description:  Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

			Bidder's Product	
186	Feature Name Above 4 Mbps / 16 Mbps	Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites.	VSBB0056	
	Bidder's Product Description: Backup bandwidth is based on 10% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
	25% Backup Ratio Bar mit / Receive	ndwidth		
187	64 Kbps / 64 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0001	
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two stress Backup service is based on customer having a minimum of four			



VSAT sites included in the network.

Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
188	64 Kbps / 128 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0002
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
189	64 Kbps / 256 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0003
100	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
190	128 Kbps / 128 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0004	
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			
191	128 Kbps / 256 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0005	
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
192	128 Kbps / 512 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0006
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
193	256 Kbps / 256 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0007
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
194	256 Kbps / 512 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0008
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
195	256 Kbps / 1024 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0009
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
196	512 Kbps / 512 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0010
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
197	512 Kbps / 1024 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0011
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
198	512 Kbps / 2048 Kbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0012
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
199	1Mbps / 1Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0013
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
200	1 Mbps / 2 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0014	
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			
201	1 Mbps / 4 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0015	
201	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
202	1.5 Mbps / 1.5 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0016
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
203	1.5 Mbps / 3 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0017
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
204	1.5 Mbps / 6 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0018
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
205	2 Mbps / 2 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0019
200	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
206	2 Mbps / 4 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0020
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
207	2 Mbps / 8 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0021
201	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
208	3 Mbps / 3 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0022
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
209	3 Mbps / 6 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0023
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
210	3 Mbps / 12 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0024
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
211	4 Mbps / 4 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0025
	Bidder's Product Description:  Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
212	4 Mbps / 8 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0026		
	Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.				
	4 Mbps / 16 Mbps	Backup bandwidth is based on 25% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of bandwidth available to each of the two sites.	VBRB0027		
Bidder's Product Description: Backup bandwidth is based on 25% of the total aggregate bandwidth associated sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup bar be shared across all VSAT sites accessing the VSAT network at a given time. VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbp available to each of the two sites. Backup service is based on customer having VSAT sites included in the network.		the total width available to erefore, if two of bandwidth			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	/SAT 50% Backup Ratio Bandwidth ransmit / Receive				
214	64 Kbps / 64 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0001		
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.				
215	64 Kbps / 128 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0002		
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.				



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
216	64 Kbps / 256 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0003
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
217	128 Kbps / 128 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0004
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
218	128 Kbps / 256 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0005	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
219	128 Kbps / 512 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0006	
213	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
220	256 Kbps / 256 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0007
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
221	256 Kbps / 512 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0008
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
222	256 Kbps / 1024 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0009
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
223	512 Kbps / 512 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0010
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
224	512 Kbps / 1024 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0011
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
225	512 Kbps / 2048 Kbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0012
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
226	1 Mbps / 1 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0013	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
227	1 Mbps / 2 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0014	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
228	1 Mbps / 4 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0015	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
229	1.5 Mbps / 1.5 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0016	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
230	1.5 Mbps / 3 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0017	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
231	1.5 Mbps / 6 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0018	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
232	2 Mbps / 2 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0019
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
233	2 Mbps / 4 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0020
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
234	2 Mbps / 8 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0021	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
235	3 Mbps / 3 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0022	
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
236	3 Mbps / 6 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0023
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
237	3 Mbps / 12 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0024
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
238	4 Mbps / 4 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0025
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
239	4 Mbps / 8 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0026
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
240	4 Mbps / 16 Mbps	Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites.	VBUR0027		
	Bidder's Product Description: Backup bandwidth is based on 50% of the total aggregate bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.				
	Primary Expedite Forw mit / Receive	varding (EF) Bandwidth			
044	0 Kbps / 0 Kbps (VSAT Enhanced Traffic Management)	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSET0000		
241	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
242	32 Kbps / 32 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0001		
	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
243	64 Kbps / 64 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0002		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.			
244	128 Kbps / 128 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0004	
244	This service includes point for customer tag	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.		
045	256 Kbps / 256 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0008	
245	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.			
246	384 Kbps / 384 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0012	
240	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.			
247	512 Kbps / 512 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0013	
	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.			
248	768 Kbps / 768 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0014	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
	1024 Kbps / 1024 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0015		
249	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
050	1536 Kbps / 1536 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0016		
250	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
054	2048 Kbps / 2048 Kbps	This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only.	VSEF0017		
251	Bidder's Product Description: This service includes VSAT transmit and receive Expedite Forwarding (EF) bandwidth for 1 end point for customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Primary bandwidth.				
I —	10% Backup Ratio Expends / Receive	pedite Forwarding (EF) Bandwidth			
252	0 Kbps / 0 Kbps (VSAT Enhanced Traffic Management)	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0000		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
253	32 kbps / 32 kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0001	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
254	64 Kbps / 64 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0002	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
255	128 Kbps / 128 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0004	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
256	256 Kbps / 256 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0008	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
257	384 Kbps / 384 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0012	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
258	512 Kbps / 512 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0013	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
259	768 Kbps / 768 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0014	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
260	1024 Kbps / 1024 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0015	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
261	1544 Kbps / 1544 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0016	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
262	2048 Kbps / 2048 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites.	WDRB0017	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 10% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the ten VSAT sites at 1Mbps each is 10Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 500 kbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of ten VSAT sites included in the network.			
	25% Backup Ratio Exp mit / Receive	pedite Forwarding (EF) Bandwidth		
263	0 Kbps / 0 Kbps (VSAT Enhanced Traffic Management)	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0000	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			
264	32 Kbps / 32 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0032	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			
265	64 Kbps / 64 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0064	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			
266	128 Kbps / 128 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0128	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
267	256 Kbps / 256 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0256
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
268	384 Kbps / 384 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0384
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
269	512 Kbps / 512 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0512
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
270	768 Kbps / 768 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF0768
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
271	1024 Kbps / 1024 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF1024
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		
272	1544 Kbps / 1544 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF1544
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.		



#### Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
273	2048 Kbps / 2048 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites.	VBEF2048	
	Bidder's Product Description:			

Backup Expedite Forwarding (EF) bandwidth is based on 25% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the four VSAT sites is 4 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 2Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of four VSAT sites included in the network.

#### VSAT 50% Backup Ratio Expedite Forwarding (EF) Bandwidth Transmit / Receive

274	0 Kbps / 0 Kbps (VSAT Enhanced Traffic Management)	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0000

#### Bidder's Product Description:

Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
275	32 Kbps / 32 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0032	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			
276	64 Kbps / 64 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0064	
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1 Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.			



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
277	128 Kbps / 128 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0128
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
278	256 Kbps / 256 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0256
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
279	384 Kbps / 384 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0384
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		
280	512 Kbps / 512 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0512
	Bidder's Product Description:  Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1 Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
281	768 Kbps / 768 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF0768	
	Bidder's Product Description: This service includes VSAT transmit and receive 50% Backup Ratio Expedite Forwarding (EF) Bandwidth for 1 end point for backup service only on customer tagged traffic. This service provides QoS to allow for priority queuing across the VSAT link only. This is incremental service to the VSAT Backup bandwidth. Backup service is based on customer having a minimum of two VSAT Terminal CPE disaster recovery sites included in the network.			
282	1024 Kbps / 1024 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF1024	
	Backup Expedite Forwassociated with the Valexample, if the total E EF bandwidth availab time. Therefore, if two 1Mbps of EF bandwidth	dder's Product Description: ackup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth is sociated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For tample, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given ne. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be bandwidth available to each of the two sites. Backup service is based on customer aving a minimum of two VSAT sites included in the network.		
283	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.		VBXF1544	



Table 1.2.2.8.8 MPLS VSAT Service (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		MB T/R). For I Mbps of backup etwork at a given ly, there will be
284	2048 Kbps / 2048 Kbps	Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites.	VBXF2048
	Bidder's Product Description: Backup Expedite Forwarding (EF) bandwidth is based on 50% of the total aggregate EF bandwidth associated with the VSAT sites (not to exceed the per site subscription rate, e.g. 1MB T/R). For example, if the total EF bandwidth of the two VSAT sites is 2 Mbps, then there is 1 Mbps of backup EF bandwidth available to be shared across all VSAT sites accessing the VSAT network at a given time. Therefore, if two VSAT sites are accessing the VSAT network simultaneously, there will be 1Mbps of EF bandwidth available to each of the two sites. Backup service is based on customer having a minimum of two VSAT sites included in the network.		

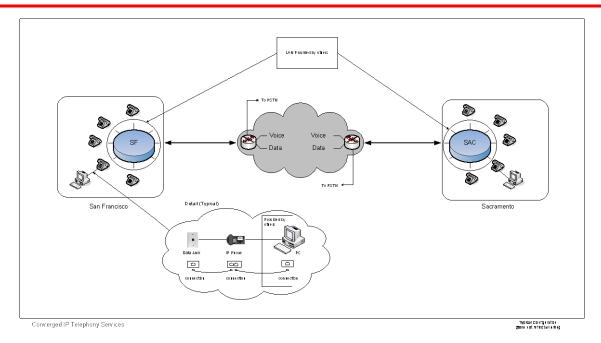
# 1.2.3 CONVERGED VOICE OVER INTERNET PROTOCOL (VOIP)

# 1.2.3.1 CONVERGED VOIP MINIMUM NETWORK REQUIREMENTS

The Contractor shall provide a VoIP network in Converged configurations that is provisioned in conjunction with the Contractor's MPLS services identified in this Subcategory. The Converged VoIP service shall utilize the MPLS circuit to access Converged VoIP calling services.

Converged VoIP Topography Example:





The VoIP network shall deliver business-class features that support standard business lines, direct inward dial (DID) lines, gateway services to local Public Switched Telephone Networks (PSTNs), and least cost (monetary) routing.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.3.1.1 Converged VoIP Network Designs and Diagrams

Bidders shall provide network designs and diagrams for the network and Converged VoIP services.

Bidders shall provide two (2) hard copies and one (1) electronic copy with their proposal. Electronic drawings shall be in .dwg, .dfx, .vsd or any mutually agreed format. Hard copy drawings shall be provided in standard D size.

Drawings must include a thorough presentation of how the Contractor's network(s) deployed for each service type will address the following:

- 1. Redundancy Having one (1) or more circuits/systems deployed in case of failure of the main circuits/systems, and;
- 2. Diversity Backbone network paths and infrastructure offered in such a way as to minimize the chance of a single point of failure.

The Contractor shall provide revisions upon CALNET 3 CMO request. Drawings shall include both topology and logical representations of all critical network backbone elements to include but not be limited to the following:

- 1. Geographic location of equipment;
- Type and capacity of equipment at each location including any backup systems;
- 3. Service type; and,



4. Unique identifier for each element.

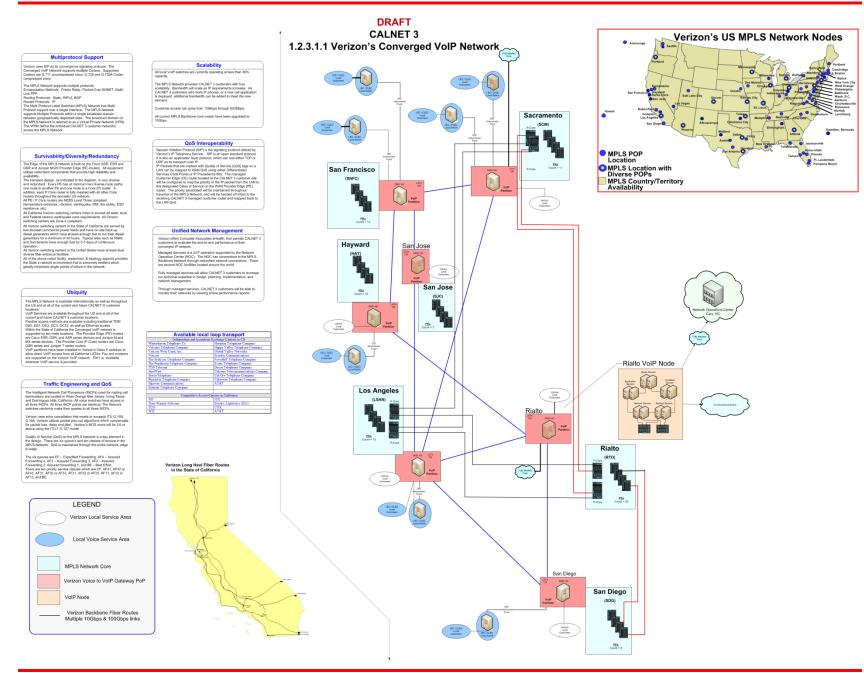
Bidder understands the requirements in Section 1.2.3.1.1 and shall meet or exceed them? Yes X No\_

Embedded Soft Copy of Drawing (Optional): Verizon has provided hard and soft copies.

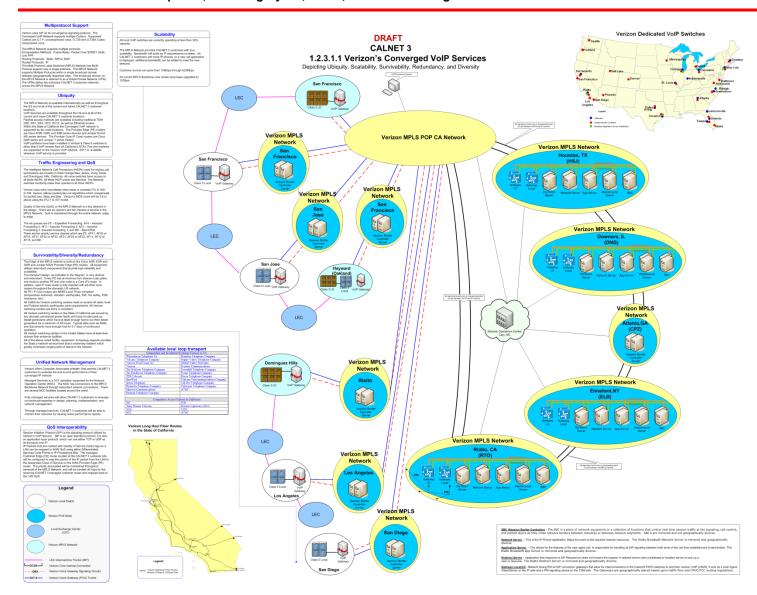


1.2.3.1.1 Verizon Converged VoIP Servi/Verizon Converged Vo











# 1.2.3.1.2 Intentionally Deleted

#### 1.2.3.1.3 Public Switched Telephone Network Interoperability

The VoIP solution shall be interoperable with the Public Switched Telephone Network (PSTN).

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.3.1.4 Number Portability

The Contractor shall comply with the local number portability regulations.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.1.5 E9 1 1 Database Updates

The Contractor shall comply with FCC emergency service requirements including E9 1 1 services to identify the location of an originating station and route the call to the appropriate Public Safety Answering Point (PSAP).

The Contractor shall be responsible for updating the E9 1 1 database when End-User equipment is moved to a location with a different street address.

The Bidder shall describe the method(s) that will be deployed to accomplish this requirement and identify any conditions that the Customer must comply with.

Bidder understands the requirements in Section 1.2.3.1.5 and shall meet or exceed them? Yes X No\_\_\_\_\_

#### Description:

Verizon will comply with FCC emergency service requirements including E9-1-1 services to identify the location of an originating station and route the call to the appropriate Public Safety Answering Point (PSAP) based upon site address and suite information of the access facility. Customer is responsible for PS ALI database station level information.

#### 1.2.3.1.6 Network Based

The system shall be network based with all call control components residing in the Contractor's network including network gatekeepers and network gateways.

The Contractor shall not be permitted to use State property for the deployment, collocation or supplementation of the Contractors' network signaling and management equipment, call control and setup equipment, or access to other PSTN or VoIP network providers.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.1.7 Private VoIP Network

No voice traffic will be routed through the public Internet. All voice traffic will traverse the Contractor's private MPLS network.



Bidder understands the Requirement and shall meet or exceed it? Yes X No\_

### 1.2.3.1.8 SIP Based Open Architecture

The VoIP network deployed for CALNET 3 shall be non-proprietary. The system shall use Session Initiation Protocol (SIP) standards based open architecture.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.3.1.9 Intentionally Deleted

#### 1.2.3.1.10 Directory Redundancy and Addressing

The VoIP network shall include redundant network-based directory or gatekeeper functionality to prevent call set up failure.

The VoIP network shall partition call addressing in such a manner that failure of gatekeepers will not result in a VoIP network failure for all State facilities. At its sole discretion, the CALNET 3 CMO may direct the partitioning and physical location of Customer or department directories to diverse gatekeepers within the VoIP network

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.1.11 Technical Measurement Metrics

The VoIP network shall meet the technical measurement metrics listed below.

Table 1.2.3.1.11 Technical Measurement Metrics

Metric		Bidder Meets or Exceeds? Y N	
1	Mean Opinion Score ITU P.800 – 3.6 or above (or equivalent industry standard measurement)	Y	
2	2 Dial Tone Delay – Not to exceed 300 ms for any call		
3	Call Setup Time – Not to exceed three (3) seconds for any call	Υ	

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.1.12 Standards Conformance

The VoIP Network and associated services shall conform to the Standards described in Table 1.2.3.1.12 as applicable.



Table 1.2.3.1.12 VoIP Standards

	Standard	Mee	der ts or eds? N
1	IETF RFC 3261 SIP (Session Initiation Protocol) and all subsequent RFC's	Y	
2	IETF RFC 2132 for DHCP 4703, 6355	Υ	
3	IETF RFC's 2916 ENUM, 2806, 6116, 6117	Υ	
4	IPv4	Υ	
5	IPv6 when and where offered commercially by the Contractor	Υ	
6	IETF RFC 1349 ToS, 2474, 2475 DiffServ 3260	Υ	
7	ITU-T E.164	Υ	
8	ITU G.165/G.168 and subsequent standards for echo cancellation	Y	
9	ITU-T G.711, G.723.x, G.726, G.728, or G.729.x	Υ	
10	ITU-T H.248.1 (MEGACO), H.323, H.350 when and where offered commercially by the Contractor	Y	
11	ITU-T P.800 series of Standards for telephone transmission quality. ITU-T P.910	Y	
12	ITU-T T.30, T.37 and T.38, Group III fax	Υ	
13	Media Gateway Control Protocol (MGCP) IETF RFC 3435 when and where offered commercially by the Contractor	Y	
14	IETF RFC 3550 Real-Time Transport Protocol (RTP) 5506, 5761, 6015, 6222	Y	
15	IETF RFC 2205 Resource Reservation Protocol (RSVP) 2750, 4495, 5946, 6437	Υ	
16	IETF RFC 768 User Datagram Protocol (UDP)	Y	

#### 1.2.3.1.13 Class of Service

The network shall be configured with the appropriate Class of Service (CoS) required for the proper operation of the service. The CoS shall be included in the per seat price and shall not be charged separately.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.3.1.14 Voice Compression

The VoIP network shall include Voice Compression that will:



- 1. Pass all applicable ITU test vectors;
- 2. Support configurable packetization for maximum flexibility; and,
- 3. Not degrade when all channels are active.

Bidder shall list the voice compression CODEC(s) that will be used with the VoIP network.

Bidder understands the requirements in Section 1.2.3.1.14 and shall meet or exceed them? Yes X No\_\_\_\_\_

# Description:

Verizon's Converged VoIP Service supports Voice Compression. The supported Voice Compression will pass all applicable International Telecommunications Union (ITU) tests and support configurable packetization for maximum flexibility.

During the Network Design the proper grade of service will be engineered and bandwidth allocated to allow all simultaneous channels to be active with no degradation of service. The Network Design will indicate the Voice Compression CODEC that will be used, the number of simultaneous calls for the P.01 grade of service and the total IP Transport bandwidth that will be available at the location.

Compression reduces the bandwidth needed per voice call, which saves transmission time or capacity. Compression is a function of the type of codec used. The codec is essentially a software algorithm used to compress/decompress speech or audio signals. The codecs currently configured in the VoIP architecture support G.711 and G.729a and G.722 standards.

Feature	Description	Benefit
G. 711 Codec Support	Uncompressed voice (includes the bandwidth needed for frame or IP headers).	Full uncompressed bandwidth for Voice Traffic and Fax Modem Traffic.
G.729 and G.729A Codec Support	Compressed voice using the G.729 and G.729A codec (includes IP headers).	Requires less bandwidth per call, (approx. 38K per call vs. 88-100K for G.711) while maintaining call quality.
T.38 Fax	T38 is the delivery of Fax over Internet Protocol (FoIP) utilizing ITU recommendation that T.38 as the delivery method.	Provides a more cost-effective solution for the customer as T.38 provides greater compression for fax traffic – 64k.
H.264 Video / G722 HD Audio	Supports video and enhanced voice applications,	Supports video and enhanced voice applications.

#### 1.2.3.1.15 Network Operations Center

The Contractor shall maintain a Network Operations Center (NOC) that is staffed 24x365 that coordinates and manages all voice traffic.



The NOC shall perform network surveillance, traffic analysis, control of access and egress traffic, and fault management (trouble identification, isolation and notification).

The NOC shall monitor network performance in near real-time to identify capacity blockages and implement controls to optimize the VoIP network health and performance immediately.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.1.16 VoIP Security

The Contractor shall implement security measures that detect and prevent unauthorized access to the network for the following types of security breaches:

- 1. Denial of Service (DoS);
- 1.2. Invasion of Privacy;
- 1.3. Man-in-the-Middle (MITM) attacks; and,
- 1.4. Protocol specific security vulnerabilities

The Contractor shall ensure security practices and policies are updated and audited every six (6) months.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

## 1.2.3.1.16.1 Physical Access

Contractor shall physically secure all data and networking facilities through which data traverses Contractor's VoIP network complying with the physical security controls of NIST SP 800-53, ISO/IEC 27001, or equivalent standards.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

#### 1.2.3.1.16.2 Network Security

The Contractor's network security solution shall incorporate the following features:

- The Contractor's VoIP Network equipment locations shall use carrier grade platforms;
- 2. All network equipment shall be in a hardened, secure facility;
- 3. All unnecessary services shall be disabled or removed;
- 4. Access control policies shall be used to deny suspicious traffic;
- 5. Core servers shall be accessed through an authentication server;
- 6. Administrators shall be required to log into a central server to access any other server on the network; and,
- 7. Proxy servers shall be protected by redundant firewalls which include features such as:
  - a. Network attack detection;



- b. Denial of Service (DoS) and Distributed Denial of Service (DDOS) protections;
- c. Transmission Control Protocol (TCP) reassembly for fragmented packet protection;
- d. Malformed packet protections;
- e. Deep inspection firewall;
- f. Protocol anomaly; and,
- g. Stateful protocol signatures.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.1.16.3 Client Authentication

The Contractor shall provide SIP Digest Authentication for Customer VoIP handsets

The Contractor shall set passwords on VoIP handsets before they are shipped.

Telnet shall be disabled to the VoIP handsets.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2 CONVERGED VOIP SERVICES

The Contractor shall provide Converged VoIP that will connect to a Customer's Local Area Network (LAN). This service will allow for the ordering and provisioning of hosted voice and data over a single VoIP network interface. This service shall be interoperable with and traverse successfully across the subscribing Customer's firewalls and security layers.

The proposed design shall be network based where all major components reside at a central office or off-premises location. Bandwidth requirements shall be determined by the ITU compression mechanisms defined by the Contractor's network design.

The handsets shall be provided by the Contractor as part of the service package and per-seat price (Table 1.2.3.2.4) but will connect directly to the Customer's infrastructure/network.

In the event at Contractor is awarded a CALNET 3 Contract for Standalone VoIP services, this service shall be interoperable and the State shall not incur any charges to place calls between the two (2) services.

The Converged VoIP service shall be charged on a per-seat basis. The Contractor's per-seat price shall include all handsets, network gatekeepers, gateways, call control components, labor and materials to make the service fully operational on a Customer provided LAN.

Converged VoIP service shall provide dial tone and full functionality of features to the on-site telephone.

No additional chargeable service or feature components required to comply with the requirements of this Section 1.2.3.2 shall be allowed and all costs shall be bundled into the service components identified.



All LAN functionality, components, cabling, and equipment shall be the responsibility of the Customer and shall be acquired elsewhere. Remediation of the LAN shall be the Customers responsibility and shall be acquired elsewhere.

Any service provided by this Subcategory shall only be used for Converged VoIP and shall not be used for traditional LAN installations.

The Converged VoIP service shall be provisioned in conjunction with MPLS Transport Services.

The Bidder shall describe its Converged VoIP network architecture, components and services that will be deployed for CALNET 3 to provide a VoIP solution for the application described.

Bidder understands the requirements in Section 1.2.3.2 and shall meet or exceed them? Yes X No\_

## Description:

Verizon will provide a Converged VoIP service that connects to a Customer's Local Area Network (LAN), as well as for the ordering and provisioning of hosted voice and data over a single VoIP network interface. This service will be interoperable with and capable of successfully traversing the subscribing Customer's firewalls and security layers.

Verizon's Converged VoIP network architecture provides connectivity to the customer's existing LAN, allowing for delivery of VoIP voice and data traffic over a secure, QoS-enabled Verizon MPLS WAN connection. The service will ensure interoperability with existing customer security devices, including firewalls.

Verizon's Converged VoIP design is a network-based service with all major components residing in Verizon's VoIP nodes, located in Verizon premium data center facilities. Bandwidth requirements will be determined by the ITU compression mechanisms G.729 and G.711, as defined for Verizon's VoIP network design.

Verizon will provide handsets that will connect directly to the Customer's LAN infrastructure/network as part of the service package, as well as a per-seat price (see Table 1.2.3.2.4).

If Verizon is awarded the CALNET 3 contract for both the Converged VoIP services and the Standalone VoIP services, the VoIP services will be interoperable with each other and calling between the two services will be free of charge. The state will not incur any charges to place calls between the two services.

Verizon's Converged VoIP service will be charged on a per-seat basis. Verizon's service will be fully operational on a customer-provided LAN, and the per-seat pricing will include all handsets, network gatekeepers, gateways, call control components, labor and materials.

Verizon's Converged VoIP service will provide dial tone and full functionality of VoIP features to the onsite telephone.



Verizon's Converged VoIP service will require no additional chargeable service or feature components to comply with the requirements of Section 1.2.3.2; all costs will be bundled into the identified service components.

Implementation of Verizon's Converged VoIP service will not include LAN functionality, components, cabling and equipment, which will be the responsibility of the customer. Remediation of the LAN will also be the customer's responsibility and will be acquired elsewhere.

Verizon services for this subcategory will be used only Converged VoIP and will not be used for traditional LAN installations.

Verizon's Converged VoIP service will be provisioned in conjunction with Verizon's MPLS Transport Services.

## 1.2.3.2.1 Converged VoIP Minimum Requirements

The Converged VoIP service shall include all equipment, hardware, software, training and ongoing administration, maintenance and upgrades in the "per-seat per-month" cost. These requirements are described in detail below.

Bidder understands the Requirement and shall meet or exceed it? Yes X No

## 1.2.3.2.1.1 Converged VoIP Equipment and Hardware

Unless otherwise noted in the detailed product listing below, the Contractor shall furnish and install all equipment and hardware required to deliver the service to the workstation handset including routers, wire management, cross-connects, patch and device cords, and the workstation handset.

Horizontal closet racks, raceway, environmental components and AC electrical power will be acquired through other procurement vehicles.

Horizontal station cabling will be the responsibility of the Customer and will be acquired through other procurement vehicles.

As stated in Section 1.2.3.2, all LAN functionality, components, cabling, and equipment shall be the responsibility of the Customer and shall be acquired elsewhere.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2.1.2 Converged VoIP Software

The Contractor shall provide all software and ongoing software patches or upgrades required to deliver the Converged VoIP service to the workstation handset.

Contractor shall provide all configuration and programming.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



## 1.2.3.2.1.3 Converged VoIP Administration

The Contractor shall perform all initial and ongoing administrative functions to deliver the Converged VoIP service to the workstation handset.

The Contractor shall provide the Customer with the option to perform selected on-site administrative functions.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.1.4 Converged VoIP Maintenance

The Contractor shall provide all maintenance (including software upgrades and patches) required for continuous delivery of the Converged VoIP service to the workstation handset.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.1.5 Converged VoIP Handset Power Supplies

The Contractor shall provide ancillary handset power supplies with the handset.

The Customer will have the option of providing Power Over Ethernet (PoE) switches in lieu of ancillary handset power supplies.

The Contractor shall provide handsets that utilize POE at the Customer's request.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.1.6 Converged VoIP Class of Service (CoS)

The network shall be configured with the appropriate class of service (CoS) required for the proper operation of the Converged VoIP service.

The CoS shall be included in the per-seat price and shall not be charged separately.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.2 Interoperability of Converged VoIP with Other CALNET 3 Technologies

The Contractor's Converged VoIP services shall be interoperable with the Contractor's SIP Trunking services (Section 1.2.5) and the State shall not incur any charges for calls between these two (2) services.

In the event at Contractor is awarded a CALNET 3 Contract for Standalone VoIP services (Subcategory 1.3), this Converged VoIP service shall be interoperable with the Contractor's Standalone VoIP services and the State shall not incur any charges for calls between these two (2) services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



## 1.2.3.2.3 Converged VoIP Basic Feature Package

The Contractor shall provide a basic feature package for all handset configurations listed in Section 1.2.3.2.4 (Converged VoIP Handsets). The basic feature package shall include the call features described in Table 1.2.3.2.3.

Table 1.2.3.2.3 Converged VoIP Basic Feature Package

	Converged VoIP Basic Call Package Features		der ts or eds? N
1	900 Blocking – No calls from 900-xxx-xxxx will be processed to any subscribers	Υ	
2	Auto Attendant – A service that automatically answers incoming calls within a predefined number of rings without assistance from a live attendant. It prompts callers with a series of choices and actions to perform. Based on selected action, the caller may listen to a recorded announcement, leave a message, place a call, activate another voice service or be routed to a particular service. Customers with Administrative authority shall have the ability to perform Auto Attendant configuration and modifications through a web interface.	Y	
3	Call Forward – Busy Don't Answer – Allows a station End-User to choose to reroute incoming calls to another specified telephone number. This shall be available for all incoming calls on a busy or ring-no-answer condition.	Y	
4	Call Forward – All Calls – Allows the station End-User to choose to reroute all incoming calls to another specified telephone number. The feature shall have the capability to restrict call forwarding to internal, local or long distance numbers.	Y	
5	Call Hold – Allows the called party to put a caller on hold and retrieve them from the hold state.	Y	
6	Call Notify - Enables a subscriber to define criteria that causes certain incoming calls to initiate an email notification.	Y	
7	Call Transfer – Allows a station End-User to transfer any call in progress to another telephone number without the assistance of an operator	Y	
8	Call Pickup – Allows a subscriber to answer any calls directed to another station line within his or her own predefined call pickup group	Υ	
9	Call Park – Allows a call to be parked at a subscriber's number for retrieval by another subscriber line. The capability shall be administered on an individual station basis according to the subscribing Agencies needs	Y	
10	<b>Conference</b> – Allows a voice station End-User to establish a multiparty conference connection of a minimum of three (3) conferees including themselves without attendant assistance.	Y	



Table 1.2.3.2.3 Converged VoIP Basic Feature Package (continued)

	Converged VoIP Basic Call Package Features	Mee	der ts or eds? N
11	<b>Call Waiting -</b> When a second call is received while a subscriber is engaged in a call, the subscriber is informed via an audible tone.	Y	
12	Caller ID – Phone number of the calling party is displayed on the terminal equipment	Y	
13	Class of Service - The CoS configured on the transport required for the proper operation of the service.	Y	
14	Conference Bridge – Allows callers from diverse locations/platforms to dial in to a specified telephone number to participate in a conference call	Y	
15	<b>DID</b> - Direct inward dial phone number including Single Line appearance.	Y	
16	<b>Directory Phone Display</b> – Directory of Customer's VoIP subscribers via the phone display	Y	
17	Four-digit Extension Dialing – All 'on-net' numbers can be reached by dialing the 4-digit extension from 'on-net' phones	Y	
18	Group Pickup – Allows an incoming call to be picked up from any one (1) of a predefined group of phones	Y	
19	Hunt Groups – Route inbound calls to a predetermined sequence of telephone numbers until it is answered	Y	
20	<b>Message Waiting Indicator</b> – Visual indication on phone that a message is in queue for review	Y	
21	<b>Multi-Line Appearance</b> – Provide the ability for multiple line appearances on a subscriber's phone	Y	
22	Redial – Allow a station End-User to automatically originate a call to the last number dialed from the station End-User's phone	Y	
23	Speed Dial – Allows abbreviated digit dialing capability on a per station basis	Y	

Bidders shall identify any additional features available at no additional charge.

Bidder understands the requirements in Section 1.2.3.2.3 and shall meet or exceed them? Yes X No\_

Description:



Verizon will provide the following additional features at no additional charge as part of the standard feature package. Features can be managed by the user/administrator.

## **End User Additional Features**

Feature Name	Feature Description
Anonymous Call Rejection	Anonymous Call Rejection - Enables a subscriber to reject calls from anonymous parties who have explicitly restricted their Caller ID. By activating the service via the end-user Communication Manager web interface, callers without available caller identification are informed that the subscriber is not accepting calls at that time. The subscriber's phone does not ring and the subscriber sees or hears no indication of the attempted call. This service does not apply to intra-location calls.  Only deliberate anonymous numbers are rejected. Callers whose numbers are unavailable are not rejected. Callers that are rejected are informed that the called party is not accepting calls from unidentified callers. ("The party you are trying to reach is not accepting calls at this
	time.")
Alternate Numbers	Alternate Numbers - Enables an administrator to configure up to two additional phone numbers and/or extensions to a subscriber. Normal ringing is provided for incoming calls to the primary phone number and subscribers have the option of enabling a distinctive ring for calls to their second and third phone numbers. If distinctive ringing is enabled, distinctive call waiting tone will also apply. For outgoing calls from the subscriber, the subscriber's primary phone number is the calling line identity.
	Automatic Callback - Allows users to monitor a busy party and automatically establish a call when the busy party becomes idle.
Automatic Callback	Upon reaching a valid ACB busy condition, the user will hear an announcement asking if they would like to monitor the line and be called back when it is idle. To activate ACB, the subscriber enters the digit prompted for then goes on hook. As soon as the called party becomes idle again, ACB attempts to re-establish the call between the subscriber and the previous busy party.
Blind Call Transfer	Blind Call Transfer - Enables a subscriber to transfer a call unattended before or after the call is answered. Subscribers can only execute blind call transfer from the Communication Manager.
Call Blast Personal	Call Blast Personal - Enables subscribers to have multiple phones ring simultaneously when any calls are received on their VoIP phone number. The first phone to be answered is connected. Caller can also select to have simultaneous devices not ring while already on a call or ring on all incoming calls.
Call Forwarding – Multi-Phone	Call Forwarding - Multi-Phone - Multi-Phone call forwarding allows an end-user to specify a different forwarding number for each entry of Selective Call Forwarding. Call Forward Selective sets the criteria to make this feature work.



Feature Name	Feature Description
Call Pickup Directed	<b>Call Pickup Directed</b> - Enables a subscriber to answer a call directed to another phone in their pick-up group by dialing the respective feature access code followed by the extension of the ringing phone.
Call Pickup – Directed with Barge- in	Call Pickup Directed with Barge-in - Directed Call Pickup with Barge-in (DPUBI) allows users to dial a feature access code (FAC) followed by an extension to pick-up (answer) a call directed to another user in the same customer group, or barge-in on the call if the call was already answered. When a barge-in occurs, a three-way call is established between the parties with the DPUBI user as the controller.  Subscribers can configure themselves as barge-in exempt so their calls cannot be barged in on.
Call Return	Call Return - To call back the last party that called, the subscriber dials the call return feature code. The system stores the number of the last party to call, and connects the subscriber to that party.
Call Transfer with 3- Way Consultation	<b>Call Transfer with 3-Way Consultation</b> - Enables a subscriber to make a three-way call with the caller and add-on party before transferring the caller.
Calling Line ID Blocking	Calling Line ID Blocking - Subscribers can block delivery of his/her identity when they make all outbound calls. The subscriber controls the service via the Communication Manager, which provides the ability to activate and deactivate the service. If activated, all calls made by the subscriber have the subscriber's identity blocked.  Calling Line ID Delivery Blocking allows subscribers to block their number from being shown when calling other numbers except for intrasite calls which will always display the calling line ID. The feature can be enabled for all calls or it can be enabled selectively using the feature access codes.
Calling Line ID Blocking per Call	Calling Line ID Blocking per Call - In addition to being able to block the presentation of their Calling Line ID on all outgoing calls, subscribers also have the option of blocking on a per-call basis by dialing a feature code before making the call.
Cancel Call Waiting/Call Waiting per Call	Cancel Call Waiting/Call Waiting per Call - Allows subscribers with Call Waiting to deactivate/activate the operation of Call Waiting via the Communication Manager interface. In addition to being able to cancel call waiting for all incoming calls, subscribers also have the option of canceling their call waiting on a per-call basis by dialing a feature code before making the call, or after a switch-hook flash during the call.
Communication Manager	<ul> <li>Communication Manager - The following features are included:</li> <li>Click-to-Dial Enables subscriber to input and dial a number, dial directly from a drop-down Phone List (Personal, location directory or Call Log) or Outlook tab, or click the Redial button.</li> <li>Talk Enables subscriber, who is already engaged in call, to answer another waiting call. When available, Calling Line ID is displayed with caller's name (if available Dependent on names in the contact list and on-net status) and number.</li> </ul>



Feature Name	Feature Description
	Call Hold/Retrieve Enables subscriber to place an existing call on hold for an extended period of time, and then retrieve the call to resume conversation. While the calling party is held, the subscriber may choose to make a consultation call to another party.
	Call Transfer Enables subscriber to redirect a ringing, active, or held call to another number or directly to voicemail. Before transferring the caller, the subscriber may choose to consult with the third party first or establish a three-way consultation.
	<ul> <li>Conference Enables subscriber to establish a three-way call involving two other parties.</li> </ul>
	<ul> <li>Hang up Call Enables subscriber to disconnect a call that has been answered.</li> </ul>
	<ul> <li>Configure Services Buttons are provided to enable subscriber to turn on/off frequently used services such as Call Forwarding Always and Do Not Disturb.</li> </ul>
	Communication Manager Express - Enables users to pre-configure multiple profiles for managing incoming calls differently based on the subscriber's status:
	Available In the Office
	Available Out of the Office
Communication	■ Busy
Manager Express	<ul> <li>Unavailable</li> </ul>
	Each profile includes preferences for managing the relevant incoming call functions (e.g., Call Forwarding (busy, no answer, always, selective), Simultaneous Ringing, Call Notify, which can be configured through a single easy-to-use web page or via the telephony user interface.
	Consultation Hold - Enables a subscriber to put the caller on hold, and make a consultation call to another party.
Consultation Hold	To initiate consultation hold, the subscriber depresses the flash hook and dials the add-on party. When the call is answered, the subscriber can consult with the add-on party. To drop the add-on party and reconnect to the original party, the subscriber depresses the flash hook twice. Subscribers can also execute consultation hold from the Communication Manager.
	<b>Distinctive Alert/Ringing</b> - Provides a different call waiting tone (i.e., alert) or a different ringing cadence for Priority Alert and Alternate Numbers calls.
Distinctive Alert/Ringing	This is a feature of the Priority Alert and Alternate Number capabilities. When setting the Priority Alert capability on, a distinctive ring will be given to those priority numbers. Likewise, when the Alternate Number feature is enabled, the user has the option of requesting a Distinctive Ringing when receiving a call from one of the Alternate Numbers.



Feature Name	Feature Description
	<b>Do Not Disturb</b> - Subscribers can choose to receive no incoming calls during the time when their "do not disturb" functionality is activated.
Do Not Disturb	Allows subscribers to set their station as unavailable so that incoming calls are given a busy treatment. Subscribers have the option to activate and deactivate the service by dialing a feature code or configuring the service via the Subscriber Web Interface. A status indicator on the Communication Manager identifies whether this service is enabled.
	Extension Dialing - Subscribers can more easily contact other subscribers at their site.
Extension Dialing	Enables subscribers to dial extensions via their Communication Manager or phone to call other Subscribers at their location.
	Find Me - Personal - Subscribers who prefer to have the system find them in a priority order may prefer this service over call blast.
	This is a feature that used to be supported and is now available again. This service sequentially attempts up to five phone numbers (in addition to, optionally, the base location) to reach the user.
Find Me – Personal	Upon triggering the Sequential Ring service, the callers are played an announcement stating to hold while the system is attempting to reach the user. The callers are then provided with ringback and comfort announcements, in sequence.
	The service sequentially tries the configured numbers until an answer is received, at which point the call is connected as usual.
	If all numbers are tried without receiving an answer, the caller is redirected to an overflow destination like voice mail. There is also an option to allow the caller to press a key to skip the search process.
	Flash Call Hold - Subscribers can use call hold functionality from any phone; even one without robust call control functionality.
Flash Call Hold	Enables subscribers to hold a call for any length of time by flashing the switch-hook on their phone and dialing the respective feature activation code. Parties are reconnected again when the switch-hook is flashed and the feature activation code is dialed again.
	<b>Inbound Caller ID</b> - Subscribers can choose to take a call when they see the caller's identity via the Communication Manager and phone (if capable).
Inbound Caller ID	Delivered information includes the caller's phone number. The information is delivered to the Communication Manager and the phone (if capable) only if the information is available and has not been blocked by the caller.
	Enables subscribers with Calling Line ID Blocking enabled to allow the delivery of their Calling Line ID on a specific call by entering the respective feature code (*65 default). Once the call is over, Calling Line ID Blocking is restored.
	Calling Party Name Delivery is available for On-Net calls to a SIP phone from another on-net SIP device.



Feature Name	Feature Description
Last Number Redial	Last Number Redial - Easy-to-use last number redial.  Enables Subscribers to redial the last number they called by clicking the 'Redial' button on their Communication Manager or by dialing a feature code (e.g., *66).
Malicious Call Trace	Malicious Call Trace (MCT) - enables a trace to identify the originator of an obscene or harassing call. When MCT is assigned and active, a call originating from and/or terminating to a user will generate an alarm. Provided the information is available at the moment the alarm is generated, data such as originating number can often be determined. This subscriber service must be configured and administered by the corporate level administrator.
Multi-Path Forwarding	Multi-Path Forwarding - Enables a subscriber to have more than one forwarded call active at a time.  There are no limitations on the number of simultaneous calls a subscriber can forward. Calls are specified for forwarding via the web portal interface.
Multi-Forward to Phone Number in Call Forward Selective	Multi-Forward to Phone Number in Call Forward Selective - Enables end-users to be more selective on how they can be reached by specific people.  Call Forward Selective allows users to forward to a different phone number for each entry of the Call Forwarding Selective service. During call processing, if the incoming number matches a predefined call forwarding criteria, the call will terminate to the specified forward-to-number. For example, a user can now dictate that all calls from his supervisor forward to his mobile phone number, whereas all calls from a particular client forward to a colleague's phone number. If a new forwarding number is not configured for a particular Call Forwarding Selective entry, incoming calls will forward to the default destination number.
Outbound Caller ID	Outbound Caller ID - Originator ensures that receiver can identify caller and will not reject the call.  Originating location sends Billing Telephone Number (BTN) of caller. Currently, station level Automatic Number Identification (ANI) is not available.



Feature Name	Feature Description
	Outlook Integration - Subscribers can leverage their office tools-VoIP and Outlook-for easier contact management.
	This service enables subscribers to integrate their personal contacts in Microsoft Outlook with their Communication Manager. Using the Outlook Contacts tab in the Communication Manager, subscribers can perform a search of their personal Outlook contacts by name or company. Once the desired contact is located, subscribers may click-to-dial one of the contact's phone numbers or the subscriber may choose to display the contact's v-card by clicking their name.
Outlook Integration	All the Outlook contact information is pulled directly from the subscriber's personal Outlook files. Essentially the Communication Manager, a java-based program, pulls all the appropriate information from the Subscriber's Microsoft Exchange server or personal computer (PC) each time they log onto Communication Manager. The Outlook contact info is automatically refreshed when the Communication Manager is accessed. Subscribers can also manually refresh it with a simple point and click on the Communication Manager screen. Verizon suggests less than 1000 contacts in any single folder for optimal performance.
	Personalized Name Recording - Enables subscribers to record their name to be played back to incoming callers.
Personalized Name Recording	Name recording in conjunction with Auto Attendant. A .WAV file is recorded via phone and then uploaded via the Verizon Customer Center Personal Dashboard web screen.
	Users can use any application to record the .wav file. The format should be a CCITT u-Law, 8.000 kHz, 8 bit Mono .wav file.
	Phone List Group - This phone list enables subscribers to dial other member of their enterprise by selecting from a list of names on their Communication Manager. The list also serves as a searchable company directory, listing names, numbers and e-mail addresses.  Each subscriber added to the location is automatically added to this
Phone List Group	group list. Also included are the extensions for reaching the Auto Attendant(s), and Hunt Group(s), when applicable. Using the common Phone List Feature, the administrator can add additional phone numbers to the Group List by either adding them individually via their web portal or by importing them from a file. This flexibility would allow the administrator to create a directory that lists all subscribers in the entire enterprise.
	Phone List Personal - Enables subscribers to dial frequently called numbers by selecting from a searchable list of names on their Communication Manager.
Phone List Personal	Each subscriber can add, delete, edit and re-order numbers in their Personal Phone List, which serves as a personal speed dial list. Subscribers can add multiple numbers to this list by uploading them from a flat file.



Feature Name	Feature Description
Phone List Call Log	Phone List Call Log - The Call Log enables subscribers to view and dial from the following lists of stored numbers: missed, received, and dialed.
	The call log is accessed through the Communication Manager and includes the most recent numbers registered for each category, as well as the respective call times and dates.
Printable Group	<b>Printable Group Directory</b> - Enables subscribers to view and print a directory listing of all the enterprise members included in the group directory that was set up by their administrator. All their respective contact information (e.g., extension, mobile phone number, e-mail address) would be included.
Directory	The business group and contact information is displayed in one of two formats: Summary or Detailed. The Group Directory is accessible from the Verizon Customer Center Administrator Dashboard Portal or via each Subscribers Communication Manager.
	Private Dial Plans - Companies can create their own virtual phone network for ease of use and long distance cost savings.
Private Dial Plans	Many customers depend on private dial plans to facilitate intra- enterprise communications. The customer can assign their own private number plan between locations. VoIP can support private numbers up to 32 digits or can utilize an existing DAP-based dial plan.
Ring Splash	Ring Splash - Enables subscribers to have a short ring burst played on their phone when the following services are triggered: Call Forwarding Always, Call Forwarding Selective, and Do Not Disturb. Ring Splash can be enabled for each of these services individually and serves as a reminder that the respective service is active.
	Send to Voicemail Feature Access Code - Offers end-users an alternative to handling a call after it is answered.
Send to Voicemail Feature Access Code	Enables a user to transfer a post-answer call directly to voicemail via a new feature access code (FAC). A user will be able to place a caller on hold, enter the FAC (*55), and follow a series of simple prompts to transfer the held party to the user's voicemail or to another party's voicemail. Experienced users will be able to dial through and perform the transfer without waiting for the prompts.
	<b>Telephony User Interface</b> - Enables administrators and Subscribers to customize select features when they do not have Internet access.
Telephony User Interface	Enables subscribers to call from any phone and modify their call forwarding features, their Communication Manager Express features, or their Auto Attendant greeting. Administrators may also use the Telephony User Interface to record Auto Attendant greetings remotely.



Feature Name	Feature Description
	Telephony User Interface – Calling - This feature is particularly useful for traveling users that already access the Telephony User Interface to retrieve voice messages and configure services. Traveling users typically access the Telephony User Interface using a toll-free number and this feature allows them to originate calls that eventually get charged against their account. For similar reasons, this feature can be useful for the employee working at home that needs to make long distance or international calls on behalf of the company. Dialing in to the Telephony User Interface first allows the subsequent long distance call to be charged to the company instead of the user's home line.
Telephony User Interface – Calling	This feature enhances the Communication Manager Telephony User Interface by allowing an authenticated user to originate calls.
	Once the Telephony User Interface authenticates the user, the user makes calls as if they were originated from their normal location. This means that services such as OCP, account/auth code and voice VPN will apply on the outgoing calls made from the Telephony User Interface. This also means that accounting records will be generated against the user's account.
	The user can make as many calls as desired. The user can either wait for the remote party to hang up, or hit an escape sequence to originate a new call from the Telephony User Interface.
Three-Way Calling	Three-Way Calling - Enables a subscriber to make a three-way call with two parties, where all parties can communicate with each other.
Time Schedule	Time Schedule - Eliminates the need to set schedules for individual features.  Administrators and subscribers can now build predefined time schedules that can be applied to several incoming calling features including Call Forwarding Selective, Call Notify, Selective Call Acceptance and Selective Call Rejection. The time schedules can contain up to 20 date and time ranges per week. Time schedules created by an administrator are visible to both groups and users; schedules created by an individual subscriber are specific to the subscriber.

## **Administrative and Enterprise Network Features:**

Feature Name	Feature Description
Administrator Web Dashboard (Verizon Customer Center Enterprise Dashboard)	Administrator Web Dashboard (Verizon Customer Center Enterprise Dashboard) - Allows administrator easy access to configure, manage and monitor features and settings.  Web portal that empowers an administrator to provision services for subscribers, a location or the entire enterprise.
Call Blast Hunt Group	Call Blast Hunt Group - Hunt Groups can receive incoming calls at all possible locations and without having to set up routing to different devices.



Feature Name	Feature Description
	Enables all of the phones in a hunt group to ring simultaneously when calls are received on a virtual number. The first phone to be answered is connected. This function is a routing capability of the Hunt Group feature.
Call Intercept	<b>Call Intercept</b> - Administrators can ensure that calls coming into non-working lines are not lost.
	Enables administrators to intercept calls routed to a non-working internal line with informative announcements and alternate routing options.
	Administrators can use a default intercept message that says, "The number you are trying to reach is out of service." If they prefer, administrators can opt to add language that says callers can press "0" to speak with an operator or they can provide callers with the new telephone number.
	The message can also be customized by the administrator. The service may be assigned to an individual subscriber's phone number (e.g., when they have left the company) or it can be assigned to all subscribers at a location.
Call Trace – Malicious	<b>Call Trace – Malicious</b> - Such a trace can then be used to identify the originator of obscene or harassing calls.
	Malicious Call Trace (MCT) is a user service administered by a system level administrator. When assigned and active, calls originating from and/or terminating to a user generate an alarm. The alarm contains a large subset of information listed in a Call Detail Record (e.g. calling, called, and redirecting numbers, answer time, etc.) provided the information is available at the moment the alarm is generated. MCT can be configured in one of three ways:
	<ul> <li>Answered: an alarm is generated for all calls terminating on the user only when answered by the user.</li> </ul>
	<ul> <li>Altering: an alarm is generated for all calls terminating on the user (answered or not, rejected or not).</li> </ul>
	<ul> <li>All: an alarm is generated for all of the user's calls (originating and terminating), including originations resulting from a redirection done by the user (such as call forward).</li> </ul>
Calling Location ID Delivery	Calling Location ID Delivery - Gives call recipient location-level information.
	Provides number of the location (or company) for outgoing calls from subscribers in the location, rather than providing the subscribers own name and number. The location number may be defined on a per subscriber basis.
Calling Line ID Configuration	Calling Line ID Configuration - Administrators can manage the appearance of all calling line IDs.
	Enables the administrator to suppress the presentation of Calling Party Identification on outbound calls. This feature is enabled if you do not want the number displayed on Caller ID when making outbound calls.



Feature Name	Feature Description			
Calling Plan Incoming	Calling Plan Incoming - Enables administrators to block specified incoming calls to their company and/or individual subscribers. For example, some subscribers may be prevented from receiving calls from outside the company. For example, subscribers may be prevented from receiving calls from a competitor's number or a particular area code or country code.			
	The Incoming Calling Plan is configured via the Verizon Customer Center Location Dashboard web interface (the administrative GUI). In addition to being able to configure which types of calls each subscriber is restricted from receiving (e.g., intra-location), administrators may regulate incoming calling by restricting specific digit patterns. This is done with the Digit String feature in the administrator web portal.			
	If a profile has not been configured for a particular subscriber, the default set of incoming call privileges for the location is applied. Use of the Custom Check Box on the administrator screen allows that subscriber to use their own call settings which can override location restrictions.			
	The Incoming Calling Plan also enables administrators to reject the following types of incoming calls:			
	Collect calls			
	Calls from within the location			
	<ul> <li>Calls from outside the location</li> </ul>			
Calling Plan Outgoing	<b>Calling Plan Outgoing</b> - Enables administrators to block subscribers from making certain types of outgoing calls, such as long distance, toll, or premium numbers. For example, subscribers may be prevented from calling a competitors number or a particular area code or country code.			
	The Outgoing Calling Plan is configured via the Verizon Customer Center Administrator Dashboard web interface. In addition to being able to configure which types of calls each subscriber is restricted from making, administrators may regulate outgoing calling by restricting specific digit patterns. This is done with the Digit String feature in Administrator web portal.			
	If a profile has not been configured for a particular subscriber, the default set of outgoing call privileges for the location is applied. Use of the Custom Check Box allows that subscriber to have separate call settings which can override the location level restrictions.			
Calling Plan Outgoing Enhanced	Calling Plan Outgoing Enhanced - Provides administrators with even greater degree of control over outgoing calls made from within their location.			
	<ul> <li>Administrators can choose from different types of call restrictions including:</li> </ul>			
	<ul> <li>Location Calls from within the subscriber's location.</li> </ul>			
	<ul> <li>Local Calls within the same geographic region.</li> </ul>			
	<ul> <li>Toll Free calls to numbers beginning with 1, usually followed by 800, 877, or 888.</li> </ul>			



Feature Name	Feature Description		
	<ul> <li>Toll Chargeable calls within the same geographic region.</li> <li>International Chargeable calls to other countries.</li> <li>Operator Assisted Calls made with the chargeable assistance of an operator.</li> </ul>		
	<ul> <li>Chargeable Directory Assistance Chargeable calls made to Directory Assistance such as 411 or 555-1212.</li> </ul>		
	<ul> <li>Special Services I Calls to 700 numbers. These calls may or may not be chargeable.</li> </ul>		
	<ul> <li>Special Services II (Reserved for system administrators discretion.)</li> </ul>		
	<ul> <li>Premium Services I Chargeable calls to 900 numbers.</li> </ul>		
	<ul> <li>Premium Services II Chargeable calls to 976 numbers.</li> </ul>		
	Casual 1010XXX chargeable calls, such as 1010321.		
	<ul> <li>URL Dialing Calls made to URLs, which are outside of the location (for example, to an e-mail address outside of the location). This call type is reserved for future VoIP product enhancements.</li> </ul>		
	In addition to blocking or allowing given call types and digit strings, administrators have the following options for configuring the outgoing calling profile of their location and individual subscribers:		
	Authorization Codes Selected-subscribers can be prompted for an authorization code to allow specified call types or digit strings.  Administrators can pre-configure one or multiple authorization codes to be entered by subscribers. Use of this feature within the Enhanced Outgoing Calling Plan takes precedence over the standalone Authorization Code service.		
	Call Transfer Specified outgoing call types and digit strings can be automatically transferred to one of up to three transfer destinations that Administrators can pre-configure. For example, international calls made from a conference room may be transferred to a company operator who will validate the Subscribers identity and their purpose for making an international call.		
	Existing configurations are retained when the Enhanced Outgoing Calling plan is assigned to replace the basic version of the service.		
	Provides Subscribers with the option to enter a Sustained Authorization Code to unlock calling from their phone. When the feature is enabled, subscribers will not be prompted for an authorization code every time they make a call that requires an authorization code, as defined by the Enhanced Operations Channel (EOCP). Separate feature access codes are used to turn this feature on and off.		
Calling Plan Forwarded/Transferred	Calling Plan Forwarded/Transferred - Enables administrators to prevent fraudulent calling, such as company employees calling their office number at night or on the weekend to make personal calls to international destinations.		



Feature Name	Feature Description			
- Catale Name				
	Enables administrators to prevent specified subscribers from forwarding or transferring calls to certain types of numbers, such as long distance, toll, or premium numbers. Calling plans are configured via the Verizon Customer Center Administrator Dashboard web interface. If a profile has not been configured for a particular subscriber, the default set of incoming call privileges for the location is applied.			
Configurable Extension Dialing	Configurable Extension Dialing - Provides the ability to map directory numbers (DNs) within a location to unique extensions.			
	The extensions can be of any length (2 to 6 digits) as defined by the administrator and dialed via the Administrator Web Interface or by phone. All extensions within a location must be of the same length.			
Configurable Feature Codes	Configurable Feature Codes - Enables Administrators to control feature code commands.			
	Provides each location administrator with the option to specify the feature codes (a.k.a., star codes) associated with their services (e.g., Last Number Redial, Call Return) via the Verizon Customer Center Administrator Dashboard web portal. Subscribers can see, but not edit, the star code associated with each service at any time by referencing their Verizon Customer Center Personal Dashboard web portal.			
	Enables Administrators to configure two different feature access codes for the same service. For example, *69 and #81 could both be used to enable Call Return.			
Configurable Feature Code Prefix	Configurable Feature Code Prefix - Enables administrators to control feature code commands.			
	Enables the administrator to define up to two different prefixes to precede their feature codes. Each prefix may include 1-2 characters, with the default being a single star (*).			
Configurable Time Zones	Configurable Time Zones - Subscribers have the option of individually change their own effective time zone in cases where it differs from their locations default.			
	A default time zone is specified for each location. The respective time zone is used for all services requiring date/time stamps, such as Auto Attendant and Selective Call Forwarding.			
Device Inventory	<b>Device Inventory</b> - Enables administrators to more effectively manage stock.			
	Enables administrators to inventory their equipment including premise gateways and IP phones via their Verizon Customer Center Administrator Dashboard web interface. Devices may be easily added, deleted and modified. In addition, administrators can assign subscribers directly to a device and/or a port on a device.			
E911 Support Enhancement	<b>E911 Support Enhancement</b> - Provides 911 support in case of emergency.			



Feature Name	Feature Description			
	Enables routing of emergency calls to the correct tandem switch based on the caller's phone number. The system ignores subscriber disconnects and disallows features to be used when an emergency number (i.e., 911) is dialed.			
Enhanced Business Hours Support for Auto Attendant	Enhanced Business Hours Support for Auto Attendant - The feature offers a company the flexibility to accommodate varying business hours within the work week.			
Hunt Groups	<b>Hunt Groups</b> - Allows users to be included in a specified hunt group to handle incoming calls received by an assigned Hunt Group phone number. This is a virtual number not a specific subscriber telephone number.			
	Administrators can choose from any of the following hunt schemes, each of which rings the specified phones in a different manner:			
	Circular sends calls in a fixed order. The call is sent to the first available person on the list, beginning where the last call left off. The Circular option tries the agent after the last agent to take a call. The search continues including looping around the list until it reaches the agent it started with.			
	Regular sends calls to users in the order listed by an administrator. Incoming calls go to the first available person on the list, always starting with the first person on the list.			
	Call Blast all of the users in the group simultaneously; the first user to pick up the ringing phone is connected.			
	With Uniform, as a call is completed, the user moves to the bottom of the call queue in a shuffling fashion. The next incoming call goes to the user who has been idle for the longest. If a user receives a call that was not directed to them through the hunt group, the call will not be included in the receiving order for Uniform calls.			
	No Answer Timeout enables calls that have been distributed to a phone, but not answered in a specific number of rings, to be redirected to the next available phone. If all idle phones have been visited once without answer, there are two options for handling the call: forward call to an external number, or give the call a Temporarily Unavailable treatment, which can trigger a service such as voicemail.			
	There is no limit to the number of users that can be included in a hunt group.			
Music on Hold	<b>Music on Hold</b> - Provides opportunity to play music and messages to enhance customer calling experience.			
	<b>Description</b> : Enables administrators to upload an audio file onto the system to be played to parties on hold.			
	Users can use any application to record the .wav file. The format should be a CCITT u-Law, 8.000 kHz, 8 bit Mono .WAV file. There is a 10 minute maximum threshold or approximately (4.7 meg).			
Origination Fully Restricted	Origination Fully Restricted - Offers additional screening criteria for administrators			



Feature Name	Feature Description			
	Provides additional restrictions that can be enabled by an administrator in the Outgoing Calling Plan. The new functionality provides a new screening criterion that will prevent a specified user from being transferred to a party outside of his or her location.			
Priority Alert for Hunt Groups	<b>Priority Alert for Hunt Groups</b> - Identifies incoming calls as part of the hunt group vs. another type of call.			
	Assigns a distinctive ring tone to calls that meet a predefined criterion, can now be assigned to a hunt group. Previously the feature could only be assigned to individual users. The administrator has the ability to create a set of criteria at the hunt group level which then impacts the ring pattern for all of the agents within the hunt group.			
Series Completion	Series Completion - Supports key system functionality.			
	The Series Completion service can be assigned to a selected series of lines to forward calls on a busy condition. It is a form of hunting in which the next line in the series completion group is tried in a prearranged order, without any limit on the number of sequential forwards. Unlike hunt group functionality, the lead number for a series completion is associated with a specific subscriber. The call is only forwarded if the subscriber's line is busy. If the user's line is not busy then the network will route the call according to the rules that have been configured for a "no answer" condition.			
	This service is used to support Key System functionality. Key systems typically ring all available lines in a specified order for incoming calls, regardless of the number dialed to reach the company. For example, when calling a tech support hotline, the subscriber dials (800) 555-HELP. That number attempts to ring line 1 of company. If line 1 is busy, it will attempt to ring line 2. If line 2 is busy and so on. If all lines are busy, the call can be sent to or another assigned service of the series completion group. Similarly, if all lines or subscribers of this company were assigned to a Series Completion group, Verizon VoIP acts just like a key system.			
Termination Fully Restricted	Termination Fully Restricted - Provides distinctions for calls from outside the location found within the Incoming Calling Plan. The screening criterion allows a distinction among the three following criteria: allow calls from outside the location, allow calls from outside of the location only if transferred by specific users (partial), and block calls from outside the location. The feature also provides support of Incoming Calling Plan over city-wide Centrex locations. This will allow any city-wide Centrex call between different hosting applications servers to be treated as an intra-group call.			

## **Management Features:**

Feature Name	Feature Description
Call reporting details via web screen	Call reporting details via web screen - Ease of administrative management.



Feature Name	Feature Description			
	Billing reports can be generated daily, weekly, monthly for call detail and printable via website.  Feature Reporting - Provides usage information by code and by user.  Feature reports can be generated for Accounting and Authorization Code usage.			
Feature Reporting				
Administrative site management via web screen	Administrative site management via web screen - Ease of administrative management and timely access to information.  Via the Verizon Customer Center, VoIP provides administrator accounts on a central website for setting up default feature classes for a range of users.			
User self-provisioning and management via web screen	User self-provisioning and management via web screen - Allows users the ability to manage their voice application needs including call forwarding and find-me, follow-me lists.  Via the Verizon Customer Center, VoIP provides web access for users to set up their phones and administer features and calling treatments.			

## 1.2.3.2.4 Converged VoIP Handsets

The Contractor shall provide the Converged VoIP service in six (6) specific handset configurations as defined below.

## 1.2.3.2.4.1 Standard Converged VoIP Handset Features

- 1. Single line;
- 2. LCD Display;
- 3. Full Duplex Hands Free Speakerphone;
- 4. Shared call / bridged line appearance;
- 5. Visual message waiting indicator;
- 6. Ring volume control;
- 7. Minimum six (6) Programmable function keys or a soft key interface;
- 8. Single 10/100 Ethernet port;
- 9. Power over Ethernet; and,
- 10. ADA Compliant section 508.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

## 1.2.3.2.4.2 Midrange Converged VoIP Handset Features

Standard Converged VoIP handset features plus:

1. Minimum three (3) lines;



- 2. Intercom feature;
- 3. Two-Port 10/100 Ethernet Port 802.3af;
- 4. 3 Way conferencing; and,
- 5. User Configurable Contact Directory.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2.4.3 Executive Converged VoIP Handset Features

Midrange Converged VoIP handset features plus:

- 1. Minimum four (4) lines; and,
- 2. Two-Port 10/100/1000 Mbps Port.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.4.4 Attendant Converged VoIP Handset Features

Executive Converged VoIP handset features Plus

- 1. Minimum Six (6) Lines;
- 2. Expansion Module(s) Capability;
- 3. USB port for call recording function; and,
- 4. XML API functionality.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.3.2.4.5 Standard Conference Room Converged VoIP Speakerphone Features and Functionality

- 1. IEEE 802.3af functionality;
- 2. IEEE 1329 full duplex standards;
- 3. RFC 3261 & companion RFCs (SIP);
- 4. IEEE 802.1 p/Q tagging;
- 5. Expansion microphone compatible;
- 6. Audio compression standards: G.711, G.729, G.722;
- 7. Ethernet 10/100Mbps connection;
- 8. Visual time & display;



- 9. Lightweight Directory Access Protocol (LDAP) corporate directory integration; and,
- 10. Layer 3 Type of Service (ToS) and Differentiated Services Code Point (DSCP).

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.2.4.6 Converged VoIP Executive Conference Room Speakerphone Features and Functionality

All Converged VoIP Standard Conference Room Speakerphone features and functionality, plus:

- 1. Integration with video conferencing systems;
- 2. High Definition Voice functionality;
- 3. Cell phone connection port;
- 4. 255x128 pixel display;
- 5. Multi-unit connectivity; and,
- 6. 2 expansion microphones included.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

Bidders shall provide the Converged VoIP Handset Service Packages described in Table 1.2.3.2.4.a

Table 1.2.3.2.4.a Converged VoIP Handset Service Packages

	Feature Name	Feature Description	Mee	lder ts or eds?	Bidder's Product Identifier
1	Standard Converged VoIP Handset Service Package	Service Package with Standard Converged VoIP Handset Service Package as described in 1.2.3.2.4.1 and the Basic Feature Package as described in 1.2.3.2.3	Y		VHSP0001

## **Bidder's Product Description:**

Verizon will provide Service Package with Standard Converged VoIP Handset Service Package as described in 1.2.3.2.4.1 and the Basic Feature Package as described in 1.2.3.2.3

Service Package:

- LCD Display;
- Full Duplex Hands Free Speakerphone;
- Shared call / bridged line appearance;



Feature Name	Feature Description	Mee	lder ets or eeds?	Bidder's Product Identifier
<ul> <li>Visual message waiting indicator;</li> <li>Ring volume control;</li> <li>Minimum six (6) Programmable function keys or a soft key interface;</li> <li>Single 10/100 Ethernet port;</li> <li>Power over Ethernet; and, ADA Compliant section 508.</li> </ul>				

Table 1.2.3.2.4.a Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Mee	lder ts or eds? N	Bidder's Product Identifier
2	Midrange Converged VoIP Handset Service Package	Service Package with Midrange Converged VoIP Handset Service Package as described in 1.2.3.2.4.2 and the Basic Feature Package as described in 1.2.3.2.3	Y		VHSP0002

## **Bidder's Product Description:**

Verizon will provide Service Package with Mid-ranged Converged VoIP Handset Service as described in 1.2.3.2.4.2 and the Basic Feature Package as described in 1.2.3.2.3.

Service Package:

Standard Converged VoIP handset features plus:

- Minimum three (3) lines;
- Intercom feature;
- Two-Port 10/100 Ethernet Port 802.3af;
- 3 Way conferencing; and,
- User Configurable Contact Directory.



Table 1.2.3.2.4.a Converged VoIP Handset Service Packages (continued)

Package as described in 1.2.3.2.3 Service Package:	vice Package with Executive Convention 1.2.3.2.4.3 and the Basic Feature of Phandset features plus:  y; and,  Mbps Port.  Service Package with Attendant Converged VoIP Handset Service Package as described			
Verizon will provide Serv Package as described in 1.2.3.2.3 Service Package: Midrange Converged Vo • Minimum four (4) lines • Two-Port 10/100/1000 Attendant Converged VolP Handset	vice Package with Executive Convention 1.2.3.2.4.3 and the Basic Feature of Phandset features plus:  y; and,  Mbps Port.  Service Package with Attendant Converged VoIP Handset Service Package as described	Packag		scribed in
1.2.3.2.3 Service Package: Midrange Converged Vo Minimum four (4) lines Two-Port 10/100/1000  Attendant Converged VolP Handset	olP handset features plus: ;; and, Mbps Port.  Service Package with Attendant Converged VoIP Handset Service Package as described		e as de	
Midrange Converged Vo  Minimum four (4) lines Two-Port 10/100/1000  Attendant Converged VolP Handset	Service Package with Attendant Converged VoIP Handset Service Package as described	Y		VHSP0004
<ul> <li>Minimum four (4) lines</li> <li>Two-Port 10/100/1000</li> <li>Attendant Converged VolP Handset</li> </ul>	Service Package with Attendant Converged VoIP Handset Service Package as described	Υ		VHSP0004
Attendant Converged VoIP Handset	Service Package with Attendant Converged VoIP Handset Service Package as described	Y		VHSP0004
VoIP Handset	Converged VoIP Handset Service Package as described	Y		VHSP0004
	in 1.2.3.2.4.4 and the Basic Feature Package as described in 1.2.3.2.3			
Bidder's Product Description:				
Verizon will provide Service Package with Attendant Converged VoIP Handset Service Package as described in 1.2.3.2.4.4 and the Basic Feature Package as described in				
Service Package: Executive Converged VoIP handset features Plus:  • Minimum Six (6) Lines;				
<ul> <li>Expansion Module(s) Capability;</li> <li>USB port for call recording function; and,</li> <li>XML API functionality.</li> </ul>				
Converged VoIP Standard Conference Room Speakerphone Service Package	Service Package with Converged VoIP conference phone Service Package with no external speakers as described in 1.2.3.2.4.5 and the Basic Feature Package as described in 1.2.3.2.3	Y		VHSP0005
	Verizon will provide Service Package as described in 1.2.3.2.3.  Service Package: Executive Converged Vo  Minimum Six (6) Lines  Expansion Module(s) (6)  USB port for call recor  XML API functionality.  Converged VolP Standard Conference Room Speakerphone	Verizon will provide Service Package with Attendant Conve Package as described in 1.2.3.2.4.4 and the Basic Feature 1.2.3.2.3.  Service Package: Executive Converged VoIP handset features Plus:  Minimum Six (6) Lines; Expansion Module(s) Capability;  USB port for call recording function; and,  XML API functionality.  Service Package with Converged VoIP conference phone Service Package with no external speakers as described in 1.2.3.2.4.5 and the Basic Feature Package as described	Verizon will provide Service Package with Attendant Converged Vo Package as described in 1.2.3.2.4.4 and the Basic Feature Packag 1.2.3.2.3.  Service Package: Executive Converged VoIP handset features Plus:  Minimum Six (6) Lines;  Expansion Module(s) Capability;  USB port for call recording function; and,  XML API functionality.  Service Package with Converged VoIP conference phone Service Package with no external speakers as described in 1.2.3.2.4.5 and the Basic Feature Package as described	Verizon will provide Service Package with Attendant Converged VoIP Hand Package as described in 1.2.3.2.4.4 and the Basic Feature Package as des 1.2.3.2.3.  Service Package: Executive Converged VoIP handset features Plus:  Minimum Six (6) Lines;  Expansion Module(s) Capability;  USB port for call recording function; and,  XML API functionality.  Service Package with Converged VoIP conference phone Service Package with no external speakers as described in 1.2.3.2.4.5 and the Basic Feature Package as described



Table 1.2.3.2.4.a Converged VoIP Handset Service Packages (continued)

	Foature Name	Feature Description	Bidder Meets or Exceeds?	Bidder's Product Identifier
	Feature Name	Feature Description	YN	identifier

Verizon will provide Service Package with Standard Conference Room Speakerphone Converged VoIP Handset Service Package as described in 1.2.3.2.4.5 and the Basic Feature Package as described in 1.2.3.2.3.

#### Service Package:

Features and Functionality

- IEEE 802.3af functionality;
- IEEE 1329 full duplex standards:
- RFC 3261 & companion RFCs (SIP);
- IEEE 802.1 p/Q tagging;
- Expansion microphone compatible;
- Audio compression standards: G.711, G.729, G.722;
- Ethernet 10/100Mbps connection;
- Visual time & display;
- Lightweight Directory Access Protocol (LDAP) corporate directory integration; and,
- Layer 3 Type of Service (ToS) and Differentiated Services Code Point (DSCP).

6	Converged VoIP Executive Conference Room Speakerphone Service Package	Converged VoIP conference phone Service Package with two (2) external speakers as described in 1.2.3.2.4.6 and the Basic Feature Package as	Y	VHSP0006
		described in 1.2.3.2.3		

#### **Bidder's Product Description:**

Verizon will provide Service Package with Executive Conference Room Speakerphone Converged VoIP Handset Service Package as described in 1.2.3.2.4.6 and the Basic Feature Package as described in 1.2.3.2.3.

Service Package:

All Converged VoIP Standard Conference Room Speakerphone features and functionality, plus:

- Integration with video conferencing systems
- High Definition Voice functionality
- Cell phone connection port
- 255x128 pixel display
- Multi-unit connectivity
- 2 expansion microphones included.



The Contractor may offer additional unsolicited Converged VoIP Handset Service Packages in Table 1.2.3.2.4.b.

Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages

	Feature Name	Feature Description	Bidder's Product Identifier	
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Package Aastra 6731i Service	This is an Aastra 6731i handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ASTR6731	
1	<b>Bidder's Product Description:</b> This is an Aastra 6731i handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also includes the following features: 3 line LCD display, supports up to 6 lines with call appearances, offers advanced XML capability, has two 10/100 Ethernet ports, handset, handset cord, installation guide, Ethernet cable, and wall mounting kit included. This phone provides a lower cost alternative which excludes a power supply and works only with PoE.			
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 6755i Service	This is an Aastra 6755i handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset service. Package owned and maintained by Verizon to provide enhanced features.	ASTR6755	
2	<b>Bidder's Product Description:</b> This is an Aastra 6755i handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also include the following features: 6 programmable keys with LEDs and 6 customizable soft keys with LEDs, full duplex speakerphone, white backlit graphical display (144 X 75),, supports headset use, and has built in dual switched 10/100 Ethernet ports. The 6755i can support up to 3 expansion modules (560M). This phone provides a lower cost alternative which includes a power supply and works with PoE.			
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 6757i Service  This is an Aastra 6757i handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features		ASTR6751	
3	<b>Bidder's Product Description:</b> This is an Aastra 6757i handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features			
	The handset specifications also includes the following features: 9 Line Telephone,12 Programmable soft keys offering up to 30 functions, One Touch Feature codes, HD Audio. Hearing Aid Compatible (HAC)Handset,Security-Users & admin Passwords, Encryption, HTTPS Configuration Downloads and Web Mgmt, Secure Real-Time Protocol (SRTP),Transport Layer Security (TLS). Multi-Lingual support. This phone provides a lower cost alternative to the base package.			



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra M675 Expansion Module Service	This is an Aastra M675 Expansion Module substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ASTE6751
4	Bidder's Product Description: This is an Aastra M675 Expansion Module substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: Expandability thatsupports up to 3 expansion modules and supporting 36 keys per module with LED indicators or 60 keys per module with a screen based LED display and System. This phone provides a lower cost alternative to the base package.		
Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 6735i  This is an Aas upgrade option Standard Con Package own		This is an Aastra 6735i handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ASTR6735
5	Bidder's Product Description: This is an Aastra 6735i handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also include the following features: 9 Line GigE Telephone,12 Programmable soft keys offering up to 30 functions, One Touch Feature codes, HD Audio. Hearing Aid Compatible (HAC)Handset, Security-Users & admin Passwords, Encryption, HTTPS Configuration Downloads and Web Mgmt, Secure Real-Time Protocol (SRTP),Transport Layer Security (TLS), and Multi-Lingual support. This phone provides a lower cost alternative to the base package.		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 6737i Service	This is an Aastra 6737i handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ASTR6737
6	Bidder's Product Description: This is an Aastra 6737i handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: 9 Line GigE Telephone, 12 Programmable soft keys offering up to 30 functions. One Touch Feature codes. Expandability that support up to 3 expansion modules-supporting 36 keys per module with LED indicators or 60 keys per module with a screen based LED display and System. HD Audio. Hearing Aid Compatible (HAC)Handset.  Security-Users & admin Passwords, Encryption, HTTPS Configuration Downloads and Web Mgmt, Secure Real-Time Protocol (SRTP), Transport Layer Security (TLS) and. Multi-Lingual support. This phone provides a lower cost alternative to the base package		



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 612d DECT Kit Service	This is an Aastra 612d DECT Kit handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ASDH0612
7	Bidder's Product Description: This is an Aastra 612d DECT Kit handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: Color TFT display (2", 176 x 220 dots, 65,536 colors). Telephone book with 200 contacts, with 8 possible entries each: office, private, and mobile number; email address, fax, quick dial, ringing tone* and name assignment. Ambient noise filter for loud environments. 44 polyphone ring tones (Midi type), 8 normal ring tones and 7 alarm tones with automatic volume control can be assigned. Up to 5 user profiles for e.g. headset use or meeting usage can be configured. Hands free operation. Headset connector (2.5 mm jack).2 programmable navigation keys.2 programmable soft keys. Intelligent battery management.3 color multi-purpose LED, which can be set for visualization of functions. Support of message & alerting applications. This phone provides a lower cost alternative to the base package.		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra 622d DECT Kit Service	This is an Aastra 622d DECT Kit handset substitution upgrade option to the handset identified in the Standard Converged VoIP Service Package owned and maintained by Verizon to provide enhanced features.	ASDH0622
8	Bidder's Product Description: This is an Aastra 622d DECT Kit handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package. owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also includes the following features: Color TFT display (2", 176 x 220 dots, 65,536 colors). Telephone book with 200 contacts*, with 8 possible entries each: (office, private and mobile number; email address, fax, quick dial, ringing tone and name assignment) VIP phonebook with 6 entries. Ambient noise filter for loud environments. 44 polyphone ring tones (Midi type), 29 normal ring tones and 7 alarm tones with automatic volume control can be assigned. Up to 5 user profiles for e.g. headset use or meeting usage can be configured. Hands free operation. Headset connector (2.5 mm jack) and Bluetooth (hands free profile) headset support, 1 programmable hotkey, 2 programmable navigation keys, 2 programmable soft keys, 3 programmable side keys, . Intelligent battery management, Mini USB PC interface, 3 color multi-purpose LED, which can be set for visualization of functions and support of message & alerting applications. This phone provides a lower cost alternative to the base package.		



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra Antenna Indoor RFP L35 Service	This is an Aastra Antenna Indoor RFP L35 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	AAIR0035
9	Bidder's Product Description: This is an Aastra Antenna Indoor RFP L35 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: all 60 DECT channels supported for maximum use of the DECT capacity.8 simultaneous voice channels per RFP.4 additional channels for switching purposes, GAP standard supported, Connection handover in line with the GAP standard, DSAA authentication between base and handset, Support of DECT encryption, Cordless system telephones can use all features offered by the OpenCom 100, 1000 and SIP-DECT Integrated DECT dipole antenna DECT XQ for minimization of interferences in reflecting environments.		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Aastra Antenna Outdoor RFP L36 Service	This is an Aastra Antenna Outdoor RFP L36 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Service Package owned and maintained by Verizon to provide enhanced features.	AAIR0036
10	Bidder's Product Description: This is an Aastra Antenna Outdoor RFP L36 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: all 60 DECT channels supported for maximum use of the DECT capacity, 8 simultaneous voice channels per RFP, 4 additional channels for switching purposes, GAP standard supported, Connection handover in line with the GAP standard, DSAA authentication between base and handset, Support of DECT encryption, Cordless system telephones can use all features offered by the Open Com 100,1000 and SIP-DECT Integrated DECT dipole antenna, and DECT XQ for minimization of interferences in reflecting environments. This phone provides a lower cost alternative to the base package.		



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
11	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint IP 321 Service	This is a Polycom SoundPoint 321 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0321	
	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 321 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package . owned and maintained by Verizon to provide enhanced handset features. The handset specifications also include the following features: 2-line SIP phone with full duplex speaker & single 10/100 port with integrated PoE, 102 x 33 pixel-graphical LCD, MWI, and LAN Cable. This phone provides a lower cost alternative to the base package.			
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint IP 331 Service	This is a Polycom SoundPoint 331 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0331	
12	Bidder's Product Description: This is a Polycom SoundPoint 331 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: 2 lines with up to 2 calls per line. Feature keys include 3 context-sensitive "soft" keys, 2 line keys with bi-color (red/green) LED, 2 feature keys ("Menu" and "Dial"), 4-way navigation key cluster with center "Select" key, 2 volume control keys, Dedicated hold key, Dedicated headset key, Dedicated hands-free speakerphone key, Dedicated microphone mute key, Interoperability with Microsoft® LCS 2005 for telephony and presence. Compatibility with Microsoft Office Communicator and Windows® Messenger 5.1 Clients include Enabled for Polycom Productivity Suite, Local feature-rich GUI, Wave file support for call progress tones, Unicode UTF-8 character support, Multilingual user interface, LED backlight with custom intensity control. This phone provides a lower cost alternative to the base package.			
13	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom -SoundPoint Service	This is a Polycom SoundPoint 335 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0335	
	Bidder's Product Description: This is a Polycom SoundPoint 335 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: 2 lines with up to 8 simultaneous calls total. Feature keys include 3 context-sensitive "soft" keys, 2 line keys with bi-color (red/green) LED, 2 feature keys ("Menu" and "Dial"), 4-way navigation key cluster with center "Select" key, 2 volume control keys, Dedicated hold key, Dedicated headset key, Dedicated			



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	hands-free speakerphone key, Dedicated microphone mute key, Optional Messages Key, and Remote missed call notification feature. This phone provides a lower cost alternative to the base package.		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 450 Service	This is a Polycom SoundPoint 450 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0450
14	Bidder's Product Description: This is a Polycom SoundPoint 450 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: 3 lines with up to 8 concurrent calls per line. Feature Keys include 4 context-sensitive "soft" keys, 17 dedicated "hard" keys, 3 line keys with bi-color (red/green) LED, 3 feature keys, 5 display/menu navigation keys, and 2 volume control keys. Windows® Messenger 5.1 Clients features include Enabled for Polycom Productivity Suite, Local feature-rich GUI, Time and date display, User-configurable contact directory and call history (missed, placed and received), Wave file support for call progress tones, Unicode UTF-8 character support and Multilingual user interface.		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 550 Service	Polycom Phone CPE offers additional enhanced service elements to Verizon's Converged VoIP services.  This is a Polycom SoundPoint 550 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0550
Bidder's Product Description: This is a Polycom SoundPoint 550 han option to the handset identified in the Standard Converged VOIP Handse and maintained by Verizon to provide enhanced handset features The handset specifications also include the following features: 3-line SIP Voice, full duplex speaker, dual 10/100 ports with integrated PoE, 256 x 1 MWI, and LAN Cable. This phone provides a lower cost alternative which excludes the specification of the second			Polycom HD aphical LCD,



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 560 Service	This is a Polycom SoundPoint 560 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0560
16	Bidder's Product Description: This is a Polycom SoundPoint 560 handset substitution upgra option to the handset identified in the Standard Converged VOIP Handset Service Package Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features:  4 context-sensitive "soft" keys, 26 dedicated "hard" keys 6 line keys with bi-color (red/green) LEI 8 feature keys, and 6 display/menu. Navigation keys feature include 2 volume control keys, Illuminated mute key, Illuminated headset key, Illuminated hands-free speakerphone key and Dedicated hold key. Integration with Microsoft LCS 2005 for telephone and presence3 include Compatibility with Microsoft Office Communicator and Windows® Messenger 5.1 Clients Universerial Bus (USB), Full Host Controller, Compliant with OHCI 1.1 specification, Support for Full-speed and Low-speed peripherals, Type-A receptacle interface, Local feature-rich GUI, Customizable call progress tones, Wave file support for call progress tones, Unicode UTF-8 character support, Multilingual user interface, Security-Transport Layer Security-TLS, Secure Retime Transport Protocol (SRTP), Encrypted configuration files, Digest authentication, Support for URL syntax with password for boot server, HTTPS secure provisioning, FTP/TFTP/HTTP/HTTP server-based central provisioning for mass deployments, and Provisioning server redundancy supported Web portal for individual unit configuration. This phone provides a lower cost alternative to the base package.		
17	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 650 Service	This is a Polycom SoundPoint 650 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	ILCD0650
	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 650 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: - High performance IP phone with Polycom HD Voice and advanced feature set with Universal power adapter. This phone provides a lower cost alternative to the base package.		
18	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 670 Service	This is a Polycom SoundPoint 670 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLY0670
	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 670 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features		



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

		Feature Name	Feature Description	Bidder's Product Identifier	
		The handset specifications also includes the following features keys to include 4 context-sensitive "soft" keys, 26 dedicated "hard" keys, 6 line keys with bi-color (red/green) LED, 8 feature keys, and 6 display/menu. Navigation keys include 2 volume control keys, Illuminated mute key, Illuminated headset key, Illuminated hands-free speakerphone key and Dedicated hold key. Integration with Microsoft LCS 2005 for telephone and presence3 include Compatibility with Microsoft Office Communicator and Windows® Messenger 5.1 Clients Universal Serial Bus (USB), Full Host Controller, Compliant with OHCI 1.1 specification, Support for Full-speed and Low-speed peripherals, Type-A receptacle interface, Local feature-rich GUI, Customizable call progress tones, Wave file support for call progress tones, Unicode UTF-8 character support, Multilingual user interface, Security-Transport Layer Security-TLS, Secure Real-time Transport Protocol (SRTP), Encrypted configuration files, Digest authentication, Support for URL syntax with password for boot server. HTTPS secure provisioning, FTP/TFTP/HTTP/HTTPS4 server-based central provisioning for mass deployments, and Provisioning server redundancy supported Web portal for individual unit configuration. This phone provides a lower cost alternative to the base package.			
15		Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint Color Expansion Module - SoundPoint IP Color Expansion Module for SoundPoint IP 670 Service  This is a Polycom SoundPoint Color Expansion Module 670 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.		SNDP0670	
	19	Bidder's Product Description: This is a Polycom SoundPoint 670 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also include the following features: 14 illuminated multifunctional line keys, PoE supports one Color Expansion Module, PSU version supports up to three Color Expansion Modules, Flexibility-hot swappable, Robust Call Handling—34 line registrations, 24concurrent calls, Caller IDs, and Shared call appearances. This phone provides a lower cost alternative to the base package.			
		Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint Backlit Expansion Module - Polycom SoundPoint IP Backlit Expansion Module 650 Service	This is a Polycom SoundPoint Backlit Expansion Module 650 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	SNDP0650	
	20	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 650 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: 14 illuminated keys configurable as a line appearance or a speed dial with busy lamp field (BLF), Feature-rich GUI with animation and Multilingual user interface. This phone provides a lower cost alternative to the base package.			



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 5000 Service	This is a Polycom SoundPoint 5000 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	PSND5000	
Bidder's Product Description: This is a Polycom SoundPoint 5000 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features The handset specifications also includes the following features: Standard 12-key keypad, Condependent 4 soft keys 4, On-hook/Off-hook, redial, mute, volume up/down, and 5-way navigate Menu Audio features Loudspeaker, Frequency: 250 – 7,000 HZ, Volume: Adjustable to peak volume, 84 dB at 1/2 meter distance, Voice activity detection, Comfort noise fill, DTMF tone generation / DTMF event RTP payload. Low-delay audio packet transmission includes Adaptive jitter buffers, Packet loss concealment, Acoustic echo cancellation and Background noise suppression.  This phone provides a lower cost alternative to the base package.				
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom - SoundPoint 6000 Service	This is a Polycom SoundPoint 6000 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	PSND6000	
22	upgrade option to the handset identified Package owned and maintained by Ver The handset specifications also include Context-dependent 3 soft keys. Loudsp Adjustable to 86 dB at 1/2 meter peak veach audio path, Voice activity detectio RTP payload, Low-delay audio packet to concealment, Acoustic echo cancellation	is a Polycom SoundPoint 6000 handset substant in the Standard Converged VOIP Handset Strizon to provide enhanced handset features. It is the following features: Standard 12-key key reaker includes Frequency: 220-14,000 Hz, Volume, Individual volume settings with visual n, Comfort noise fill, DTMF tone generation / transmission, Adaptive jitter buffers, Packet Icon, Background noise suppression, Wave file aracter support and Multilingual user interface in package.	Service  /pad and folume: feedback for DTMF event oss support for	



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 7000 Service	This is a Polycom SoundPoint 7000 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	PSND7000	
Bidder's Product Description: This is a Polycom SoundPoint 7000 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features. The handset specifications also include the following features: Standard 12-key keypad, . Codependent 4 soft keys, On-hook/Off-hook, redial, mute, volume adjustable to 88 dB at 1/2 m peak volume, , Remote missed call notification, Automatic off-hook call placement, Do not difunction, Local feature-rich GUI, Wave file support for call progress tones, Unicode UTF-8 character support, Multilingual user interface and Web portal for individual unit configuration. Network Address Translation (NAT) support include RTCP support (RFC 1889), Event loggin Local digit map, Hardware diagnostics, Status and statistics, User selectable ringer tones, Convenient volume adjustment keys and Automatic Gain Control intelligently. This phone provious cost alternative to the base package.				
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 6000 EX Microphone Service	This is a Polycom SoundPoint 6000 EX Microphone handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPMI60000	
24	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 6000 EX Microphone handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features The handset specifications also include the following features: 2 expansion MICS and 2.1M-7ft connection cables for expanded room coverage. This phone provides a lower cost alternative to the base package.			
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Polycom SoundPoint 7000 EX Microphone Service	This is a Polycom SoundPoint 7000 EX Microphone handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	IPLS7000	
25	<b>Bidder's Product Description:</b> This is a Polycom SoundPoint 7000 EX Microphone handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features The handset specifications also include the following features: TWO 2 EXPANSION MICS AND 2.1M-7FT CONNECTION CABLES for expanded room coverage. This phone provides a lower cost alternative to the base package.			



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco 3905 Service	This is a Cisco 3905 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	CSCP3900		
26	Bidder's Product Description: This is a Cisco 3905 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package. owned and maintained by Verizon to provide enhanced handset features.  The handset specifications also include the following features: Two lines, Fixed keys for redial, transfer, hold/resume, full-duplex speakerphone and two-line display. Web server for configuration and statistics. Real-Time Control Protocol (RTCP) support and monitoring. Support for online firmware upgrades using Trivial File Transfer Protocol (TFTP).  This phone provides a lower cost alternative to the base package.				
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco 6961 Service	This is a Cisco 6961 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	CSCP6900		
27	Bidder's Product Description: This is a Cisco 6961 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: 12 lines, Four soft key buttons and a scroll toggle bar. Multi-call per-line appearance.  Power savings option- cycling power by time of day and day of week.  Co-Branding button allows customers to include their logo on the Cisco Unified IP Phone 6900 Series phones and Cisco has approved third-party vendors to produce the buttons. This phone provides a lower cost alternative to the base package.				
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco 7965G 7965G Service  This is a Cisco Cisco 7965G handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.				
28	Bidder's Product Description: This is a Cisco 7965G handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: Six telephone lines. Four interacti soft keys that guide you through call features and functions, an intuitive four-way (plus Select key) navigation cluster. Hands-free speakerphone and handset designed for high-fidelity wideband audio. 24 defined user-selectable ring tones are available. Ring tones may also be personalized through use of the Cisco Unified Phone Application Suite. Online Help button gives users information about the phone keys, buttons, and features. Positive device identity through X.509v3 Certificates, digitally signed images, cryptographically secure provisioning, and secure signaling a secure media with AES-128. This phone provides a lower cost alternative to the base package.				



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco 8945 Service	This is a Cisco 8945 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	CSCP8900		
29	Bidder's Product Description: This is a Cisco 8945 handset substitution upgrade option to the handset identified in the Standard Converged VOIP Handset Service Package owned and maintained by Verizon to provide enhanced handset features  The handset specifications also includes the following features: 5 lines expanding to 41 with 1 Key Expansion Module, Internal 2-port Cisco Ethernet switch allows for a direct connection to a 10/100/1000 BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the phone and a collocated PC. System administrator can designate separate VLANs (802.1Q) for the PC and phone, providing improved security and reliability of voice and data traffic. VGA presentation for calling and applications. 5-inch (10 cm) graphical TFT color display, 24-bit color depth, 640 x 480 effective pixel resolutions, (with backlight). Display also supports localization requiring double-byte Unicode encoding for fonts This phone provides a lower cost alternative to the base package.				
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco 9971 Service	This is a Cisco 9971 handset substitution upgrade option to the handset identified in the Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	CSCP9900		
30	the handset identified in the Stamaintained by Verizon to provide The handset specifications also Expansion Modules, Bluetooth headset users within 30 feet of and applications by enabling acheadsets.  Supports an on-board wi-fi radiv VGA presentation for calling, viouch screen display, 24-bit co	n: This is a Cisco 9971 Video handset substitution andard Converged VOIP Handset Service Package de enhanced handset features o include the following features: 6 Lines Expanding Mobility- supports the Hands-free and Headset Blustheir desktop. 2 USB ports accelerate the usability ccessories such as the Cisco Unified IP Camera, within it is and antenna that enables connectivity to a wi-fit acideo calling and applications, 5.6-inch (14 cm) graph lor depth, 640 x 480 effective pixel resolution, (with on requiring double-byte Unicode encoding for fonts of the base package.	owned and to 114 with 3 Key etooth profiles for of call handling red and wireless ccess point. nical TFT color backlight), And		

Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	Handset Substitute Upgrade Standard Converged VoIP Handset Service Pkg Cisco SPA508G Service	Standard Converged VoIP Handset Service Package owned and maintained by Verizon to provide enhanced features.	CSCI0500	
Bidder's Product Description: This is a Cisco SPA508G handset substitution upgrade op the handset identified in the Standard Converged VOIP Handset Service Package owned ar maintained by Verizon to provide enhanced handset features  The handset specifications also include the following features: 8 lines. Eight independent SII Registrations. Line status- active line indication, with name and number. Menu-driven user in Anonymous caller blocking, Group paging, andPixel-based display: 128 x 64 monochrome L graphical display with backlight.  Dedicated illuminated buttons include  Audio mute on/off, Headset on/off, Speakerphone on/off, 4-way rocking directional knob for navigation, Settings button for access to feature, setup, and configuration menus, Standard button dialing pad, High-quality handset and cradle. Two Ethernet ports with integrated Ethe switch: 10/100BASE-T RJ-45, Optional 5 VDC universal (100-240V) switching; power supply ordered separately (Cisco PA100) Syslog, debug, report generation, and event logging, High secure call encrypted voice communications support, Built-in web server for administration a configuration with multiple security levels. Automated remote provisioning, multiple methods to 256-bit encryption (HTTP, HTTPS, Trivial File Transfer Protocol [TFTP]). This phone provides				
	VoIP Transition Support Service (Legacy to VoIP Services)	VoIP Transition Support Service (Legacy to VoIP Services)	VHPT0000	
32	Bidder's Product Description: VoIP Transition Support Service (Legacy to VoIP Service) – A VoIP Transition Management Service that will provide the customer assistance with CALNET3 VoIP Handset Service Package transition from existing legacy voice services to Verizon's CALNET3 VoIP Handset service. VoIP Transition Support Service (Legacy to VoIP Service) Support Service activities require a Statement of Work (SOW) subject to the defined activities below, projects based, in blocks of 40 hours.  VoIP Transition Support Service (Legacy to VoIP Service) - VoIP Transition Support Service will include the following:			
	<ul> <li>and local Incumbent or Co inventory.</li> <li>The VoIP Support Service ensure that the inventory n</li> <li>Verizon VoIP Support Se Number (BTN) strategy in order rejections.</li> <li>The VoIP Support Services</li> </ul>	on VoIP Support Services to understand the project impetitive Local Exchange Carriers (ILEC/CLEC) volumes will validate the porting users list against the ILEC natches the expected project outcome. rvices will work with the customer to come up wan effort minimize project "Risk" of retail to service pass will also evaluate the inventory to ensure that line come up with solutions on the ILEC/CLEC side to fixitions to the business.	C/CLEC records to the bill Telephone provider wholesale is are in a portable	



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name Feature Description		Bidder's Product Identifier			
	<ul> <li>VoIP Support Service can interview the end users to understand features and functionality of the current service in an effort to assist with the resolution process.</li> <li>The VoIP Support Service will provide recommendations and remediation solutions as part of the workaround process.</li> <li>The VoIP Support Service will work with the customer point of contact.</li> </ul>					
Suppler network other ag	re-design and re-configuration greed upon network changes. Th	rices al activities, including but not limited to training, ingr to support additional protocols, re- addressing of th ese activities will be defined on a per Customer bas d deliverable being a design/configuration documer	e network and sis (detailed			
	Technical Services Support I - Standard Hours/Regular Rate (8am - 5pm local time)	Technical Services Support I - Standard Hours/Regular Rate (8am - 5pm local time)	VPTR0001			
33	implementation site survey and	n: Basic Network Skillset - Standard Hours: Pre or F I network support. Provides basic Networking skills. equipment. Performs Cross Connects. Places Phon	For Example:			
	Technical Services Support I - Non-Standard Hours	Technical Services Support I - Non-Standard Hours	VPTN0001			
34	<b>Bidder's Product Description</b> : Basic Network Skillset - Non Standard Hours Pre or Post implementation site survey and network support. Provides basic Networking skills. For Example: Installs equipment, powers up equipment. Performs Cross Connects. Places Phone sets. Inventory equipment.					
	Technical Services Support II - Standard Hours/Regular Rate (8am - 5pm local time)	Technical Services Support II - Standard Hours/Regular Rate (8am - 5pm local time)	VPTR0002			
35	Bidder's Product Description: Basic Plus Network Skillset - Standard Hours: Pre or Post- implementation site survey and network design. Provides advanced networking skills. For exam Conducts assessments for complex installations or network solutions. Network configurations of router, switches and firewalls.					
	Technical Services Support II - Non-Standard Hours	Technical Services Support II - Non-Standard Hours	VPTN0002			
36	<b>Bidder's Product Description</b> : Basic Plus Network Skillset -Non Standard Hours: Pre or Post-implementation site survey and network design. Provides advanced networking skills. For example Conducts assessments for complex installations or network solutions. Network configurations of router, switches.					
37	Network Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	Network Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	VPNR0001			
		n: Advanced Network Engineering Skillset- Standar y and network design. Performs advanced on-site i				



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	tests interoperability with other products For example Network configurations of router, switches, Firewall & VoIP.				
	Network Engineer - Non- Standard Hours	Network Engineer - Non-Standard Hours	VPNT0001		
38	or Post-implementation site sur	n: Advanced Network Engineering Skillset- Non-Starvey and network design. Performs advanced on-sit products For example Network configurations of ro	e installation and		
	Network Engineer II - Standard Hours/Regular Rate (8am - 5pm local time)	Network Engineer II - Standard Hours/Regular Rate (8am - 5pm local time)	VPNR0002		
39	Pre or Post-implementation site and tests interoperability with o	n: Advanced Plus Network Engineering Skillset - Ste survey and network design. Performs advanced on the products For example Complex Network configure. Skillset to understand MPLS and SDN.	n-site installation		
	Network Engineer II - Non- Standard Hours	Network Engineer II - Non-Standard Hours	VPNT0002		
40	Bidder's Product Description: Advanced Plus Network Engineering Skillset - Non-Standard Hours: Pre or Post-implementation site survey and network design. Performs advanced on-site installation and tests interoperability with other products For example Complex Network configurations of router, switches, Firewall & VoIP. Skillset to understand MPLS and SDN.				
41	Professional Services - Senior Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	Professional Services - Senior Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	VPSE0000		
	<b>Bidder's Product Description</b> : Professional Network Engineer: Person may hold a degree or industry certifications in specific specialization. Security, cyber security, disaster recovery and business continuity and Advanced networking specific to manufacturer.				
	Professional Services Principle Architect I - Standard Hours/Regular Rate (8am - 5pm local time)	Professional Services Principle Architect I - Standard Hours/Regular Rate (8am - 5pm local time)	VPPS0001		
42	Bidder's Product Description: Multi-Skillset Individual providing Network oversight: Pre or Find implementation site survey and network design. Provides highly advanced consulting skills are multiple disciplines. For Example, Security, Networking, MPLS, Standards and best practices Conducts assessments, design, and overall technical oversight for highly complex installation involving multiple technologies.				
43	Professional Services - Principal Architect II - Standard Hours/Regular Rate (8am - 5pm local time)	Professional Services - Principal Architect II - Standard Hours/Regular Rate (8am - 5pm local time)	VPPS0002		



Table 1.2.3.2.4.b Unsolicited Converged VoIP Handset Service Packages (continued)

Feature Name	Feature Description	Bidder's Product Identifier
oversight. Pre or Post-impleme consulting skills across multiple and best practices. Works with	n: Multi-Skillset Individual providing network design entation site survey and network design. Provides his disciplines. For Example, Security, Networking, Macustomer to integrate legacy technology, Conducts versight for highly complex installations involving machine.	ghly advanced PLS, Standards assessments,

#### 1.2.3.2.5 Converged VoIP Site Survey

The Contractor shall provide site survey, design, and implementation of Converged VoIP services which shall be included in the nonrecurring per seat price.

The Contractor shall perform an assessment of the environment to identify all required components and tasks needed for implementation of this service.

The Site Survey will include the completion of the Contractor's Site Survey Assessment form that will identify the steps required to facilitate a successful implementation of the Converged VoIP services. Upon completion of the survey, the Contractor shall provide the Customer a copy of the completed Site Survey Assessment form. The Site Survey Assessment form will identify potential deficiencies found at the location and the necessary steps that will be required to correct them so that the Customer can order and implement Converged VoIP services.

The Contractor shall certify existing cabling. The Bidder shall describe in detail and list all cabling requirements that must be met by the Customer to certify existing horizontal cabling for Converged VoIP services.

Bidder understands the requirements in Section 1.2.3.2.5 and shall meet or exceed them? Yes  $\underline{X}$  No\_\_\_\_\_

#### Description:

Verizon will provide site surveys, design, and implementation of Converged VoIP services, which will be included in the nonrecurring per seat price.

Verizon will perform an assessment of the environment to identify all required components and tasks needed for implementation of this service.

The Site Survey will include the completion of the Verizon's Site Survey Assessment form that will identify the steps required to facilitate a successful implementation of the Converged VoIP services. Upon completion of the survey, Verizon will provide the Customer with a copy of the completed Site Survey Assessment form. The Assessment form will identify potential environmental deficiencies found at the location and the necessary steps that will be required to correct them so that the Customer can order and implement the Converged VoIP services.



Verizon will confirm that the customer has met cabling requirements to certify existing horizontal cabling for Converged VoIP Services. The requirements include customers' existing communication cabling, patch cordage and connectors, are at a minimum of Category 5 complaint as defined in ANSI/TIA/EIA-568-A, with clarification in TSB-95. These documents specify performance characteristics and test requirements for frequencies of up to 100 MHz. Cable types, connector types and cabling topologies are defined by TIA/EIA-568-B and are nearly always, 8P8C modular connectors, often referred to as RJ45, are used for connecting category 5 cable. The cable can be terminated in either the T568A scheme or the T568B scheme. Confirm maximum cable segment length of 100M has not been exceeded. The maximum length for a cable segment is 100m per TIA/EIA 568-5-A. The specifications for 10BASE-T networking specify a 100 meter length between active devices. This allows for 90 meters of solid-core permanent wiring, two connectors and two stranded patch cables of 5 meters, one at each end.

#### 1.2.3.2.6 Converged VoIP Network LAN Assessment

The Contractor shall perform a network LAN Assessment to address the following at no charge:

- 1. Health of the network;
- 2. Bandwidth requirements;
- 3. Power requirements;
- 4. Firewall requirements; and,
- 5. E9-1-1 requirements.

The Contractor shall perform a network VoIP LAN Assessment for Customer locations to determine the readiness of the network infrastructure to support VoIP traffic. The VoIP LAN Assessment shall identify network and equipment impairments that would cause VoIP to fail.

The Contractor shall measure network infrastructure performance by electronically passing the amount of simulated traffic expected under a VoIP implementation and measuring network infrastructure performance under the increased traffic load.

The Contractor shall provide a corrective action plan that identifies any corrective actions required by the Customer for the Customer's LAN to support the Converged VoIP service.

Upon written confirmation from Customer that the specifically identified corrective actions have been completed, Contractor shall perform any additional LAN Assessments to identify corrective actions required to insure proper operation of the service.

The Contractor shall provide an option for retesting the LAN as described within this Section.

The Contractor shall develop a Scope of Work (SOW) for each location as described in IFB Section A.6 (Contracted Service Project Work).

This service shall only be used for the purposes of determining Customer's site readiness for provisioning of the Contractor's Converged VoIP services under this Contract.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



## 1.2.3.2.7 Converged Site Design

The Contractor shall perform design services for each VoIP deployment. The design services shall include engineering and Documentation of all components required for proper implementation of the VoIP service. The site design service will be provided after a Customer has placed an order for Converged VoIP services and before implementation.

The Contractor shall complete a network design for implementation of Converged VoIP service for each Customer location.

The Contractor shall provide Visio Diagram(s) that details the Converged VoIP design for each location including the Customer Premise Equipment (CPE) and VoIP Transport bandwidth that will be installed.

During the network design, the proper grade of service will be engineered and bandwidth allocated to allow all simultaneous channels to be active with no degraded service.

The network design will indicate the Voice Compression CODEC that will be used, the number of simultaneous calls that the network will be able to handle for the P.01 grade of service and the total VoIP transport bandwidth that will be available at the location.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2.8 Converged VoIP Site Implementation

The Contractor shall install all on-site equipment at the Customer location implementing a Converged VoIP service. The installation will commence after Customer approval following completion of the Site Survey, and network Design phase.

The Contractor shall install all appropriate components detailed in Section 1.2.3.2.1 (Converged VolP Minimum Requirements). This includes, but is not limited to, software, a router, firewall, VolP handsets and required analog phone adapters. The Customer shall be responsible for the required LAN components.

The Contractor shall test the complete system, all phones and associated equipment. The Contractor shall provide written test results to the Customer to assist Customer in determination of the final acceptance.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2.9 Converged VoIP Account Codes

The Contractor's system shall allow the Customer to utilize account codes which enable the tracking of calls made outside of the location by prompting subscribers for an account code.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.2.10 Converged VoIP Authorization Codes

The Contractor's system shall allow the Customer to utilize Authorization Codes. This feature allows Customers to enable a prompt for an Authorization Code when making calls outside of the location. Calls will not be connected unless a valid code is entered.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



#### 1.2.3.3 ADDITIONAL CONVERGED VOIP SERVICES AND FEATURES

The Contractor shall provide the additional Converged VoIP services and features described below.

## 1.2.3.3.1 Converged VoIP Site Survivability Network Failure

The Contractor shall provide an option for Converged VoIP site survivability in the event of a network failure. Site Survivability Network Failure is an option where, in the event of a network failure, calling functionality is maintained for all handsets on premise. The installation of an on premise gateway to connect to the PSTN is an acceptable solution.

Failure of a Customer to select this option does not release the Contractor from its SLA obligations as described in Section 1.2.9.8.1 (Availability SLAs).

This solution is for backup purposes only. The Contractor shall not promote, design or offer this service as a standalone primary service and it shall only be used in conjunction with the Converged VoIP Service. Connections to the PSTN shall only be used in the event of Converged VoIP Service failure.

The Contractor shall only route traffic originating from the locally served Customer of record. No other traffic is permitted.

The Converged VoIP Site Survivability Network Failure solution shall provide automatic alarm notification by electronic means to the CALNET 3 CMO whenever traffic is routed through the gateway to the PSTN via locally connected circuits.

This service is exempt from the provisions of Section 1.2.3.1.6 (Network Based).

Bidder shall describe their CALNET 3 Network Failure Site Survivability solution.

Any Bidder proposed additional unsolicited local gateway site survivability solutions must conform to these requirements and will fall under the SLA's established in Section 1.2.9 Error! Reference source not found. (Service Level Agreements).

Bidder	understands	the requirements in	Section 1.2.3.3.	1 and shall meet	or exceed them?
Yes <u>X</u> I	No				

Description:

# Verizon's Network Failure Site Survivability Option for Converged VoIP

Verizon will provide an option for Converged VoIP site survivability in the event of a network failure. Site Survivability Network Failure is an option where, in the event of a network failure, calling functionality is maintained for all handsets on premise. This Survivability Network Failure option will include the installation of an on-premise gateway to connect to the PSTN.

Verizon understands that failure of a Customer to select this option does not release Verizon from its SLA obligations, as described in Section 1.2.9.8.1 (Availability SLAs).



The Converged VoIP Site Survivability Network Failure solution will provide automatic alarm notification by electronic means to the CALNET 3 CMO whenever traffic is routed through the gateway to the PSTN via locally connected circuits.

#### 1.2.3.3.2 Converged VoIP Network LAN Assessment Retest

If required, Contractor shall perform a network LAN Assessment retest in accordance with the provisions of Section 1.2.3.2.6 (Converged VoIP Network LAN Assessment) to validate corrective actions have been completed that allow for proper operation of the service.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.3.3.3 Converged VoIP Block of 20 Additional Direct Inward Dialing (DID) Number Reservation

Contractor shall provide an option that allows the Customer to purchase an additional block of 20 DID numbers. This block will be used to reserve additional blocks of DID numbers for future requirements (20 per block) this charge shall only apply for the reservation of the block of numbers. Upon utilization of all 20 DIDs, this charge shall be terminated.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

## 1.2.3.3.4 Converged VoIP Web Based Attendant Console

The Contractor shall provide a Converged VoIP web-based Attendant Console that enables a subscriber (e.g., receptionist) to monitor a configurable set of subscribers at the same location as the Attendant. The Attendant Console shall graphically display subscribers' status (busy, idle, do not disturb), as well as detailed call information. The Attendant Console window shall allow the attendant to perform click-to-transfer or click-to-dial.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

#### 1.2.3.3.5 Converged VoIP Additional Line Appearance

The Contractor shall provide additional line appearances for multi-line phones.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.3.6 Converged VolP Analog and Facsimile Support

The Contractor shall provide analog device or facsimile support services that will:

- 1. Provide Auto Detection of voice or fax;
- 2. Provide Facsimile over TCP/IP; and,
- 3. Provide Fax Messaging.

The network will automatically detect a voice or fax call and use the correct compression code.



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The Contractor shall furnish, install and support all equipment for proper operation of the Customer analog device.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

Contractor shall offer the Converged VoIP service features detailed in Table 1.2.3.3.a.



Table 1.2.3.3.a Converged VoIP Service Features

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier	
1	Converged VoIP Site Survivability Network Failure	Site survivability option	Y		CVSS0000	
	Bidder's Product Description:  Verizon will provide Converged VoIP - Site Survivability Network Failure Site survivability option - Verizon will provide an option for Converged VoIP site survivability in the event of a network failure. Site Survivability Network Failure is an option where, in the event of a network failure, calling functionality is maintained for all handsets on premise.  This Survivability Network Failure option will include the installation of an on premise gateway to connect to the PSTN.  Failure of a Customer to select this option does not release Verizon from its SLA obligations as described in Section 1.2.8.8.1 (Availability SLAs). The Converged VoIP Site Survivability Network Failure solution will provide automatic alarm notification by electronic means to the CALNET 3 CMO whenever traffic is routed through the gateway to the PSTN via locally connected circuits.					
2	Converged VoIP Network LAN Assessment Retest	Additional test beyond the initial LAN Assessment test as identified in Section1.2.3.2.6) Converged VoIP Network LAN Assessment. [per seat]	Y		CVNL0000	
		ription: rged VoIP Network LAN Assessment Rete t test as identified in Section1.2.3.2.6) Cor				
3	Converged VoIP Block of 20 Additional Direct Inward Dialing (DID) Number Reservation	Block of 20 DID numbers held in reservation.	Y		IDID0000	
	Bidder's Product Description:  Verizon will provide Converged VoIP Block of 20 Additional Direct Inward Dialing (DID) Number Reservation - Block of 20 DID numbers held in reservation.					
4	Converged VoIP Web- Based Attendant Console	Enables a subscriber (e.g., receptionist) to monitor a configurable set of subscribers	Y		CVAC0000	
	Bidder's Product Description:  Verizon will provide Converged VoIP Web-Based Attendant Console that enables a subscriber (e.g., receptionist) to monitor a configurable set of subscribers.					



Table 1.2.3.3.a Converged VoIP Service Features (continued)

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier	
5	Converged VoIP Additional Line Appearance	Additional line appearances for multi- line handsets.	Y		CVAL0000	
	Bidder's Product Description:  Verizon will provide Converged VoIP - Additional Line Appearance Additional line appearances for multi-line handsets.					
6	Converged VoIP Analog and Facsimile Support	Analog device or facsimile support	Y		CVAF0000	
	Bidder's Product Description:  Verizon will provide Converged VoIP - Analog and Facsimile Support Analog device or facsimile support.					

The Contractor may offer additional unsolicited Converged VoIP service features in Table 1.2.3.3.b.

Table 1.2.3.3.b Unsolicited Converged VoIP service features

Feature Name	Feature Description	Bidder's Product Identifier
Account Codes	Enables the tracking of calls made outside of the location by prompting subscribers for an account code.	ACTC0000
Bidder's Product Description: Enables the tracking of calls made outside of the location by prompting subscribers for an account code.		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
2	Additional Auto Attendant Levels	For each Additional Auto Menu Level.	AATL0000	
	Bidder's Product Description:  Additional Auto Attendant serves as an automated receptionist that answers the phone and provides a personalized message to callers with options for connecting to the operator, dialing by name or extension, or connecting to up to six configurable extensions. Configuration via the Verizon Customer Center Administrator Dashboard web interface also allows for hours of operation to be modified, with different options available for hours that the company is open or closed.			
	Remote Office	Enables subscribers to access and use their VoIP service from any end point, on-net or off-net (e.g., home office, mobile phone).	RMTO0000	
Bidder's Product Description:  Enables subscribers to access and use their VoIP service from any end point, on-net (e.g., home office, mobile phone). This service is especially useful for tele-workers ar workers, as it enables them to use all of their Communication Manager features while remotely (e.g., extension dialing, transfers, conference calls, Outlook Integration, dire etc.). In addition, since calls are still originated from VoIP, the service provides an ea mechanism for separating personal and business phone expenses, as well as keepir phone numbers private. This service must be set-up by the administrator.			and mobile hile working directories, easy	
	Deviceless Subscriber	Deviceless Subscriber is an optional feature available to installed HIPC locations that allows an additional HIPC user line without an assigned SIP end point.	DVCS0000	
Bidder's Product Description:  Deviceless Subscriber is an optional feature available to installed HIPC locations that all additional HIPC user line without an assigned SIP end point. Deviceless Subscriber received the following optional features which includes Remote Office or Voice Mail. also excludes the required DID number charge. The following features are included with Deviceless Subscriber as follows: Anonymous Call Rejection to reject callers who have their caller ID, Call Forwarding to redirect incoming calls, Call log to view missed or received Call Notify to provide text or e-mail notification of incoming calls, Do Not Disturb to appear and send calls to an alternate location, Selective Call Acceptance/Call Rejection to screen incoming calls, Caller ID to view caller identification, Voice Messaging to send calls to voice (requires voicemail), Locate Me "Find Me Follow Me" to ring multiple phones sequentially Simultaneous Ring "Call Blast" to ring multiple phones simultaneously.			er requires at Mail. This ed with have blocked or received, appear busy o screen s to voicemail	
	Directory Assistance	Directory Assistance	DRAC0000	
5		iption:  Dee provided by the traditional method of dialing 1-Area co asking Directory Assistance to find any listed number wh		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	Operator Service	Operator Services include collect, third party and person-to-person calls.	OPAC0000
6	that are not directly diale not directly dialed and pla are calls that are not dire Calls not directly dialed a Calls include calls that ar	ription:  e collect, third party and person-to-person calls. Collect Cd and are placed as collect to the called party using an operaced as collect to the called party, using an operator. Third ctly dialed and are requesting third party be billed, using an request third-party billing, using an operator. Person-re completed using an operator (Station-to-Station and Perly dialed, using an operator, between stations.	erator. Calls d-Party Calls an operator. to-Person

## Managed Local Access Network (MLAN) Service

	Feature Name	Feature Description	Bidder's Product Identifier
7	MLAN - Monitor and Notify - Small	MLAN - Monitor and Notify – Small features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.	MLMN0001

#### **Bidder's Product Description:**

Verizon is proposing Managed Local Access Network (MLAN) Service as an Unsolicited Service Offering in section 1.2. MLAN Service supports the agencies ability to successfully implement Converged VoIP service on the customer LAN. Smaller agencies require additional technical support to provide this assistance implementing the Converged VoIP service. Managing VLAN traffic (i.e. VLAN queuing/tagging) would be an example of this type of intregration support.

Managed LAN general description applies to the following Managed LAN line items. Verizon's Managed LAN Services represents a comprehensive network management service, providing monitoring, fault isolation, trouble resolution, and proactive outage notification service for a variety of LAN switches.

All equipment under management must be certified by Verizon for Managed LAN Services and must not be identified as End of Life by the manufacture. Certified equipment and corresponding size (Small, Medium, and Large) are updated on a regular basis; the current list of Verizon Certified CPE will be provided on request. With the exception of the Monitor and Notify level of service, all equipment must have a means for Out-of-Band (OOB) management, enabled with a customer provided modem and POTS line, and must have a maintenance agreement in place.

Managed LAN - Monitor & Notify - Small provides the monitoring of a Small managed device. The device is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to access, transport, or CPE and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. Verizon will own the resolution of the access and transport issues related to the fault. The customer retains responsibility for resolving all physical and logical CPE issues.



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MLAN - Monitor and Notify - Medium	MLAN - Monitor and Notify – Medium features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.	MLMN0002
8		<b>n:</b> ify - Medium provides everything provided by Manaq t this service is for LAN equipment classified as a M	
	MLAN - Monitor and Notify - Large	MLAN - Monitor and Notify – Large features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.	MLMN0003
9	Bidder's Product Description:  Managed LAN - Monitor & Notify - Large provides everything provided by Managed LAN  Monitor & Notify - Small except this service is for LAN equipment classified as a Large sized device.		
40	MLAN - Physical - Small	MLAN - Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLPH0001
10	Bidder's Product Description:  Managed LAN - Physical - Small provides all of the monitoring features of Managed LAN  Monitor and Notify – Small as well as Verizon owning the resolution of any physical CPE issues.  The customer retains responsibility for resolving all logical CPE issues.		
	MLAN - Physical - Medium	MLAN - Physical - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLPH0002
11	Bidder's Product Description:  Managed LAN - Physical - Medium provides all of the monitoring features of Managed LAN  Monitor and Notify – Medium as well as Verizon owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical CPE issues.		
12	MLAN - Physical - Large	MLAN - Physical - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLPH0003
	Bidder's Product Description:  Managed LAN - Physical - Large provides all of the monitoring features of Managed LAN  Monitor and Notify – Large as well as Verizon owning the resolution of any physical CPE issues.  The customer retains responsibility for resolving all logical CPE issues.		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
13	MLAN - Full - Small	MLAN - Full - Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLFL0001
		<b>n:</b> ovides all of the monitoring features of Managed LA ng the resolution of any logical CPE issues.	.N Physical -
14	MLAN -Full - Medium	MLAN - Full - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLFL0002
		n: provides all of the monitoring features of Managed wning the resolution of any logical CPE issues.	LAN Physical
15	MLAN - Full - Large	MLAN - Full - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.	MLFL0003
	Bidder's Product Description:  Managed LAN - Full - Large provides all of the monitoring features of Managed LAN Physical - Large as well as Verizon owning the resolution of any logical CPE issues.		
	MLAN -Takeover of Existing Device	MLAN -Takeover of Existing Device: Takeover of existing device for management.	MTOI0001
16	Bidder's Product Description:  Managed LAN - Takeover of Existing Device provides for the takeover process of previously installed and working device for management.		
	MLAN -Device Installation	MLAN -Device Installation: Installation of a device to be managed at turn up.	MIIO0002
17	Bidder's Product Description:  Managed LAN - Device Installation provides for the process of installing, implementing, and activating a new device under management		
	MLAN -Order Expedite	MLAN -Order Expedite: Add-on service for expediting installation of LAN device.	MLEX0000
18	Bidder's Product Description:  Managed LAN - Order Expedite provides for an expedited process for activating a LAN device in fifteen (15) days or less. This service is solely for the purposes of expediting the CPE installation process and does not affect circuit installation and activation.		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MLAN - UPS Monitoring	Managed LAN - UPS Monitoring features include: UPS Mode, Battery State	MLUM0000	
19	Bidder's Product Description:  Managed LAN - UPS Monitoring is a *custom* Managed LAN option for monitoring the state an Uninterruptible Power Supply (UPS). Features will vary based on capability of the UPS be will generally revolve around the current state of facility power, UPS mode, and battery state.			
20	MLAN - Reporting Threshold Proactive Perform Monitor	MLAN - Reporting Threshold Proactive Perform Monitor - Managed LAN Threshold Proactive Performance Monitoring (PPM) features include: Add-on service to Managed LAN for proactively monitoring specific predefined performance thresholds.	MTHP0000	
	Bidder's Product Description:  Managed LAN - Services Reporting general description applies to the following Managed LAN - Services Reporting line items. Verizon's Managed LAN Services Reporting provides optional reporting capabilities that are in addition to the standard reporting included with Verizon's Managed LAN Services.			
	MLAN - Reporting - Analysis – ETM Reporting	MLAN - Reporting - Analysis – ETM Reporting features include: Enhanced Traffic Management reports of QoS, NBAR, and response times	METR0000	
21	Bidder's Product Description:  Managed LAN - Reporting Analysis – Enhanced Traffic Management (ETM) Reporting – This feature includes all of the benefits from the basic reporting included with the managed service.  ETM reporting adds the ability to report on QoS, CE-CE path performance, and high-level application data. CE-CE path performance allows reports of information, such as latency, for up to ten (10) paths per managed device. CE network performance allows for monitoring and detailed reporting on traffic volumes for up to twenty (20) Customer defined and selected network protocols. QoS performance reports can be generated on the quality and performance of DSCP and CoS on managed devices. Customer may generate At-a-Glance, Top-N, and Trend reports with PE elements.			
	MLAN - Reporting Analysis ETM Select Netflow≤100Mb	MLAN - Reporting Analysis ETM Select Netflow≤100Mb features include: Live Health reporting and collection and reporting from netflow data.	METM0001	
22	Bidder's Product Description:  Managed LAN – Reporting Analysis – Enhanced Traffic Management (ETM) Select With Netflow ≤ 100Mb – This feature includes all of the benefits from Managed LAN Analysis – ETM reporting. ETM Select with Netflow adds near real-time CPE performance exceptions and alarms, near real-time trending, and CPE network status maps as well as data collection and reporting from IPFIX/NetFlow/j-Flow/sFlow (collectively known as "netflow"). Live Status provides a single console for viewing performance exceptions and performance related faults for key CPE elements. Live Status provides drill down to Live Exceptions, Live Trend, and historical reports. Live Exceptions is a live interface that provides near real-time display of			



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	exceptions as they are detected and can be customized to monitor many different logical arrangements of CPE devices. Live Exceptions Notification can provide e-mail notifications for a limited subset of exceptions. Live Trend provides near real-time monitoring and charting of statistical data as it is collected. The netflow feature enables reporting on which hosts, protocols, and conversations are consuming bandwidth and on what interfaces and when. Configuration of the CPE device may be required to enable this service and is not include. Any CPE configuration or remediation activity would be provided as an Optional Change Management Activity. This feature allows for the collection and analysis of netflow data collected from interface/device/site speeds up to and including 100Mb/s.				
	MLAN - Reporting Analysis ETM Select Netflow 101<500Mb	MLAN - Reporting Analysis ETM Select Netflow 101<500Mb features include: Live Health reporting and collection and reporting from netflow data.	METM0002		
23	Bidder's Product Description:  Managed LAN – Reporting Analysis – Enhanced Traffic Management (ETM) Select With Netflow 101Mb < 500Mb – This feature is identical to Managed LAN Analysis – ETM Select Netflow ≤ 100Mb except for interface/device/site speeds greater than 100Mb/s and less the 500Mb/s.				
	MLAN – Reporting Analysis ETM Select w/Netflow 500Mb<1Gb	MLAN - Reporting - Analysis ETM Select w/Netflow 500Mb<1Gb features include: Live Health reporting and collection and reporting from netflow data.	METM0003		
24	Bidder's Product Description:  Managed LAN – Reporting Analysis – Enhanced Traffic Management (ETM) Select With Netflow 500Mb/s < 1Gb/s – This feature is identical to Managed LAN Analysis – ETM Select With Netflow ≤ 100Mb except for interface/device/site speeds equal to and greater than 500Mb/s and less than 1Gb/s.				
	MLAN – Reporting Analysis ETM Select w/Netflow 1Gb≤10Gb	MLAN – Reporting Analysis ETM Select w/Netflow 1Gb≤10Gb features include: Live Health reporting and collection and reporting from netflow data.	METM0004		
25	Bidder's Product Description:  Managed LAN - Reporting Analysis – Enhanced Traffic Management (ETM) Select With Netflow 1Gb ≤ 10Gb – This feature is identical to Managed LAN Analysis – ETM Select With Netflow ≤ 100Mb except for interface/device/site speeds equal to and greater than 1Gb/s and up to and including 10Gb/s.				



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
26	MLAN - Reporting Network Analysis	MLAN - Reporting Network Analysis features include: Analysis, summarization, and recommendations for resolution of network issues discovered through Managed Services reporting tools.	MLNA0000
	Bidder's Product Description:  Managed LAN - Reporting Network Analysis is an optional service that provides for a Verizon Analysis Professional to review the Customer entitled reports and provides a monthly summarization of issues and provides recommendations to improve network performance. The analyst will analyze the network performance based on key variables such as, but not limited to, utilization, queue drops, and error conditions from the perspective of the Verizon managed device. With a preliminary report established, the analyst has the capability to utilize other Verizon tools and reporting systems, as required, to validate finds and further clarify the nature of the identified issue in finalizing the report. This service also includes a monthly review of the post monthly network performance report with Customer and Verizon account team as well as notification to Customer and/or the appropriate Verizon organization to isolate and resolve performance anomalies discovered outside of the reporting cycle.		
	MLAN - Network Engineering – Small Switch	MLAN - Network Engineering – Small Switch features include: Design Planning, Support Services, and Change Management Support.	MLNE0001
27	Bidder's Product Description:  Managed LAN - Network Engineering Services general description applies to the following Managed LAN - Network Engineering Services line items. Verizon's Managed LAN Network Engineering (NE) Services provide additional support and on-going engineering advice, and is a premium architecture and engineering service that augments the services provided by Verizon's Managed WAN, Managed LAN, and Managed Wireless LAN services. Network Engineering is an offering that includes on-going supplemental architectural, design, and engineering support for Managed Services with a minimum of twenty (20) devices under the Full level of service.		
20	MLAN - Network Engineering – Medium Switch	MLAN - Network Engineering – Medium Switch features include: Design Planning, Support Services, and Change Management Support.	MLNE0002
28	Bidder's Product Description:  Managed LAN - Network Engineering – Medium Switch – Places a medium switch under NE support.		
	MLAN – Optional Change Mgmt - Intra-LAN Routing Turn-up	MLAN – Optional Change Mgmt - Intra-LAN Routing Turn-up features include: Activation of Layer-3 switch/routing support.	MLRT0000
29		ange Management Intra-LAN Routing Turn-up – on on a fully managed LAN device of LAN based La	



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MLAN – Optional Change Mgmt - Intra-LAN Routing Support	MLAN – Optional Change Mgmt - Intra-LAN Routing Support features include: Management of LAN device with Layer-3 switch/routing.	MLRS0000	
30	Bidder's Product Description:  Managed LAN – Optional Change Management Intra-LAN Routing Support – This optional service provides for the additional management and support of LAN based Layer-3 switching/routing on a fully managed LAN device. This fee is in addition to the Managed LAN Full – (Small, Medium, Large) management fee.			
24	MLAN – Optional Change Mgmt -DHCP IP Helper Configure	MLAN – Optional Change Mgmt -DHCP IP Helper Configure features include: Adding, modifying, and/or deleting Dynamic Host Configuration Protocol (DHCP) Internet Protocol (IP) Helper configuration.	LDFM0000	
31	Bidder's Product Description:  Managed LAN - Optional Change Management Dynamic Host Configuration Protocol (DHCP)  IP Helper Configuration - This optional service provides configuration on an existing fully managed LAN device for adding, deleting, or modifying DHCP IP Helper information. This service is performed remotely.			
	MLAN – Optional Change Mgmt - IP Address Change	MLAN – Optional Change Mgmt - IP Address Change features include: Adding, modifying, and/or deleting IP addressing information.	IAFM0000	
32	Bidder's Product Description:  Managed LAN - Optional Change Management IP Address Change – This optional service provides configuration on an existing fully managed LAN device for adding, deleting, or modifying and IP address or network mask. This service is performed remotely.			
	MLAN – Optional Change Mgmt - Hostname Change	MLAN – Optional Change Mgmt - Hostname Change features include: Changing of a LAN device hostname.	HCFM0000	
33	Bidder's Product Description:  Managed LAN - Optional Change Management Hostname Change – This optional service provides configuration on an existing fully managed LAN device for modifying the hostname. This service is performed remotely.			
34	MLAN – Optional Change Mgmt - VLAN Add/Delete	MLAN – Optional Change Mgmt - VLAN Add/Delete features include: Adding or deleting a VLAN	VLFM0000	
	Bidder's Product Description:  Managed LAN – Optional Change Management Virtual LAN Add/Delete - This optional service provides configuration on an existing fully managed LAN device for creating a new VLAN or deleting and existing VLAN. This service is performed remotely.			



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MLAN - Optional Change Mgmt - Trunking Configuration	MLAN - Optional Change Mgmt - Trunking Configuration features include: Enabling or disabling trunking features.	TCFM0000
35	provides configuration on an extrunking. This service includes	n:  nge Management - Trunking Configuration - This op  xisting fully managed LAN device for enabling or dis  c configuration of Dynamic Trunk Protocol (DTP) and  sulation mode. This service is performed remotely.	abling d
	MLAN - Optional Change Mgmt - Spanning Tree Add/Delete	MLAN - Optional Change Mgmt - Spanning Tree Add/Delete features include: Enabling or disabling Spanning Tree Protocol (STP).	STFM0000
36	Bidder's Product Description:  Managed LAN – Optional Change Management - Spanning Tree Add/Delete – This optional service provides configuration on an existing fully managed LAN device for enabling or disabling STP. This service includes configuring port costs, priority, root bridge, etc when enabling SPT. This service is performed remotely.		
	MLAN - Optional Change Mgmt - Storm Control Add/Delete	MLAN - Optional Change Mgmt - Spanning Tree Add/Delete features include: Enabling or disabling storm control	SCFM0000
37	Bidder's Product Description:  Managed LAN – Optional Change Management - Storm Control Add/Delete - This optional service provides configuration on an existing fully managed LAN device for enabling or disabling storm control for broadcast, multicast, and unicast traffic. Applicable thresholds will be configured when enabling storm control. This service is performed remotely.		
	MLAN - Optional Change Mgmt - EtherChannel Add/Delete	MLAN - Optional Change Mgmt - EtherChannel Add/Delete - Enable or disable EtherChannel	ECFM0000
38	Bidder's Product Description:  Managed LAN – Optional Change Management - EtherChannel Add/Delete - This optional service provides configuration on an existing fully managed LAN device for enabling or disabling link aggregation (e.g. Cisco EtherChannel). Enabling link aggregation will include configuring port modes and aggregation protocols. This service is performed remotely.		
	MLAN - Optional Change Mgmt - UDLD Add/Delete	MLAN - Optional Change Mgmt - UDLD Add/Delete - Enable or disable Unidirectional Link Detection (UDLD) protocol	UCFM0000
39	Bidder's Product Description:  Managed LAN – Optional Change Management - Unidirectional Link Detection (UDLD)  Add/Delete - This optional service provides configuration on an existing fully managed LAN device for enabling or disabling UDLD and associated modes. This service is performed remotely.		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MLAN - Optional Change Mgmt - Multicast Configuration	MLAN - Optional Change Mgmt - Multicast Configuration – Configure multicast features	MCFM0000		
40	Bidder's Product Description:  Managed LAN – Optional Change Management - Multicast Configuration - This optional service provides configuration on an existing fully managed LAN device for configuration of Internet Group Management Protocol (IGMP) snooping, GARP Multicast Registration Protocol (GMRP) and Router-Port Group Management Protocol (RGMP). This service is performed remotely.				
	MLAN - Optional Change Mgmt - VTP Configuration	MLAN - Optional Change Mgmt - VTP Configuration – Configure VLAN Trunking Protocol (VTP)	VTPC0000		
41	Bidder's Product Description:  Managed LAN – Optional Change Management - VLAN Trunking Protocol (VTP) Configuration This optional service provides configuration on an existing fully managed LAN device for configuration of VTP and all associated parameters (e.g. mode, password, domain, pruning, version). This service is performed remotely.				
	MLAN - Optional Change Mgmt - Memory Upgrade	MLAN - Optional Change Mgmt - Memory Upgrade – Upgrade memory on an existing switch	MEMU0000		
42	Bidder's Product Description:  Managed LAN – Optional Change Management - Memory Upgrade - This optional service provides resources on an existing fully managed LAN device for installing customer provided RAM and/or flash memory. This includes dispatching a technician for the installation or swapping of memory modules and remote management and configuration support.				
	MLAN - Optional Change Mgmt - IOS Support New Features	MLAN - Optional Change Mgmt - IOS Support New Features – Upgrade IOS for supporting new features	DOFM0000		
43	Bidder's Product Description:  Managed LAN – Optional Change Management - IOS Support New Features - This optional service provides resources on an existing fully managed LAN device for changing or upgrading IOS for new features. This includes dispatching a technician for on-site support and remote management and configuration support.				
	MLAN - Optional Change Mgmt - Intra-building Move	MLAN - Optional Change Mgmt - Intra-building Move – Relocation of a LAN device within a building	IBSM0001		
44	provides resources on an exist within a given building. This in	n: age Management - Intra-building Move - This optionating fully managed LAN device for relocating an exist cludes dispatching a technician for on-site support an support and assumes no design change.	ting switch		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MLAN - Optional Change Mgmt - Hardware Module Upgrade	MLAN - Optional Change Mgmt - Hardware Module Upgrade - Upgrade modular features of an existing LAN device.	HRDU0001	
45	service provides resources on	nge Management - Hardware Module Upgrade - Thi an existing fully managed LAN device for adding or udes dispatching a technician for on-site support an	swapping a	
	MLAN - Optional Change Mgmt - Device Move	MLAN - Optional Change Mgmt - Device Move – Relocation of a LAN device between buildings	LNIB0000	
Bidder's Product Description:  Managed LAN – Optional Change Management - Device Move - This optional service presources on an existing fully managed LAN device for relocating the device between the up to thirty (30) miles apart. This includes dispatching a technician for on-site support are mote management and configuration support and assumes no design change.			een buildings	
	MLAN - Optional Change Mgmt - Device Exchange	MLAN - Optional Change Mgmt - Device Move – Swapping out of an existing LAN device	LERS0001	
47	Bidder's Product Description:  Managed LAN – Optional Change Management - Device Exchange - This optional service provides resources on an existing fully managed LAN device for swapping the device with a substitute device. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.			
	MLAN - Optional Change Mgmt - Field Services Dispatch Normal	MLAN - Optional Change Mgmt - Field Services Dispatch Normal – An hourly service for on-site services during normal business hours.	DDON0000	
Bidder's Product Description:  Managed LAN – Optional Change Management - Field Services Dispatch Normal - In optional change management per occurrence services described with on premise actituck rolls, customers have the option to utilize the established hourly rate. Labor cha commence upon arrival at customer site. Only the highest single NRC will be charged device. This optional service provides for dispatch a technician to perform on-site man services on a time basis at the level of a journeyman during normal business hours. End of Verizon recognized holidays, Normal Business hours are defined as M-F 8:00 AM to Pacific Time.		activities for charges will rged per managed s. Exclusive		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	MLAN - Optional Change Mgmt - Field Svcs Dispatch Off Hours	MLAN - Optional Change Mgmt - Field Svcs Dispatch Off Hours – An hourly service for onsite services outside of normal business hours.			
Bidder's Product Description:  Managed LAN – Optional Change Management - Field Services Dispatch Off Hours - the optional change management per occurrence services described with on premise a for truck rolls, customers have the option to utilize the established hourly rate. Labor of will commence upon arrival at customer site. Only the highest single NRC will be chard device. This optional service provides for dispatch a technician to perform on-site man services on a time basis at the level of a journeyman outside of normal business hours Exclusive of Verizon recognized holidays, outside of Normal Business hours defined a 8:00 AM to 5:00 PM Pacific Time.		ise activities for charges charged per managed ours.			



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

## Managed Wireless LAN (MWLAN)

Feature Name	Feature Description	Bidder's Product Identifier
MWLAN -Controller Full - Small	MWLAN - Controller Full – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, Proactive Outage Notification and Fault Resolution.	MGSM0000

#### **Bidder's Product Description:**

50

Verizon is proposing Managed Wireless LAN (MWLAN) Service as an Unsolicited Service Offering in section 1.2. MWLAN Service supports the agencies ability to successfully implement Converged VoIP service on the customer LAN. Smaller agencies require additional technical support to provide this assistance implementing the Converged VoIP service. Managing VLAN traffic (i.e. VLAN queuing/tagging) would be an example of this type of intregration support.

Managed Wireless LAN Services general description applies to the following Managed Wireless LAN Services line items. Verizon's Managed Wireless LAN Services represents a comprehensive network management service. Verizon's Managed Wireless LAN Services provides fault management, proactive outage notification service, configuration management and backup, and performance management for a variety of WLAN devices based on the "lightweight" architecture.

Managed Wireless LAN Services requires at least one (1) Verizon managed router and circuit at the site. All equipment under management must but be certified by Verizon for Managed Wireless LAN Services and must not be identified as End of Life by the manufacture. The list of certified equipment is updated on a regular basis; the current list of Verizon Certified CPE will be provided on request. All WLAN Controllers must have a means for Out-of-Band (OOB) management either through a dedicated OOB modem and POTS line; terminal server, dedicated modem, and POTS line; or a serial cable connection to an unused AUX port interface on a router.

Managed Wireless LAN - Controller Full - Small provides for the monitoring of a Small sized managed WLAN controller. The WLAN controller is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to a physical CPE issue or logical issue and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. Verizon will remedy CPE physical and logical faults. A Small WLAN controller can support up to twenty-five (25) access points.

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Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
	MWLAN -Controller Full - Medium	MWLAN - Controller Full - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, Proactive Outage Notification and Fault Resolution.	MWMD0000
51	Bidder's Product Description:  Managed Wireless LAN Controller Full - Medium provides for the monitoring of a Medium sized managed WLAN controller. The WLAN controller is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to a physical CPE issue or logical issue and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. Verizon will remedy CPE physical and logical faults. A Medium WLAN controller can support between twenty-six (26) and fifty (50) access points.		
	MWLAN -Controller Full - Large	MWLAN - Controller Full - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, Proactive Outage Notification and Fault Resolution.	MWLG0000
52	Bidder's Product Description:  Managed Wireless LAN - Controller Full – Large provides for the monitoring of a Large sized managed WLAN controller. The WLAN controller is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to a physical CPE issue or logical issue and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. Verizon will remedy CPE physical and logical faults. A Large WLAN controller can support fiftyone (51) access points and greater.		
	MWLAN - Takeover of Existing Controller	MWLAN - Takeover of Existing Controller features include: Takeover of existing device/network for management.	TWLN0000
53	Bidder's Product Description:  Managed Wireless LAN - Takeover of Existing Controller provides for the takeover product previously installed and working network for management. Customer will provide site sinformation, detailed network information, and interviews for Verizon's design review. Will generate a Statement of Requirements (SOR) detailing the inventory of Customer's		site specific ew. Verizon mer's rk under necessary ovide this



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
	MWLAN - Controller Installation	MWLAN - Controller Installation features include: Installation of a device/network to be managed at turn up.	NDWC0000	
54	management of a new WLAN in provided information (e.g. system requirements) that will include Verizon will implement the solution Managed Services Operations	n: roller Installation provides for the installation, configuetwork. Verizon will provide a design based on Cuem requirement, application requirements, end-user a detailed logical design and physical equipment relation, provide project management, and hand-off to center. Verizon will provide this service in accordance as agreed upon by both parties.	stomer quirements. Verizon's	
FF	MWLAN - Access Point Full	MWLAN - Access Point Full features include: Fault resolution for logical and physical CPE issues.	MAPW0000	
55	Bidder's Product Description Managed Wireless LAN - Acce and physical fault resolution.	n: ess Point Full provides for monitoring of access poin	ts with logical	
50	MWLAN - Takeover of Existing Access Point			
56	Bidder's Product Description:  Managed Wireless LAN - Takeover of Existing Access Point provides all of the features of Managed WLAN Takeover of Existing Controller for the AP component of the network.			
	MWLAN - Access Point Installation	MWLAN - Access Point Installation features include: Installation of a device/network to be managed at turn up.	MAPI0000	
Bidder's Product Description:  Managed Wireless LAN - Access Point Installation provides all of the features of Ma WLAN Controller Installation for the AP component of the network. Mounting of APs antennas outdoors is not included and may be available as an ICB.				
	MWLAN - PoE Midspan Full	MWLAN - PoE Midspan Full features include: Fault resolution for logical and physical CPE issues.	MPWE0000	
58	Bidder's Product Description:  Managed Wireless LAN – Power over Ethernet (PoE) Midspan Full provides for logical and physical fault resolution as well as any applicable remote monitoring of a PoE Midspan device.			



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description		
	MWLAN - Takeover of Existing PoE Midspan Device	MWLAN - PoE Midspan Full features include: Takeover of existing device/network for management.	TWPO0000	
59	Bidder's Product Description:  Managed Wireless LAN - Takeover of Existing Power over Ethernet (PoE) Midspan Device provides all of the features of Managed WLAN Takeover of Existing Controller for the PoE Midspan component of the network.			
	Managed WLAN -PoE Midspan Device Installation	Managed WLAN -PoE Midspan Device Installation features include: Installation of a device/network to be managed at turn up.	NDWP0000	
60		n: rer over Ethernet (PoE) Midspan Device Installation N Controller Installation for the PoE Midspan compo		
61	MWLAN - Authentication Appliance Full	MWLAN - Authentication Appliance Full features include: Fault resolution for logical and physical CPE issues.	MAPF0000	
01	Bidder's Product Description:  Managed Wireless LAN - Authentication Appliance Full provides for monitoring of an authentication appliance with logical and physical fault resolution.			
	MWLAN - Takeover of Existing Authentication Appliance	MWLAN - Takeover of Existing Authentication Appliance features include: Takeover of existing device/network for management.		
62	Bidder's Product Description:  Managed Wireless LAN - Takeover of Existing Authentication Appliance provides all of the features of Managed WLAN Takeover of Existing Controller for the authentication appliance component of the network.			
	MWLAN -Authentication Appliance Installation	MWLAN -Authentication Appliance Installation features include: Installation of a device/network to be managed at turn up.	NDWS0000	
63		n: entication Appliance Installation provides all of the footable tallation for the Authentication Appliance componen		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name Feature Description		Bidder's Product Identifier		
	MWLAN - Order Expedite	MWLAN - Order Expedite provides add-on service for expediting installation of WLAN device.	MWEX0000		
64	Bidder's Product Description:  Managed Wireless LAN - Order Expedite provides for an expedited process for activating a WLAN device in fifteen (15) days or less. This service is solely for the purposes of expediting the CPE installation process and does not affect circuit installation and activation.				
	MWLAN - Network Engineering Controller (S, M, L)	MWLAN - Network Engineering Controller (S, M, L)	MWLC0000		
65	Bidder's Product Description:  Network Engineering WLAN Services general description applies to the following Network Engineering WLAN Services line items. Verizon's Network Engineering (NE) WLAN Service provide additional support and on-going engineering advice, and is a premium architecture a engineering service that augments the services provided by Managed Wireless LAN services Network Engineering is an offering that includes on-going supplemental architectural, design and engineering support for Managed Services with a minimum of twenty (20) devices under the Full level of service.				
66	MWLAN - Network Engineering – Managed Access Point	MWLAN - Network Engineering – Managed – Access Point features include: Design Planning, Support Services, and Change Management Support.	MWAP0000		
	Bidder's Product Description:  Managed Wireless LAN Network Engineering – Access Point – Places an access point under NE support.				
	MWLAN - Network Engineering Opt Chg Mgmt - IP Address Change	MWLAN - Network Engineering Opt Chg Mgmt - IP Address Change features include: Adding, modifying, and/or deleting IP addressing information.	MWIP0000		
Bidder's Product Description:  Managed Wireless LAN - Network Engineering – Optional Change Management Segeneral description applies to the following line items 21 – 31. Optional change material description applies to the following line items 21 – 31. Optional change material description activities are available for configuration changes on devices under Managed Wireles (MWLAN).  Managed Wireless LAN – Optional Change Management - IP Address Change – To service provides configuration on an existing fully managed WLAN device for additional or modifying and IP address or network mask. This service is performed remotely.		anagement ess LAN This optional ng, deleting,			



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name Feature Description		Bidder's Product Identifier	
	MWLAN - Network Engineering Opt Chg Mgmt- Hostname Change	MWLAN - Network Engineering Opt Chg Mgmt- Hostname Change features include: Changing of a LAN device hostname.	MWHC0000	
68		onal Change Management - Hostname Change – T on an existing fully managed WLAN device for mod		
	MWLAN - Network Engineering Opt Chg Mgmt- VLAN Add/Delete	MWLAN - Network Engineering Opt Chg Mgmt- VLAN Add/Delete features include: Adding or deleting a VLAN	MWAD0000	
69	optional service provides confi	n: onal Change Management – Virtual LAN Add/Delete guration on an existing fully managed WLAN device sting VLAN. This service is performed remotely.		
	MWLAN - Network Engineering Opt Chg Mgmt - WLAN HW Upgrade	MWLAN - Network Engineering Opt Chg Mgmt - WLAN HW Upgrade - Upgrade modular features of an existing WLAN device.	MWHU0000	
70	Bidder's Product Description:  Managed Wireless LAN – Optional Change Management - Hardware Module Upgrade is an optional service provides resources on an existing fully managed WLAN device for adding or swapping a modular component. This includes dispatching a technician for on-site support and remote management and configuration support.			
	MWLAN - Network Engineering Opt Chg Mgmt - Span Tree Add/Del	MWLAN - Network Engineering Opt Chg Mgmt - Span Tree Add/Del features include: Enabling or disabling Spanning Tree Protocol (STP).	MWST0000	
71				
	MWLAN - Network Engineer Opt Chg Mgmt OS Support New Feature	Mgmt Support New Feature – Upgrade OS for		
72	service provides resources on	n: rating System Change Support New Features - This an existing fully managed WLAN device for changin by This service is performed remotely.		



Table 1.2.3.3.b Unsolicited Converged VoIP service features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
73 E	MWLAN - Network Engineer Opt Chg Mgmt - MLAN Intra-build Mov	MWLAN - Network Engineer Opt Chg Mgmt - MLAN Intra-build Mov – Relocation of a WLAN device within a building	MWLN1201		
	Bidder's Product Description:  Managed Wireless LAN – Optional Change Management – Wireless LAN Intra-building Move - This optional service provides resources on an existing fully managed WLAN device for relocating an existing wireless device within a given building. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.				
	MWLAN - Network Engineer Opt Chg Mgmt - WLAN Device Move	Mgmt - WLAN Device Move – Relocation of a WLAN			
74	Bidder's Product Description:  Managed Wireless LAN – Optional Change Management – Wireless LAN Device Move - This optional service provides resources on an existing fully managed LAN device for relocating the wireless device between buildings up to thirty (30) miles apart. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.				
MWLAN - Network Engineer Opt Chg Mgmt - WLAN Device Exchange  MWLAN - Network Engineer Opt Chg Mgmt - WLAN Device Exchange – Swapping out of an existing wireless device			MWLN1203		
75	Bidder's Product Description:  Managed Wireless LAN – Optional Change Management – Wireless LAN Device Exchange - This optional service provides resources on an existing fully managed WLAN device for swapping the wireless device with a substitute device. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design change.				

## 1.2.3.4 CONVERGED VOIP CALLING REQUIREMENTS

The Contractor shall provide the Converged VoIP calling solutions described below.

## 1.2.3.4.1 Converged VoIP On-Net Calling

The Contractor shall provide a Converged VoIP service that provides unlimited on-net calling for both domestic and international calls at no additional charge. On-net calling is defined as calling from a Converged VoIP Customer Site that uses the Contractors VoIP network and terminates at another Converged VoIP site. If the Contractor offers SIP Trunking or Standalone VoIP under another CALNET contract, Converged VoIP calls terminating at such a site shall be considered onnet.



Bidder understands the Requirement and shall meet or exceed it? Yes X No

## 1.2.3.4.2 Converged VoIP Off-Net Calling

The Contactor shall provide off-net calling at no additional charge. The Converged VoIP service will route call traffic off the VoIP network within the 50 United States, the District of Columbia, the Virgin Islands, and Puerto Rico. This will be accomplished using network based PSTN gateways.

Bidder understands the Requirement and shall meet or exceed it? Yes X No

## 1.2.3.4.3 On-Net Enterprise Calling

The Contractor shall treat the State of California as a single enterprise for the purpose of on-net calling. On-net calling from one (1) State of California Agency/Department to another shall be treated the same as on-net calling within a State of California Agency or Department.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_

## 1.2.3.4.4 Converged Off-Net Toll-Free

The Contractor shall provide Converged off-net toll-free services that shall only be provided by the Converged VoIP Contractor and shall not be provided by a third party. This service shall only be utilized in conjunction with the awarded Contractor's VoIP service. The Converged VoIP service allows Customers to receive off-net toll-free calls from the 50 United States, the District of Columbia, the U.S. Virgin Islands, and Puerto Rico. The Contractor's CALNET 3 approved applicable rates shall apply.

Table 1.2.3.4.4.a, Converged VoIP Off-Net Toll-Free

	Feature Name	Feature Description	Mee	der ts or eds? N	Bidder's Product Identifier
1	Converged VoIP Off-Net Toll-Free	Allows a Customer to receive off-net toll-free calls from the 50 United States, the District Of Columbia, the Virgin Islands, and Puerto Rico.	Y		CVOT0000
	Bidder's Product Description:  Verizon will provide Converged VoIP Off-Net Toll-Free - Allows a Customer to receive off-net toll-free calls from the 50 United States, the District Of Columbia, the Virgin Islands, and				

The Contractor may offer additional Converged VoIP Off-Net Toll-Free features in Table 1.2.3.4.4.b.



Puerto Rico.

Table 1.2.3.4.4.b Unsolicited Converged VolP Off-Net Toll-Free Features

	Feature Name	Feature Description	Bidder's Product Identifier
1			
	Bidder's Product Description:		
2	Bidder's Product Desc	cription:	
3	Bidder's Product Desc	cription:	

## 1.2.3.4.5 Converged International Off-Net Calling

The Contractor shall provide Converged VoIP international off-net calling to the countries listed in Table 1.2.3.3.5. Bidder's rates as provided in the Subcategory Cost Worksheets shall be based on time of day ("Peak Time" or "Off-Peak Time"). Peak Time is between 8:00 a.m. and 4:59 p.m., Monday through Friday based on the time at the CALNET caller's location. Off-Peak time is for all calls where Peak Time rates do not apply.

All usage shall be billed in accordance with the Business Requirements Section A.5.1 (Billing and Invoicing Requirements #11) except Mexico which shall be billed in 60 second increments with a 60 second minimum.

Note: If the Bidder charges the same rate for both Peak Time and Off-Peak time, Bidder may use the same Product Identifier for both products.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.4.5.1 International Mobile Termination Charges (IMTC)

Contractor shall provide the ability to terminate international calls on wireless devices. Contractor shall charge International Mobile Termination Charge (IMTC) as an additional per minute rate that is applied to international calls (direct dial business or credit card calls) originating in the U.S. and terminating in certain countries to either wireless communications devices including mobile telephones, pagers, personal computers, and personal digital assistants, or to a portable telephone number where a forwarding, tracking or other type of location service is used.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.3.4.5.2 U.S. Based Services Waiver

The provisions detailed in IFB-A Section A.2.4.4 (U.S. Based Services) will not apply to Contractor's International Long Distance Calling services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



The Contractor shall offer the Converged VoIP International Off-Net Calling configurations detailed in Table 1.2.3.4.5.a

Table 1.2.3.4.5.a Converged VolP International Off-Net Calling

	Country	Mee	lders ets or eeds? N	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
1	Brazil:	Υ		VBRZ0000	VBRZ0001	MBRZ0000
2	Canada:	Υ		VCAN0000	VCAN0001	MBCN0000
3	China:	Y		VCHN0000	VCHN0001	MBCH0000
4	France:	Y		VFRN0000	VFRN0001	MFRN0000
5	Germany:	Υ		VGRM0000	VGRM0001	MGRM0000
6	Israel:	Υ		VISR0000	VISR0001	MISL0000
7	Italy:	Υ		VITL0000	VITL0001	MIVC0000
8	Japan:	Υ		VJPN0000	VJPN0001	MJPN0000
9	Korea:	Υ		VKOR0000	VKOR0001	MKSR0000
10	Mexico:	Y		VMXC0000	VMXC0001	MMXC0010
11	Spain:	Y		VSPN0000	VSPN0001	MSWS0000
12	Switzerland:	Y		VSWZ0000	VSWZ0001	MSWL0000
13	United Kingdom:	Υ		VUKN0000	VUKN0001	MUNK0000

Bidder's may offer the Converged VoIP International Off-Net Calling to unsolicited countries listed in Table 1.2.3.4.5.b.



Table 1.2.3.4.5.b Unsolicited Converged VoIP International Off-Net Calling

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
1	Afghanistan	AFGH0001	AFGH0001	MAFG0000
2	Albania	ALBA0001	ALBA0001	MALB0000
3	Algeria	ALGR0001	ALGR0001	MALG0000
4	Andorra	ANDR0001	ANDR0001	MAND0000
5	Angola	ANGO0001	ANGO0001	MANG0000
6	Anguilla	ANGU0001	ANGU0001	MAGL0000
7	Antarctica (Casey)	ANTA0001	ANTA0001	MACS0000
8	Antarctica (Scott)	ANSB0001	ANSB0001	MATS0000
9	Antigua and Barbuda	ANTG0001	ANTG0001	MATG0000
10	Argentina	ARGN0001	ARGN0001	MARG0000
11	Armenia	ARMN0001	ARMN0001	MARM0000
12	Aruba	ARUB0001	ARUB0001	MARB0000
13	American Samoa	ASMA0001	ASMA0001	MASM0000
14	Ascension Island	ASCN0001	ASCN0001	MASI0000
15	Australia	ASTR0001	ASTR0001	MAUS0000
16	Austria	AUST0001	AUST0001	MAST0000
17	Azerbaijan	AZER0001	AZER0001	MAZR0000
18	Bahamas	BAHM0001	BAHM0001	MBAH0000
19	Bahrain	BAHR0001	BAHR0001	MBHR0000
20	Bangladesh	BNGL0001	BNGL0001	MBNG0000
21	Barbados	BARB0001	BARB0001	MBRD0000
22	Belarus	BELA0001	BELA0001	MBLR0000
23	Belgium	BELG0001	BELG0001	MBLG0000
24	Belize	BELZ0001	BELZ0001	MBLZ0000
25	Benin	BENN0001	BENN0001	MBNN0000
26	Bermuda	BERM0001	BERM0001	MBRM0000
27	Bhutan	BHUT0001	BHUT0001	МВНТ0000
28	Bolivia	BOLV0001	BOLV0001	MBLV0000

Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
29	Bosnia and Herzegovina	BASH0001	BASH0001	MBSH0000
30	Botswana	BTSW0001	BTSW0001	MBTS0000
31	Brunei	BRNI0001	BRNI0001	MBRN0000
32	Bulgaria	BULG0001	BULG0001	MBUL0000
33	Burkina Faso	BRKN0001	BRKN0001	MBRK0000
34	Burundi	BRND0001	BRND0001	MBUR0000
35	British Virgin Islands	BVRG0001	BVRG0001	MBVI0000
36	Central African Republic	CAFR0001	CAFR0001	MCAR0000
37	Cambodia	CMBD0001	CMBD0001	MCMB0000
38	Cameroon	CMRN0001	CMRN0001	MCMR0000
39	Cape Verde	CAPV0001	CAPV0001	MCPV0000
40	Cayman Islands	CYMN0001	CYMN0001	MCMI0000
41	Chad	CHAD0001	CHAD0001	MCHD0000
42	Chile	CHLE0001	CHLE0001	MCHL0000
43	Christmas and Cocos Islands	CHCO0001	CHCO0001	MCHC0000
44	Colombia	CLMB0001	CLMB0001	MCLM0000
45	Comoros	CMYI0001	CMYI0001	мсомоооо
46	Congo	CNGO0001	CNGO0001	MCNG0000
47	Cook Islands	CKIS0001	CKIS0001	MCKI0000
48	Costa Rica	CSTA0001	CSTA0001	MCSR0000
49	Croatia	CROA0001	CROA0001	MCRT0000
50	Cuba	CGBA0001	CGBA0001	MCBA0000
51	Cyprus	CPRS0001	CPRS0001	MCPR0000
52	Czech Republic	CZCR0001	CZCR0001	MCZR0000
53	Diego Garcia	DGRC0001	DGRC0001	MCDG0000
54	Djibouti	DJBT0001	DJBT0001	MDJB0000
55	Denmark	DNMK0001	DNMK0001	MDNM0000



Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
56	Dominica	DMNC0001	DMNC000 1	MDMN0000
57	Dominican Republic	DMCR0001	DMCR0001	MDMR0000
58	Ecuador	ECDR0001	ECDR0001	MECD0000
59	Egypt	EGPT0001	EGPT0001	MEGP0000
60	El Salvador	ELSV0001	ELSV0001	MESV0000
61	Equatorial Guinea	EQTG0001	EQTG0001	MEQG0000
62	Eritrea	ERTRO001	ERTRO001	MERT0000
63	Estonia	ESTN0001	ESTN0001	MEST0000
64	Ethiopia	ETHP0001	ETHP0001	METP0000
65	East Timor	ETMR0001	ETMR0001	METM0000
66	Faeroe Islands	FRISO001	FRISO001	MFRI0000
67	Falkland Islands	FLKI0001	FLKI0001	MFLI0000
68	Fiji Islands	FIJI0001	FIJI0001	MFJI0000
69	Finland	FNLD0001	FNLD0001	MFNL0000
70	French Antilles	FAMR0001	FAMR0001	MFAM0000
71	French Guiana	FRNG0001	FRNG0001	MFRG0000
72	French Polynesia	FRNP0001	FRNP0001	MFRP0000
73	Gabon Republic	GBON0001	GBON0001	MGBN0000
74	Gambia	GMBA0001	GMBA0001	MGMB0000
75	Georgia	GRGA0001	GRGA0001	MGRG0000
76	Ghana	GANA0001	GANA0001	MGHN0000
77	Gibraltar	GBRL0001	GBRL0001	MGBR0000
78	Greece	GREC0001	GREC0001	MGRC0000
79	Greenland	GRNL0001	GRNL0001	MGRN0000
80	Grenada	GRND0001	GRND0001	MGRD0000
81	Guadeloupe	GDLP0001	GDLP0001	MGDL0000
82	Guantanamo	GNTM0001	GNTM0001	MGNB0000
83	Guatemala	GTML0001	GTML0001	MGTM0000



Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
84	Guinea-Bissau	GNBA0001	GNBA0001	MGBS0000
85	Guinea, People's Revolutionary Republic	GNEA0001	GNEA0001	MGPR0000
86	Guyana	GYNA0001	GYNA0001	MGYN0000
87	Haiti	HATI0001	HATI0001	MHTI0000
88	Hong Kong	HNKG0001	HNKG0001	MHNK0000
89	Honduras	HNDR0001	HNDR0001	MHND0000
90	Hungary	HNGR0001	HNGR0001	MHNG0000
91	Iceland	ICLN0001	ICLN0001	MICL0000
92	India	NDIA0001	NDIA0001	MIND0000
93	Indonesia	NDNS0001	NDNS0001	MNDS0000
94	Iran	IRAN0001	IRAN0001	MIRN0000
95	Iraq	IRAQ0001	IRAQ0001	MIRQ0000
96	Ireland	IRLN0001	IRLN0001	MIRL0000
97	Ivory Coast	ICST0001	ICST0001	MICT0000
98	Jamaica	JMCA0001	JMCA0001	MJMC0000
99	Jordan	JRDN0001	JRDN0001	MJRD0000
100	Kazakhstan	KZKH0001	KZKH0001	MKZK0000
101	Kenya	KNYA0001	KNYA0001	MKNY0000
102	Kiribati	KRBT0001	KRBT0001	MKRB0000
103	Korea, North	NKRE0001	NKRE0001	MKND0000
104	Kuwait	KWAT0001	KWAT0001	MKWT0000
105	Kyrgyzstan	KRYG0001	KRYG0001	MKRG0000
106	Laos	LAOS0001	LAOS0001	MLAS0000
107	Latvia	LTVA0001	LTVA0001	MLTV0000
108	Lebanon	LBNN0001	LBNN0001	MLBN0000
109	Lesotho	LSTH0001	LSTH0001	MLST0000
110	Liberia	LBRA0001	LBRA0001	MLBR0000
111	Libya	LBYA0001	LBYA0001	MLBY0000

Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
112	Liechtenstein	LCHN0001	LCHN0001	MLCH0000
113	Lithuania	LTHN0001	LTHN0001	MLTH0000
114	Luxembourg	LXMB0001	LXMB0001	MLXB0000
115	Macao	MCAU0001	MCAU0001	MMCA0000
116	Macedonia	MCDN0001	MCDN000 1	MMCD0000
117	Madagascar	MDSC0001	MDSC0001	MMDG0000
118	Malawi	MLWI0001	MLWI0001	MMLW0000
119	Malaysia	MLYS0001	MLYS0001	MMLY0000
120	Maldives	MLDV0001	MLDV0001	MMLD0000
121	Mali	MALI0001	MALI0001	MMLI0000
122	Malta	MLTA0001	MLTA0001	MMLT0000
123	Marshall Islands	MSHI0001	MSHI0001	MMIS0000
124	Mauritius	MAUR0001	MAUR0001	MMTS0000
125	Mauritania	MRIT0001	MRIT0001	MMRT0000
126	Mayotte Island	MYTE0001	MYTE0001	MYTI0000
127	Micronesia	MCRN0001	MCRN0001	MMCN0000
128	Moldova	MOLV0001	MOLV0001	MMLV0000
129	Monaco	MNCO0001	MNCO000 1	MMNC0000
130	Mongolian People's Republic	MNGL0001	MNGL0001	MMGL0000
131	Montserrat	MNTS0001	MNTS0001	MMTR0000
132	Morocco	MRCC0001	MRCC0001	MMRC0000
133	Mozambique	MZMB0001	MZMB000 1	MMZB0000
134	Myanmar	MYBR0001	MYBR0001	MMBR0000
135	Namibia	NMBA0001	NMBA0001	MNMB0000
136	Nauru	NURU0001	NURU0001	MNRU0000
137	New Caledonia	NCLD0001	NCLD0001	MNWC0000
138	Nepal	NPAL0001	NPAL0001	MNPL0000



Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
139	Netherlands	NTHR0001	NTHR0001	MNTH0000
140	Nevis	NEVS0001	NEVS0001	MNVS0000
141	Nigeria	NGRI0001	NGRI0001	MNGA0000
142	Nicaragua	NCRG0001	NCRG0001	MNCG0000
143	Niger	NGER0001	NGER0001	MNGR0000
144	Niue	NIUE0001	NIUE0001	MNIS0000
145	Norfolk Island	NRFK0001	NRFK0001	MNFI0000
146	Norway	NRWY0001	NRWY0001	MNRW0000
147	Netherlands Antilles	NTHA0001	NTHA0001	MNTA0000
148	New Zealand	NZLN0001	NZLN0001	MNZA0000
149	Oman	OMAN0001	OMAN000 1	MOMN0000
150	Pakistan	PKST0001	PKST0001	MPKS0000
151	Palau	PLIS0001	PLIS0001	MPLI0000
152	Panama	PLST0001	PLST0001	MPNM0000
153	Papua New Guinea	PNMA0001	PNMA0001	MPNG0000
154	Paraguay	PRGY0001	PRGY0001	MPRG0000
155	Peru	PERU0001	PERU0001	MPRU0000
156	Philippines	PHLP0001	PHLP0001	MPHL0000
157	Poland	PLND0001	PLND0001	MPLN0000
158	Portugal	PTGL0001	PTGL0001	MPRT0000
159	Qatar	QTAR0001	QTAR0001	MQTR0000
160	Reunion	RUNI0001	RUNI0001	MRUI0000
161	Romania	RMAN0001	RMAN0001	MRMN0000
162	South Africa	SAFR0001	SAFR0001	MSAF0000
163	Russia	RUSS0001	RUSS0001	MRUS0000
164	Rwanda	RWND0001	RWND000 1	MRWN0000
165	Samoa	SAM00001	SAMO0001	MSOM0000



Table 1.2.3.4.5.b Unsolicited Converged VoIP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
166	Sao Tome	SAOT0001	SAOT0001	MSTO0000
167	Saudi Arabia	SARB0001	SARB0001	MSDA0000
168	Senegal Republic	SNGL0001	SNGL0001	MSNG0000
169	Seychelles Islands	SYCH0001	SYCH0001	MSYC0000
170	Sierra Leone	SRLN0001	SRLN0001	MSRL0000
171	Singapore	SNGP0001	SNGP0001	MSNP0000
172	Slovakia	SLVK0001	SLVK0001	MSLV0000
173	Slovenia	SLVN0001	SLVN0001	MSVN0000
174	San Marino	SMAR0001	SMAR0001	MSNM0000
175	Solomon Islands	SLMN0001	SLMN0001	MSIS0000
176	Somali Republic	SMLA0001	SMLA0001	MSMR0000
177	Sri Lanka	SRLK0001	SRLK0001	MSLK0000
178	St. Helena	STHL0001	STHL0001	MSTH0000
179	St. Kitts	SKTS0001	SKTS0001	MSKT0000
180	St. Lucia	SLUC0001	SLUC0001	MSTL0000
181	St. Pierre and Miquelon	STPR0001	STPR0001	MSPM0000
182	St. Vincent and The Grenadines	STVN0001	STVN0001	MSVG0000
183	Sudan	SUDN0001	SUDN0001	MSDN0000
184	Suriname	SRNM0001	SRNM0001	MSRN0000
185	Swaziland	SWZL0001	SWZL0001	MSWZ0000
186	Sweden	SWDN0001	SWDN0001	MSWD0000
187	Syrian Arab Republic	SRIA0001	SRIA0001	MSRY0000
188	Taiwan	TWAN0001	TWAN0001	MTWN0000
189	Tajikistan	TDJK0001	TDJK0001	MTJK0000
190	Tanzania	TNZN0001	TNZN0001	MTNZ0000
191	Thailand	THLN0001	THLN0001	MTHL0000
192	Turks and Caicos Islands	TCAC0001	TCAC0001	MTCI0000



Table 1.2.3.4.5.b Unsolicited Converged VolP International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
193	Togo	TOGO0001	TOGO0001	MTG00000
194	Tonga Islands	TNGA0001	TNGA0001	MTNG0000
195	Trinidad and Tobago	TRND0001	TRND0001	MTRT0000
196	Turkmenistan	TRKM0001	TRKM0001	MTRK0000
197	Tunisia	TNSA0001	TNSA0001	MTNS0000
198	Turkey	TRKY0001	TRKY0001	MTKY0000
199	Tuvalu	TVLU0001	TVLU0001	MTVL0000
200	United Arab Emirates	UAEM0001	UAEM0001	MUAE0000
201	Uganda	UGND0001	UGND0001	MUGN0000
202	Ukraine	UKRN0001	UKRN0001	MUKR0000
203	Uruguay	URGY0001	URGY0001	MURG0000
204	Uzbekistan	UZBK0001	UZBK0001	MUZK0000
205	Vanuatu	VNTU0001	VNTU0001	MVNT0000
206	Vatican City	VTCN0001	VTCN0001	MVTC0000
207	Venezuela	VNZL0001	VNZL0001	MVNZ0000
208	Vietnam	VTNM0001	VTNM0001	MVTN0000
209	Wallis and Fortuna Islands	WLSF0001	WLSF0001	MWLF0000
210	Yemen	YMNA0001	YMNA0001	MYMN0000
211	Yugoslavia (Federal Republic)	YGSL0001	YGSL0001	MYGS0000
212	Zaire	ZARE0001	ZARE0001	MZAR0000
213	Zambia	ZMBA0001	ZMBA0001	MZBA0000
214	Zimbabwe	ZMBW0001	ZMBW000 1	MZBW0000

# 1.2.3.5 CONVERGED VOIP VOICE MAIL SERVICES

The Contractor shall provide Converged VoIP Voice Mail services that are interoperable and work with Converged VoIP service. The Converged Voice Mail services will include the capability for End-Users to have callers leave a message to be retrieved at a later time.



The service shall allow VoIP Voice Mail End-Users to forward messages to other End-Users in the same VoIP Voice Mail network.

The service shall offer a variety of message length capabilities, greeting and delivery options, broadcast messaging and the ability to transfer to an attendant.

Contractors shall provide the Converged VoIP Voice Mail services feature requirements are listed in Table 1.2.3.5.a.

Table 1.2.3.5.a Converged VoIP Voice Mail Service Features

	Converged VoIP Basic Call Package Features	Mee	lder ts or eds? N
1	Minimum message length will be at least two (2) minutes each	Υ	
2	Message review, including skip back or ahead	Υ	
3	Message saving and erasing	Υ	
4	Erased message retrieval before call is ended	Υ	
5	Messaging forwarding to another voice mailbox in the system with the ability to append additional comments	Y	
6	Message sending	Υ	
7	Password protection	Υ	
8	Personalized greetings (both permanent and temporary)	Υ	
9	Message waiting indicator signal received at workstation within one (1) minute	Y	
10	Remote access capability from any telephone location on or off net	Y	
11	Creation of Group Distribution Lists - Allow an administrator to define voice mail distribution lists to forward and reply to an individual or to a group of predefined recipients	Y	
12	Web based End-User administration software	Υ	
13	Ability to integrate with Unified Messaging applications with no hardware modification	Υ	

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



Contractor shall offer the VoIP Voice Mail services and features detailed in Table 1.2.3.5.b.

Table 1.2.3.5.b - VoIP Voice Mail Services and Features

	Feature	Feature Description		der ts or eds? N	Bidder's Unique Identifier	
1	Converged VoIP Voice Mail	Minimum feature requirements as listed in Table 1.2.3.5.a	Υ		CVVM000	
		Bidder's Product Description: Verizon will provide Converged VoIP Voice Mail minimum feature requirements as listed in Table 1.2.3.5.a				

The Contractor may offer additional unsolicited VoIP Voice Mail features in Table 1.2.3.5.c.

Table 1.2.3.5.c Unsolicited VoIP Voice Mail Features

	Feature Name	Feature Description	Bidder's Product Identifier			
1						
	Bidder's Product Desc	cription:				
2						
	Bidder's Product Desc	cription:				
3						
	Bidder's Product Description:					

### 1.2.3.6 CONVERGED VOIP AND VOICE MAIL GEOGRAPHIC REQUIREMENTS

### 1.2.3.6.1 Converged VoIP and Voice Mail Specific Service Areas

The Contractor shall provide Converged VoIP and VoIP Voice Mail services in the cities specified below. Serving area is defined as within the city limits for each location identified.

- 1. Sacramento;
- 2. Oakland;
- 3. San Francisco;
- 4. Los Angeles;
- 5. San Diego; and,
- 6. San Jose.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



#### 1.2.3.6.2 Additional Commercially Available Areas

The Contractor shall provide Converged VoIP and VoIP Voice Mail services where services are currently commercially available by the Bidder.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

Bidder shall identify the locations where their Converged VoIP and VoIP Voice Mail Services are currently commercially available in Table 1.2.3.6.2.a. Bidders shall indicate the locations where the Contractor provides Converged VoIP and VoIP Voice Mail service. By answering "Yes", the Bidder commits to provide service in that specific location. Bidders shall answer "No" for all locations where service will not be available.

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas

		Converged IP		VoIP Voi	ce Mail
	Service Location	Yes	No	Yes	No
1	Adelanto	Υ		Υ	
2	Agoura Hills	Υ		Υ	
3	Alameda	Υ		Υ	
4	Albany	Υ		Υ	
5	Alhambra	Υ		Υ	
6	Aliso Viejo	Υ		Υ	
7	Alturas	Υ		Υ	
8	Amador	Υ		Υ	
9	American Canyon	Υ		Υ	
10	Anaheim	Υ		Υ	
11	Anderson	Υ		Υ	
12	Angels Camp	Υ		Υ	
13	Antioch	Υ		Υ	
14	Apple Valley	Υ		Υ	
15	Arcadia	Υ		Υ	
16	Arcata	Υ		Υ	
17	Arroyo Grande	Υ		Υ	
18	Artesia	Υ		Υ	
19	Arvin	Υ		Υ	
20	Atascadero	Υ		Υ	
21	Atherton	Υ		Υ	
22	Atwater	Υ		Υ	



Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	rged IP	VoIP Voice Mail	
23	Auburn	Υ		Υ	
24	Avalon	Υ		Υ	
25	Avenal	Υ		Υ	
26	Azusa	Υ		Υ	
27	Bakersfield	Υ		Υ	
28	Baldwin Park	Υ		Υ	
29	Banning	Υ		Υ	
30	Barstow	Υ		Υ	
31	Beaumont	Υ		Υ	
32	Bell	Υ		Υ	
33	Bell Gardens	Υ		Υ	
34	Bellflower	Υ		Υ	
35	Belmont	Υ		Υ	
36	Belvedere	Υ		Υ	
37	Benicia	Υ		Υ	
38	Berkeley	Υ		Υ	
39	Beverly Hills	Υ		Υ	
40	Big Bear Lake	Υ		Υ	
41	Biggs	Υ		Υ	
42	Bishop	Υ		Υ	
43	Blue Lake	Υ		Υ	
44	Blythe	Υ		Υ	
45	Bradbury	Υ		Υ	
46	Brawley	Υ		Υ	
47	Brea	Υ		Υ	
48	Brentwood	Υ		Υ	
49	Brisbane	Υ		Υ	
50	Buellton	Υ		Υ	
51	Buena Park	Υ		Υ	
52	Burbank	Υ		Υ	
53	Burlingame	Υ		Υ	
54	Calabasas	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
55	Calexico	Υ		Υ	
56	California City	Υ		Υ	
57	Calimesa	Υ		Υ	
58	Calipatria	Υ		Υ	
59	Calistoga	Υ		Υ	
60	Camarillo	Υ		Υ	
61	Campbell	Υ		Υ	
62	Canyon Lake	Υ		Υ	
63	Capitola	Υ		Υ	
64	Carlsbad	Υ		Υ	
65	Carmel-By-The- Sea	Υ		Υ	
66	Carpinteria	Υ		Υ	
67	Carson	Υ		Υ	
68	Cathedral City	Υ		Υ	
69	Ceres	Υ		Υ	
70	Cerritos	Υ		Υ	
71	Chico	Υ		Υ	
72	Chino	Υ		Υ	
73	Chino Hills	Υ		Υ	
74	Chowchilla	Υ		Υ	
75	Chula Vista	Υ		Υ	
76	Citrus Heights	Υ		Υ	
77	Claremont	Υ		Υ	
78	Clayton	Υ		Υ	
79	Clearlake	Υ		Υ	
80	Cloverdale	Υ		Υ	
81	Coachella	Υ		Υ	
82	Coalinga	Υ		Υ	
83	Colfax	Υ		Υ	
84	Colma	Υ		Υ	
85	Colton	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
86	Colusa	Υ		Υ	
87	Commerce	Υ		Υ	
88	Compton	Υ		Υ	
89	Concord	Υ		Υ	
90	Corcoran	Υ		Υ	
91	Corning	Υ		Υ	
92	Corona	Υ		Υ	
93	Coronado	Υ		Υ	
94	Corte Madera	Υ		Υ	
95	Costa Mesa	Υ		Υ	
96	Cotati	Υ		Υ	
97	Covina	Υ		Υ	
98	Crescent City	Υ		Υ	
99	Cudahy	Υ		Υ	
100	Culver City	Υ		Υ	
101	Cupertino	Υ		Υ	
102	Cypress	Υ		Υ	
103	Daly City	Υ		Υ	
104	Dana Point	Υ		Υ	
105	Danville	Υ		Υ	
106	Davis	Υ		Υ	
107	Del Mar	Υ		Υ	
108	Del Rey Oaks	Υ		Υ	
109	Delano	Υ		Υ	
110	Desert Hot Springs	Υ		Υ	
111	Diamond Bar	Υ		Υ	
112	Dinuba	Υ		Υ	
113	Dixon	Υ		Υ	
114	Dorris	Υ		Υ	
115	Dos Palos	Υ		Υ	
116	Downey	Υ		Υ	
117	Duarte	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
118	Dublin	Υ		Υ	
119	Dunsmuir	Υ		Υ	
120	East Palo Alto	Υ		Υ	
121	El Cajon	Υ		Υ	
122	El Centro	Υ		Υ	
123	El Cerrito	Υ		Υ	
124	El Monte	Υ		Υ	
125	El Paso De Robles	Υ		Υ	
126	El Segundo	Υ		Υ	
127	Elk Grove	Υ		Υ	
128	Emeryville	Υ		Υ	
129	Encinitas	Υ		Υ	
130	Escalon	Υ		Υ	
131	Escondido	Υ		Υ	
132	Etna	Υ		Υ	
133	Eureka	Υ		Υ	
134	Exeter	Υ		Υ	
135	Fairfax	Υ		Υ	
136	Fairfield	Υ		Υ	
137	Farmersville	Υ		Υ	
138	Ferndale	Υ		Υ	
139	Fillmore	Υ		Υ	
140	Firebaugh	Υ		Υ	
141	Folsom	Υ		Υ	
142	Fontana	Υ		Υ	
143	Fort Bragg	Υ		Υ	
144	Fort Jones	Υ		Υ	
145	Fortuna	Υ		Υ	
146	Foster City	Υ		Υ	
147	Fountain Valley	Υ		Υ	
148	Fowler	Υ		Υ	
149	Fremont	Υ		Υ	



Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
150	Fresno	Υ		Υ	
151	Fullerton	Υ		Υ	
152	Galt	Υ		Υ	
153	Garden Grove	Υ		Υ	
154	Gardena	Υ		Υ	
155	Gilroy	Υ		Υ	
156	Glendale	Υ		Υ	
157	Glendora	Υ		Υ	
158	Goleta	Υ		Υ	
159	Gonzales	Υ		Υ	
160	Grand Terrace	Υ		Υ	
161	Grass Valley	Υ		Υ	
162	Greenfield	Υ		Υ	
163	Gridley	Υ		Υ	
164	Grover Beach	Υ		Υ	
165	Guadalupe	Υ		Υ	
166	Gustine	Υ		Υ	
167	Half Moon Bay	Υ		Υ	
168	Hanford	Υ		Υ	
169	Hawaiian Gardens	Υ		Υ	
170	Hawthorne	Υ		Υ	
171	Hayward	Υ		Υ	
172	Healdsburg	Υ		Υ	
173	Hemet	Υ		Υ	
174	Hercules	Υ		Υ	
175	Hermosa Beach	Υ		Υ	
176	Hesperia	Υ		Υ	
177	Hidden Hills	Υ		Υ	
178	Highland	Υ		Υ	
179	Hillsborough	Υ		Υ	
180	Hollister	Υ		Υ	
181	Holtville	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
182	Hughson	Υ		Υ	
183	Humboldt	Υ		Υ	
184	Huntington Beach	Υ		Υ	
185	Huntington Park	Υ		Υ	
186	Huron	Υ		Υ	
187	Imperial	Υ		Υ	
188	Imperial Beach	Υ		Υ	
189	Indian Wells	Υ		Υ	
190	Indio	Υ		Υ	
191	Industry	Υ		Υ	
192	Inglewood	Υ		Υ	
193	Inyo	Υ		Υ	
194	Ione	Υ		Υ	
195	Irvine	Υ		Υ	
196	Irwindale	Υ		Υ	
197	Isleton	Υ		Υ	
198	Jackson	Υ		Υ	
199	Kerman	Υ		Υ	
200	Kern	Υ		Υ	
201	King City	Υ		Υ	
202	Kings	Υ		Υ	
203	Kingsburg	Υ		Υ	
204	La Canada Flintridge	Υ		Υ	
205	La Habra	Υ		Υ	
206	La Habra Heights	Υ		Υ	
207	La Mesa	Υ		Υ	
208	La Mirada	Υ		Υ	
209	La Palma	Υ		Υ	
210	La Puente	Υ		Υ	
211	La Quinta	Υ		Υ	
212	La Verne	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
213	Lafayette	Υ		Υ	
214	Laguna Beach	Υ		Υ	
215	Laguna Hills	Υ		Υ	
216	Laguna Niguel	Υ		Υ	
217	Laguna Woods	Υ		Υ	
218	Lake	Υ		Υ	
219	Lake Elsinore	Υ		Υ	
220	Lake Forest	Υ		Υ	
221	Lakeport	Υ		Υ	
222	Lakewood	Υ		Υ	
223	Lancaster	Υ		Υ	
224	Larkspur	Υ		Υ	
225	Lassen	Υ		Υ	
226	Lathrop	Υ		Υ	
227	Lawndale	Υ		Υ	
228	Lemon Grove	Υ		Υ	
229	Lemoore	Υ		Υ	
230	Lincoln	Υ		Υ	
231	Lindsay	Υ		Υ	
232	Live Oak	Υ		Υ	
233	Livermore	Υ		Υ	
234	Livingston	Υ		Υ	
235	Lodi	Υ		Υ	
236	Loma Linda	Υ		Υ	
237	Lomita	Υ		Υ	
238	Lompoc	Υ		Υ	
239	Long Beach	Υ		Υ	
240	Loomis	Υ		Υ	
241	Los Alamitos	Υ		Υ	
242	Los Altos	Υ		Υ	
243	Los Altos Hills	Υ		Υ	
244	Los Angeles	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mail	
245	Los Banos	Υ		Υ	
246	Los Gatos	Υ		Υ	
247	Loyalton	Υ		Υ	
248	Lynwood	Υ		Υ	
249	Madera	Υ		Υ	
250	Malibu	Υ		Υ	
251	Mammoth Lakes	Υ		Υ	
252	Manhattan Beach	Υ		Υ	
253	Manteca	Υ		Υ	
254	Maricopa	Υ		Υ	
255	Marina	Υ		Υ	
256	Martinez	Υ		Υ	
257	Marysville	Υ		Υ	
258	Maywood	Υ		Υ	
259	Mcfarland	Υ		Υ	
260	Mendota	Υ		Υ	
261	Menlo Park	Υ		Υ	
262	Merced	Υ		Υ	
263	Mill Valley	Υ		Υ	
264	Millbrae	Υ		Υ	
265	Milpitas	Υ		Υ	
266	Mission Viejo	Υ		Υ	
267	Modesto	Υ		Υ	
268	Monrovia	Υ		Υ	
269	Montague	Υ		Υ	
270	Montclair	Υ		Υ	
271	Monte Sereno	Υ		Υ	
272	Montebello	Υ		Υ	
273	Monterey	Υ		Υ	
274	Monterey Park	Υ		Υ	
275	Moorpark	Υ		Υ	
276	Moraga	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	rged IP	VoIP Voice Mail	
277	Moreno Valley	Υ		Υ	
278	Morgan Hill	Υ		Υ	
279	Morro Bay	Υ		Υ	
280	Mount Shasta	Υ		Υ	
281	Mountain View	Υ		Υ	
282	Murrieta	Υ		Υ	
283	Napa	Υ		Υ	
284	National City	Υ		Υ	
285	Needles	Υ		Υ	
286	Nevada City	Υ		Υ	
287	Newark	Υ		Υ	
288	Newman	Υ		Υ	
289	Newport Beach	Υ		Υ	
290	Norco	Υ		Υ	
291	Norwalk	Υ		Υ	
292	Novato	Υ		Υ	
293	Oakdale	Υ		Υ	
294	Oakland	Υ		Υ	
295	Oakley	Υ		Υ	
296	Oceanside	Υ		Υ	
297	Ojai	Υ		Υ	
298	Ontario	Υ		Υ	
299	Orange	Υ		Υ	
300	Orange Cove	Υ		Υ	
301	Orinda	Υ		Υ	
302	Orland	Υ		Υ	
303	Oroville	Υ		Υ	
304	Oxnard	Υ		Υ	
305	Pacific Grove	Υ		Υ	
306	Pacifica	Υ		Υ	
307	Palm Desert	Υ		Υ	
308	Palm Springs	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	ged IP	VoIP Voice Mail	
309	Palmdale	Υ		Υ	
310	Palo Alto	Υ		Υ	
311	Palos Verdes Estates	Υ		Υ	
312	Paradise	Υ		Υ	
313	Paramount	Υ		Υ	
314	Parlier	Υ		Υ	
315	Pasadena	Υ		Υ	
316	Patterson	Υ		Υ	
317	Perris	Υ		Υ	
318	Petaluma	Υ		Υ	
319	Pico Rivera	Υ		Υ	
320	Piedmont	Υ		Υ	
321	Pinole	Υ		Υ	
322	Pismo Beach	Υ		Υ	
323	Pittsburg	Υ		Υ	
324	Placentia	Υ		Υ	
325	Placerville	Υ		Υ	
326	Pleasant Hill	Υ		Υ	
327	Pleasanton	Υ		Υ	
328	Plymouth	Υ		Υ	
329	Point Arena	Υ		Υ	
330	Pomona	Υ		Υ	
331	Port Hueneme	Υ		Υ	
332	Porterville	Υ		Υ	
333	Portola	Υ		Υ	
334	Portola Valley	Υ		Υ	
335	Poway	Υ		Υ	
336	Rancho Cordova	Υ		Υ	
337	Rancho Cucamonga	Υ		Υ	
338	Rancho Mirage	Υ		Υ	



Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	rged IP	VoIP Voice Mail	
339	Rancho Palos Verdes	Υ		Υ	
340	Rancho Santa Margarita	Υ		Υ	
341	Red Bluff	Υ		Υ	
342	Redding	Υ		Υ	
343	Redlands	Υ		Υ	
344	Redondo Beach	Υ		Υ	
345	Redwood City	Υ		Υ	
346	Reedley	Υ		Υ	
347	Rialto	Υ		Υ	
348	Richmond	Υ		Υ	
349	Ridgecrest	Υ		Υ	
350	Rio Dell	Υ		Υ	
351	Rio Vista	Υ		Υ	
352	Ripon	Υ		Υ	
353	Riverbank	Υ		Υ	
354	Riverside	Υ		Υ	
355	Rocklin	Υ		Υ	
356	Rohnert Park	Υ		Υ	
357	Rolling Hills	Υ		Υ	
358	Rolling Hills Estates	Υ		Υ	
359	Rosemead	Υ		Υ	
360	Roseville	Υ		Υ	
361	Ross	Υ		Υ	
362	Sacramento	Υ		Υ	
363	Salinas	Υ		Υ	
364	San Anselmo	Υ		Υ	
365	San Bernardino	Υ		Υ	
366	San Bruno	Υ		Υ	
367	San Buenaventura	Υ		Υ	
368	San Carlos	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	ged IP	VoIP Voice Mail	
369	San Clemente	Υ		Υ	
370	San Diego	Υ		Υ	
371	San Dimas	Υ		Υ	
372	San Fernando	Υ		Υ	
373	San Francisco	Υ		Υ	
374	San Gabriel	Υ		Υ	
375	San Jacinto	Υ		Υ	
376	San Joaquin	Υ		Υ	
377	San Jose	Υ		Υ	
378	San Juan Bautista	Υ		Υ	
379	San Juan Capistrano	Υ		Υ	
380	San Leandro	Υ		Υ	
381	San Luis Obispo	Υ		Υ	
382	San Marcos	Υ		Υ	
383	San Marino	Υ		Υ	
384	San Mateo	Υ		Υ	
385	San Pablo	Υ		Υ	
386	San Rafael	Υ		Υ	
387	San Ramon	Υ		Υ	
388	Sand City	Υ		Υ	
389	Sanger	Υ		Υ	
390	Santa Ana	Υ		Υ	
391	Santa Barbara	Υ		Υ	
392	Santa Clara	Υ		Υ	
393	Santa Clarita	Υ		Υ	
394	Santa Cruz	Υ		Υ	
395	Santa Fe Springs	Υ		Υ	
396	Santa Maria	Υ		Υ	
397	Santa Monica	Υ		Υ	
398	Santa Paula	Υ		Υ	
399	Santa Rosa	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	rged IP	VoIP Voice Mai	
400	Santee	Υ		Υ	
401	Saratoga	Υ		Υ	
402	Sausalito	Υ		Υ	
403	Scotts Valley	Υ		Υ	
404	Seal Beach	Υ		Υ	
405	Seaside	Υ		Υ	
406	Sebastopol	Υ		Υ	
407	Selma	Υ		Υ	
408	Shafter	Υ		Υ	
409	Shasta Lake	Υ		Υ	
410	Sierra Madre	Υ		Υ	
411	Signal Hill	Υ		Υ	
412	Simi Valley	Υ		Υ	
413	Solana Beach	Υ		Υ	
414	Soledad	Υ		Υ	
415	Solvang	Υ		Υ	
416	Sonoma	Υ		Υ	
417	Sonora	Υ		Υ	
418	South El Monte	Υ		Υ	
419	South Gate	Υ		Υ	
420	South Lake Tahoe	Υ		Υ	
421	South Pasadena	Υ		Υ	
422	South San Francisco	Υ		Υ	
423	St Helena	Υ		Υ	
424	Stanton	Υ		Υ	
425	Stockton	Υ		Υ	
426	Suisun City	Υ		Υ	
427	Sunnyvale	Υ		Υ	
428	Susanville	Υ		Υ	
429	Sutter Creek	Υ		Υ	
430	Taft	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Conve	rged IP	VolP Vo	ice Mail
431	Tehachapi	Υ		Υ	
432	Tehama	Υ		Υ	
433	Temecula	Υ		Υ	
434	Temple City	Υ		Υ	
435	Thousand Oaks	Υ		Υ	
436	Tiburon	Υ		Υ	
437	Torrance	Υ		Υ	
438	Tracy	Υ		Υ	
439	Trinidad	Υ		Υ	
440	Truckee	Υ		Υ	
441	Tulare	Υ		Υ	
442	Tulelake	Υ		Υ	
443	Turlock	Υ		Υ	
444	Tustin	Υ		Υ	
445	Twentynine Palms	Υ		Υ	
446	Ukiah	Υ		Υ	
447	Union City	Υ		Υ	
448	Upland	Υ		Υ	
449	Vacaville	Υ		Υ	
450	Vallejo	Υ		Υ	
451	Vernon	Υ		Υ	
452	Victorville	Υ		Υ	
453	Villa Park	Υ		Υ	
454	Visalia	Υ		Υ	
455	Vista	Υ		Υ	
456	Walnut	Υ		Υ	
457	Walnut Creek	Υ		Υ	
458	Wasco	Υ		Υ	
459	Waterford	Υ		Υ	
460	Watsonville	Υ		Υ	
461	Weed	Υ		Υ	
462	West Covina	Υ		Υ	

Table 1.2.3.6.2.a Bidder's Converged VoIP and VoIP Voice Mail Services are Commercially Available Areas (continued)

	Service Location	Converged IP		VoIP Voice Mai	
463	West Hollywood	Υ		Υ	
464	West Los Angeles	Υ		Υ	
465	West Sacramento	Υ		Υ	
466	Westlake Village	Υ		Υ	
467	Westminster	Υ		Υ	
468	Westmorland	Υ		Υ	
469	Wheatland	Υ		Υ	
470	Whittier	Υ		Υ	
471	Williams	Υ		Υ	
472	Willits	Υ		Υ	
473	Willows	Υ		Υ	
474	Windsor	Υ		Υ	
475	Winters	Υ		Υ	
476	Woodlake	Υ		Υ	
477	Woodland	Υ		Υ	
478	Woodside	Υ		Υ	
479	Yorba Linda	Υ		Υ	
480	Yountville	Υ		Υ	
481	Yreka	Υ		Υ	
482	Yuba City	Υ		Υ	
483	Yucaipa	Υ		Υ	
484	Yucca Valley	Υ		Υ	

Bidder may identify additional locations where their Converged VoIP and VoIP Voice Mail Services are currently commercially available in Table 1.2.3.6.2.b.

If Bidder is unable to identify all service areas within Table 1.2.3.6.2.a, Bidder shall provide additional information in the form of a coverage map that includes unincorporated areas.



Table 1.2.3.6.2.b Additional Bidder's Converged VoIP and VoIP Voice Mail Services
Commercially Available Areas

ı		Standalone IP		VoIP Voice Mail	
	Service Location	Yes	No	Yes	No

## 1.2.4 AUDIO CONFERENCING

The Contractor shall provide Audio Conferencing which shall consist of a multiple port, reserved and reservationless, conferencing bridge.

Basic Audio Conferencing shall include the following:

- 1. International Access Callers have the ability to participate in a conference from an international location;
- 2. Host Controlled Question and Answer Service The host of a conference can control a question and answer session on a conference call; and,
- 3. Voting and Polling Service The capability for participants to vote via touchtone keys and for the host to poll votes.

All Audio Conferencing services shall be available and functional to all subscribers.

Contractor shall support Toll-Free Dial-in and Caller Paid Dial-in conferencing services.

Audio Conferencing services shall support users who are connected via IP and the Public Switched Telephone Network (PSTN).

Contractor shall provide gateway services to support calls through the PSTN.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.4.1 AUDIO CONFERENCING FEATURES

Contractor shall offer the Audio Conferencing features detailed in Table 1.2.4.1.a.



Table 1.2.4.1.a Audio Conferencing Service and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier	
1	Caller Paid Dial- in Reservation- less Service	Also known as "Meet-Me" service, participants dial a pre-established number and access code to join the conference call.	Y		OIMM0000	
	Bidder's Product Description:  Verizon will provide Caller Paid Dial-in Reservation-less Service, also known as "Meet-Me" service. Participants access the call through a long distance or local number and access code to join the conference call.					
2	Toll-Free Dial-in Reservation-less Service	Also known as "Meet-Me" service, participants dial a pre-established toll-free number and access code to join the conference call.	Y		IIMM0000	
	Bidder's Product Description:  Verizon will provide Toll-Free Dial-in Reservation-less Service, also known as "Meet-Me" service, where participants dial a pre-established toll-free number and access code to join the conference call.					



Table 1.2.4.1.a Audio Conferencing Service and Features (continued)

	Feature Name	Feature Description	Bid Meet Exce Y	s or	Bidder's Product Identifier	
3	Caller Paid Dial- in Reserved Service	Host reserves a conference session in advance and receives a temporary dial-in number and access code. Participants dial the number and enter the access code to join the call.	Y		ISMM0000	
	session in advance	Description:  • Caller Paid Dial-in Reserved Service. The host  • and receives a temporary dial-in number and a d enter the access code to join the call.				
4	Toll-Free Dial-in Reserved Service	Host reserves a conference session in advance and receives a temporary toll-free dial-in number and access code.  Participants dial the toll-free number and enter the access code to join the call.	Y		ITFR0000	
	Bidder's Product Description:  Verizon will provide Toll-Free Dial-in Reserved Service in which the Host reserves a conference session in advance and receives a temporary toll-free dial-in number and access code. Participants dial the toll-free number and enter the access code to join the call.					
5	Operator-Dialed Service	An operator sets up the conference call by placing calls to each of the participants.	Y		IPMM0000	
	Bidder's Product Description:  Verizon will provide an Operator-Dialed Service in which An operator sets up the conference call by placing calls to each of the participants. Participants are notified of the conference date and time. Minutes prior to the schedule conference call, the Verizon Conferencing Center will dial out and connect participants.					
6	Operator- Assisted Dial-in Service	Participants dial in to the conference number and the operator screens the callers for information such as password, name or location.	Y		IOPR0000	
	Bidder's Product Description:  Verizon will provide Operator-Assisted Dial-in Service in which Participants dial in to the conference number and the operator screens the callers for information such as password, name or location. Participants dial into the conference number, and a Conference Coordinator screens callers by name, passcode, location or other information, joins the callers for the conference call. The Conference Coordinator will monitor the call periodically for quality and is available for assistance as needed.					



Table 1.2.4.1.a Audio Conferencing Service and Features (continued)

	Feature Name	Feature Description	Bide Meet Excee Y	s or	Bidder's Product Identifier	
7	Recording Service	The capability to record to various media including CD, audiocassette or the Digitized Replay option below.	Y		IRWF0000	
		Description: Recording Service with the capability to record or the Digitized Replay option below.	to vario	ous me	edia including	
8	Digitized Replay	A user can listen to a conference call at their convenience by dialing an access number/code. During replay the caller can control the session utilizing telephone keypad entries.	Y		IIRP0000	
	Bidder's Product Description:  Verizon will provide Digitized Replay. A user can listen to a conference call at their convenience by dialing an access number/code. During replay the caller can control the session utilizing telephone keypad entries. This service is available after a call for the duration of time indicated by the customer.					
9	Transcription	Contractor provided transcribing a conference call	Υ		ICTR0000	
	Bidder's Product Verizon will provide	Description: e transcription services for conference calls.				
10	Language Interpretation/ Translation	Real-time interpretation and translation services	Y		VCTS0000	
	Bidder's Product Description: Verizon will provide Language Interpretation/ Translation as real-time interpretation and translation services for 120 languages or dialects.					
11	Security List Screening	Host specifies a list of participants who may dial into the conference call. Conference Attendant screens callers against the list.	Y		IRPN0000	
	Bidder's Product Description:  Verizon will provide Security List Screening in which a host specifies a list of participants who may dial into the conference call. The Conference Attendant screens callers against the list, compiling the data requested.					



Table 1.2.4.1.a Audio Conferencing Service and Features (continued)

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier	
12	Participant List	Conference Attendant captures up to three (3) caller attributes and distributes a list of conference participants to the host immediately following the call.	Y		IRPL0000	
	Bidder's Product Description:  Verizon will a Participant list for which the Conference Attendant captures up to three (3) caller attributes and distributes a list of conference participants to the host immediately following the call.					

The Contractor may offer additional unsolicited Audio Conferencing features in Table 1.2.4.1.b.

Table 1.2.4.1.b Unsolicited Audio Conferencing Features

	Feature Name	Feature Description	Bidder's Product Identifier			
	Global Access Toll Band A	Global Access Toll Band A Transport	ATBA0000			
1	Bidder's Product Description: Global Access Toll Band A allows call participants to access a call via a non-U.S. local exchange number. Each participating caller calls the non-U.S. Local exchange number. The following countries are based on availability of service, zone and origination type. Austria, Belgium, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Spain, Sweden, Switzerland, UK, and Denmark.					
	Global Access Toll Band C	Global Access Toll Band C Transport	ATBC0000			
2	Bidder's Product Description: Global Access Toll Band C allows call participants to access a call via a non-U.S. local exchange number. Each participating caller calls the non-U.S. Local exchange number. The following countries are based on availability of service, zone and origination access type. Australia, Hong Kong, Japan, Romania, South Korea, and New Zealand.					
	Global Access Toll Band D	Global Access Toll Band D Transport	ATBD0000			
3	Bidder's Product Description: Global Access Toll Band D allows call participants to access a call via a non-U.S. local exchange number. Each participating caller calls the non-U.S. Local exchange number. The following countries are based on availability of service, zone and origination access type. Singapore and Taiwan.					



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier			
	Global Access Toll Band E	Global Access Toll Band E Transport	ATBE0000			
4	Bidder's Product Description: Global Access Toll Band E allows call participants to access a call via a non-U.S. local exchange number. Each participating caller calls the non-U.S. Local exchange number. The following countries are based on availability of service, zone and origination access type. Greece, Finland, Norway, Czech, and Slovakia.					
	Global Access Toll Band F	Global Access Toll Band F Transport	ATBF0000			
5	Bidder's Product Description: Global Access Toll Band F allows call participants to access a call via a non-U.S. local exchange number. Each participating caller calls the non-U.S. Local exchange number. The following countries are based on availability of service, zone and origination access type. Brazil, Hungary, and Mexico.					
	Global Access Toll Band G	Global Access Toll Band G Transport	ATBG0000			
6	number. Each participating cal	n:  ows call participants to access a call via a non-U.S. ler calls the non-U.S. Local exchange number. The illity of service, zone and origination access type. C	following			
	Global Access Freephone Band A	Global Access Freephone Band A Transport	AFBA0000			
7	Bidder's Product Description: Global Access Freephone Band A allows call participants to access a call via a Local Toll Free number. Each participating caller calls the designated Freephone number. Local Freephone access is available via an in-country Freephone number. The Local Freephone number and corresponding passcode will allow direct dial access to the call. The following countries are based on availability of service, zone and origination type. Austria, Belgium, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Spain, Sweden, Switzerland, UK, and Denmark.					
	Global Access Freephone Band C	Global Access Freephone Band C Transport	AFBC0000			
8	Bidder's Product Description: Global Access Freephone Band C allows call participants to access a call via a Local Toll Free number. Each participating caller calls the designated Freephone number. Local Freephone access is available via an in-country Freephone number. The Local Freephone number and corresponding passcode will allow direct dial access to the call. The following countries are based on availability of service, zone and origination access type. Australia, Hong Kong, Japan, South Korea, and New Zealand.					



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Global Access Freephone Band D	Global Access Freephone Band D Transport	AFBD0000			
Bidder's Product Description: Global Access Freephone Band D allows call participants to access a call via a Local T number. Each participating caller calls the designated Freephone number. Local Freep access is available via an in-country Freephone number. The Local Freephone number corresponding passcode will allow direct dial access to the call. The following countrie based on availability of service, zone and origination access type. Singapore, Malaysia Slovenia, Turkey, and Taiwan.						
	Global Access Freephone Band E	Global Access Freephone Band E Transport	AFBE0000			
10	Bidder's Product Description: Global Access Freephone Band E allows call participants to access a call via a Local Toll Free number. Each participating caller calls the designated Freephone number. Local Freephone access is available via an in-country Freephone number. The Local Freephone number and corresponding passcode will allow direct dial access to the call. The following countries are based on availability of service, zone and origination access type. Estonia, Greece, Finland, Norway, Czech, and Slovakia.					
	Global Access Freephone Band F	Global Access Freephone Band F Transport	AFBF0000			
11	Bidder's Product Description: Global Access Freephone Band F allows call participants to access a call via a Local Toll Free number. Each participating caller calls the designated Freephone number. Local Freephone access is available via an in-country Freephone number. The Local Freephone number and corresponding passcode will allow direct dial access to the call. The following countries are based on availability of service, zone and origination access type. Argentina, Brazil, Costa Rica, Croatia, Hungary, Israel, Mexico, Panama, Poland, Portugal, Russia, South Africa, and Uruguay.					
	Global Access Freephone Band G	Global Access Freephone Band G Transport	AFBG0000			
12	Bidder's Product Description: Global Access Freephone Band G allows call participants to access a call via a Local Toll Free number. Each participating caller calls the designated Freephone number. Local Freephone access is available via an in-country Freephone number. The Local Freephone number and corresponding passcode will allow direct dial access to the call. The following countries are based on availability of service, zone and origination access type. Chile, China, Colombia, India, Indonesia, Latvia, Peru, Philippines, Saudi Arabia, Thailand, United Arab Emirates and Venezuela.					



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

**Managed Video Conferencing** 

	Feature Name	Feature Description	Bidder's Product Identifier	
	Managed Video Conferencing - Standard Session Support 384K	Managed Video Conferencing - Standard Session Support 384K provides Video Conference session support with assistance of a live Conferencing Attendant.	ISSS0000	
13	Bidder's Product Description:  Verizon is proposing Managed Video Conferencing Service as an Unsolicited Service Offering ir section 1.2 Conferencing service. Managed Video Conferencing Service supports the agencies ability to successfully implement MPLS service on customer provided Video Conferencing equipment. Smaller agencies require additional technical support to provide this assistance configuring and manging the implemention of Video Conferencing service. Managing video configurations on the equipment over the MPLS network would be an example of this type of intregration support.  Managed Video Conferencing - Standard Session Support 384K provides Standard Session Support with a connection at 384K. A Conferencing Attendant to greet each caller; assist participants in connecting, perform a roll call of all participants and notify the conference leader when all participants are present. At the completion of the roll call, the Conferencing Specialist will disconnect from the call. If technical assistance is needed during the conference, the Customer can contact a Conferencing Attendant for assistance.			
14	Managed Video Conferencing - Enhanced Session Support	Managed Video Conferencing - Enhanced Session Support provides Video Conference session support with assistance of a live Conferencing Attendant for the duration of the conference.	IESS0000	
	Bidder's Product Description:  Managed Video Conferencing - Enhanced Session Support provides Standard Session Support.  A Conferencing Attendant to greet each caller; assist participants in connecting, perform a roll call of all participants and notify the conference leader when all participants are present. At the completion of the roll call, the Conferencing Attendant shall remain online and provide technical assistance until the end of the conference.			
15	Managed Video Conferencing - Session Support Cancellation fee	Managed Video Conferencing - Session Support Cancellation fee is a fee that is applied if the Session Support is cancelled less than 1 hour prior to the scheduled conference.	ISCF0000	
	Bidder's Product Description:  Managed Video Conferencing - Session Support Cancellation fee is a fee that is applied if the Session Support is cancelled less than 1 hour prior to the scheduled conference.			



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
16	Managed Video Conferencing - Network MCU Less than 385K	Managed Video Conferencing - Network MCU Less than 385K allows for a single session IP based video and audio conferencing in a multipoint arrangement.	IMCU0000	
	Bidder's Product Description:  Managed Video Conferencing - Network MCU Services (Port) Less than 385K provides  Multipoint Control Unit (MCU) services that allow for a single session IP based video and audio conferencing in a multipoint arrangement. This is accomplished through a centralized system of provider based equipment and software. The Network MCU Service is up to 384K connection.			
	Managed Video Conferencing - Enhanced Network MCU 385-768K	Managed Video Conferencing - Enhanced Network MCU 385K to 768Kbs allows for a single session IP based video and audio conferencing in a multipoint arrangement.	IMCU0512	
17	Bidder's Product Description:  Managed Video Conferencing - Enhanced Network MCU Services (Port) 385K to Enhanced Network MCU Services (385kbps-768kbps) allow for a single session and audio conferencing in a multipoint arrangement. This is accomplished through system of provider based equipment and software at 512K. The Enhanced Network Service is from 512K to 768K connection.			
18	Managed Video Conferencing - IP Access Port Bridge - 768K-T1	Managed Video Conferencing - IP Access Port Bridge - 768K to T1 allows for a single session IP based video and audio conferencing in a multipoint arrangement.	ICSP0015	
	Bidder's Product Description:  Managed Video Conferencing - IP Access Port Bridge - 768K to T1 provides Multipoint Control Unit (MCU) services that allow for a single session IP based video and audio conferencing in a multipoint arrangement. This is accomplished through a centralized system of provider based equipment and software. The Network MCU Service is up to 384K connection.			
19	Managed Video Conferencing - MCU Cascading 384K	Managed Video Conferencing - MCU Cascading Services (Port 384K) allows for distributed videoconferencing arrangements using a Blended Network and Premise MCUs 384K	ICAS0000	
	Bidder's Product Description:  Managed Video Conferencing - MCU Cascading Services (Port 384K) allows for distributed videoconferencing arrangements utilizing a combination of customer owned and network based MCUs. The MCU Cascading Service is up to 384K connection.			
20	Managed Video Conferencing - Enhanced MCU Cascading 512-768K	Managed Video Conferencing - Enhanced MCU Cascading Service (512K to 768K) allows for distributed videoconferencing arrangements using a Blended Network and Premise MCUs 512K to 768K	ICAS0512	



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description:  Managed Video Conferencing - Enhanced MCU Cascading Service (512K to 768K) allows for distributed videoconferencing arrangements using a Blended Network and Premise MCUs 512K to 768K				
	Managed Video Conferencing - Gateway Services (384K)	Managed Video Conferencing - Gateway Services (384K) provides PSTN Interconnection 384K	IGYS0000		
21	Bidder's Product Description:  Managed Video Conferencing - Gateway Services (384K) allows for the interconnection based videoconference sessions with Integrated Services Digital Network (ISDN) based videoconferencing sessions connecting via the Public Switched Telephone Network (PSThis is accomplished through use of a specific number to call where parties can join. The Cascading Service is up to 384K connection.				
	Managed Video Conferencing - Enhanced Gateway 512-768K	Managed Video Conferencing - Enhanced Gateway Services (512K to 768K) provides PSTN Interconnection between 512K and 768K	IGYS0512		
22	Bidder's Product Description:  Managed Video Conferencing - Enhanced Gateway Services (512K to 768K) Enhanced Gateway Services allows for the interconnection of IP based videoconference sessions with ISDN based videoconferencing sessions connecting via the PSTN. This is accomplished through use of a specific number to call where parties can join. The MCU Cascading Service is from 512K to 768K connections.				
	Managed Video Conferencing - Transcoding Services	Managed Video Conferencing - Transcoding Services Per Session enables translation between Network CODECs	ITRN0000		
23	Bidder's Product Description:  Managed Video Conferencing - Transcoding Services Per Session enables a participant to take part in a conference even though they communicate via unlike compression methods or dissimilar codec speeds. Converts the Customer's CODEC algorithm or speed to match with the other participants in the videoconference.				
	Managed Video Conferencing - Conference Scheduling Services	Managed Video Conferencing - Conference Scheduling Services allows scheduling of video/audio conferencing sessions.	ICSS0000		
24	Bidder's Product Description:  Managed Video Conferencing - Conference Scheduling Services Conference Scheduling Services is a network wide scheduling of video/audio conferencing sessions shall be available through any combination of web-based, e-mail or phone initiated methods.				
25	Managed Video Conferencing Enhanced Session Powerpoint Push  Managed Video Conferencing - Enhanced Session Powerpoint Pushes enables document sharing over the network.		ISPP0000		



# Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Bidder's Product Description:  Managed Video Conferencing - Enhanced Session Powerpoint Pushes supports H.239 standard for document sharing, or the customer can use Verizon's Net Conferencing solution in conjunction with the video. The H.239 feature enables both video and graphical data to be transmitted over a single network connection and displayed in the video conference simultaneously using a single monitor, using the H.239 industry standard protocol.				
26	Managed Video Conferencing Enhanced Content Manipulation	Managed Video Conferencing - Enhanced Session Content Manipulation enables Combined Video and Graphical Content Delivery	ISCM0000		
	Bidder's Product Description:  Managed Video Conferencing - Enhanced Session Content Manipulation supports H.239 standard for document sharing, or the customer can use Verizon's Net Conferencing solution in conjunction with the video. The H.239 feature enables both video and graphical data to be transmitted over a single network connection and displayed in the video conference simultaneously using a single monitor, using the H.239 industry standard protocol.				
	Managed Video Conferencing - Enhanced Session Q&A Moderation  Managed Video Conferencing - Enhanced Session Q&A Moderation provides a Session Moderator for a Q&A session.		ISQA0000		
27	Bidder's Product Description:  Managed Video Conferencing - Enhanced Session Q&A Moderation is supported in Verizon's Premier Level service. When using Verizon's Premier Level service, Verizon's video coordinators will moderate a formal Question and Answer (Q&A) session.				

**Open Video Communications** 

	Feature Name Feature Description		Bidder's Product Identifier
	OVC Instant Service Level Usage up to 6Mbs  Open Video Communications (OVC) Instant Service Level Usage up to 6Mbs is multi-party video conferencing with usage level suitable for Smartphones, Small Clients, Desktop Single Purpose devices.		OVC10006
28	Offering in section 1.2 Confere successfully implement MPLS both the private and public MP provide ubiquitious connection two State agenices over differenthis type of intregration support Open Video Communications	eo Communications (OVC) Service as an Unsolicite noing service. OVC Service supports the agencies service on customer provided Video Conferencing & LS network. State agencies require additional techns over a Video Conference system. Video Connection network solutions (one being MPLS) would be ar	ability to equipment on nical support to ons between n example of multi-party



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
29	OVC Instant Service Level Usage 6Mbs to 12Mbs	OVC Instant Service Level Usage 6Mbs to 12Mbs is multi-party video conferencing with usage level suitable for Single Screen Telepresence rooms.	OVCI0012		
		<b>n:</b> (OVC) Standard Service Level Usage 6Mbs to 12Mb usage level suitable for Single Screen Telepresence			
30	OVC Instant Service Level Usage 12Mbs to 18Mbs	OVC Instant Service Level Usage 12Mbs to 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms.	OVCI0018		
	Bidder's Product Description:  Open Video Communications (OVC) Instant Service Level Usage 12Mbs to 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms.				
24	OVC Instant Service Level Usage Over 18Mbs	OVC Instant Service Level Usage Over 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms with Document Sharing.	OVCI0019		
31	Bidder's Product Description:  Open Video Communications (OVC) Instant Service Level Usage Over 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms with Document Sharing.				
	OVC Standard Service Level Usage up to 6Mbs	OVC Standard Service Level Usage up to 6Mbs is multi-party video conferencing with usage level suitable for Smartphones, Small Clients, Desktop Single Purpose devices.	OVCS0006		
32	Bidder's Product Description: Open Video Communications (OVC) Standard Service Level Usage up to 6Mbs is muvideo conferencing with usage level suitable for Smartphones, Small Clients, Desktop Purpose devices.				
33	OVC Standard Service Level Usage 6Mbs to 12Mbs	OVC Standard Service Level Usage 6Mbs to 12Mbs is multi-party video conferencing with usage level suitable for Single Screen Telepresence rooms.	OVCS0012		
	Bidder's Product Description:  Open Video Communications (OVC) Standard Service Level Usage 6Mbs to 12Mbs is multiparty video conferencing with usage level suitable for Single Screen Telepresence rooms.				
34	OVC Standard Service Level Usage 12Mbs to 18Mbs	OVC Standard Service Level Usage 12Mbs to 18Mbs is multi-party video conferencing with			



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Name Feature Description				
	Bidder's Product Description: Open Video Communications (OVC) Standard Service Level Usage 12Mbs to 18Mbs is multiparty video conferencing with usage level suitable for Multi-Screen Telepresence rooms.					
	OVC Standard Service Level Usage Over 18Mbs	5				
35		n: (OVC) Standard Service Level Usage Over 18Mbs is suitable for Multi-Screen Telepresence rooms with				
	OVC Premier Service Level Usage up to 6Mbs	OVC Premier Service Level Usage up to 6Mbs is multi-party video conferencing	OVCP0006			
36		n: (OVC) Premier Service Level Usage up to 6Mbs is n level suitable for Smartphones, Small Clients, Desk				
37	OVC Premier Service Level Usage 6Mbs to 12Mbs	OVC Premier Service Level Usage 6Mbs to 12Mbs is multi-party video conferencing with usage level suitable for Single Screen Telepresence rooms.	OVCP0012			
	Bidder's Product Description:  Open Video Communications (OVC) Premier Service Level Usage 6Mbs to 12Mbs is multi-party video conferencing with usage level suitable for Single Screen Telepresence rooms.					
38	OVC Premier Service Level Usage 12Mbs to 18Mbs	OVC Premier Service Level Usage 12Mbs to 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms.	OVCP0018			
	Bidder's Product Description:  Open Video Communications (OVC) Premier Service Level Usage 12Mbs to 18Mbs is multiparty video conferencing with usage level suitable for Multi-Screen Telepresence rooms.					
	OVC Premier Service Level Usage Over 18Mbs	OVC Premier Service Level Usage Over 18Mbs is multi-party video conferencing with usage level suitable for Multi-Screen Telepresence rooms with Document Sharing.	OVCP0019			
39		n: (OVC) Premier Service Level Usage Over 18Mbs is level suitable for Multi-Screen Telepresence rooms				



Table 1.2.4.1.b Unsolicited Audio Conferencing Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
40	OVC Endpoint Management Non-Cisco Telepresence	OVC Endpoint Management Non-Cisco Telepresence Endpoint Management Service	OVPE0000	
40	Bidder's Product Description: Open Video Communications (OVC) Endpoint Management Non-Cisco Telepresence is Monthly Management of Customer Videoconferencing Endpoints.			
41	OVC Endpoint Management Cisco Telepresence, Single CODEC	OVC Endpoint Management Cisco Telepresence, Single CODEC Endpoint Management Service  OVSC0000		
	Bidder's Product Description: Open Video Communications (OVC) Endpoint Management Cisco Telepresence, Single CODEC is Monthly Management of Customer Videoconferencing Endpoints.			
42	OVC Endpoint Management Cisco Telepresence, Multiple CODECs	OVC Endpoint Management Cisco Telepresence, Multiple CODECs Endpoint Management Service	OVMC0000	
		n: (OVC) Endpoint Management Cisco Telepresence, lent of Customer Videoconferencing Endpoints.	Multiple	

# 1.2.5 SESSION INITIATED PROTOCOL (SIP) TRUNKING

The Contractor shall provide a network based trunk service using Session Initiated Protocol (SIP) that includes the functionality described below. The SIP trunk service shall allow a Customer to utilize a connection to the contractors MPLS network provided under this section to access the Public Switched Telephone Network from an end-user device such as an IP PBX, Call Manager or Unified Communications and Collaboration device.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.5.1 SIP SUPPORTED CALLING

Contractor shall provide access to the PSTN via SIP trunking that supports local, long distance and inbound toll-free calling.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_



#### 1.2.5.2 CONCURRENT SIP CALLS

The Contractor shall engineer the SIP trunk service to support the number of concurrent calls requested by the End-User. The SIP trunk service shall support G.711 and G.729a voice compression.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.5.3 ON-NET SIP CALLING

The Contractor shall provide SIP Trunk service that provides unlimited on-net calling. On-net calling is defined as calling from a SIP Trunk site that uses the contractors MPLS network and terminates at a SIP Trunk site or a Converged VoIP site. The Converged VoIP service is that offered by the contractor under this section. If the contractor offers Standalone VoIP under another CALNET contract, a SIP Trunk call terminating at such a site shall be considered on-net. Off-net calling is any call that is not on-net. Off-net calling consists of local, long distance (United States) and international.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.5.4 ON-NET ENTERPRISE CALLING

The Contractor shall treat the State of California as a single enterprise for the purpose of on-net calling. On-net calling from one (1) State of California Agency/Department to another shall be treated the same as on-net calling within a State of California Agency or Department.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.5.5 INTEROPERABILITY OF SIP TRUNK WITH OTHER CALNET 3 TECHNOLOGIES

The Contractor's SIP Trunk services shall be interoperable with the Contractor's Converged VoIP services (Section 1.2.3.2) and the State shall not incur any charges to call between these two (2) services.

In the event at Contractor is awarded a CALNET 3 Contract for Standalone VoIP services (Subcategory 1.3), this IP Trunking service shall be interoperable with the Contractor's Standalone VoIP services and the State shall not incur any charges to call between these two (2) services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.5.6 SIP CALLING FEATURES

The SIP trunk service shall support the following calling features:

- 1. Direct Inward Dialing (DID);
- 2. Direct Outward Dialing (DOD);
- 3. Local Number Portability;
- 4. 4-1-1 Directory Assistance;



- 5. 7-1-1 Telecommunications Relay Service;
- 6. 9-1-1 and E9-1-1 Emergency Calling;
- 7. Operator Services; and,
- 8. ITU T.38 Standard for transmission over IP networks between Group 3 fax terminals.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.5.7 SIP TRUNKING GEOGRAPHIC AVAILABILITY

The Contractor shall provide SIP Trunking at all locations where Contractor is required to provide MPLS service.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.5.8 SIP CALLING PLANS

The Contractor shall provide the SIP calling plans identified in Table 1.2.5.8

Table 1.2.5.8, SIP Calling Plans

	Feature Name	Feature Description	Mee	lder ts or eds? N	Bidder's Product Identifier
1	SIP Calling Plan A	Unlimited Local Calling (inbound/outbound) with unlimited off-net long distance calling (United States). The plan shall include a rate for off-net international and shall not include any other rates. There shall be no charges for on-net calling.	Y		SIPA0000

# **Bidder's Product Description:**

Verizon will provide Unlimited Local Calling (inbound/outbound) with unlimited off-net long distance calling (United States). The Verizon plan will include a rate for off-net international and will not include any other rates. There will be no charges for on-net calling.



Table 1.2.5.8, SIP Calling Plans (continued)

	Feature Name	Feature Description	Mee	lder ts or eds? N	Bidder's Product Identifier
2	SIP Calling Plan B	Unlimited local calling with off-net long distance (Unites State) usage. The plan shall include a rate for off-net long distance (United State) and a rate for off-net international and shall not include any other rates. There shall be no charges for on-net calling.	Y		SIPB0000
	Bidder's Product Description:  Verizon will provide Unlimited local calling with off-net long distance (Unites State) usage. The plan shall include a rate for off-net long distance (United State) and a rate for off-net international and shall not include any other rates. There shall be no charges for on-net calling.				
3	U.S. Off-Net Calling for Calling Plan B	Domestic Off-Net calling for Calling Plan B Customers	Y		UCOB0000
		uct Description: ide Domestic Off-Net calling for Calling Plan	B Cust	omers.	
4	SIP Calling Plan C	Unlimited off-net long distance calling (United States) with no local calling. There shall be no rates associated with this plan. There shall be no charges for on-net calling.	Y		SIPC0000
	Bidder's Product Description:  Verizon will provide unlimited off-net long distance calling (United States) with no local calling.  There shall be no rates associated with this plan. There shall be no charges for on-net calling.				



Table 1.2.5.8, SIP Calling Plans (continued)

	Feature Name	Feature Description	Mee	der ts or eds? N	Bidder's Product Identifier
5	SIP Calling Plan D	United States Inbound toll-free calling. The plan shall contain a rate for United States inbound toll-free calling and shall not include any other rates.	Y		SIPD0000
	Bidder's Product Description:  Verizon will provide United States Inbound toll-free calling. The plan shall contain a rate for United States inbound toll-free calling and shall not include any other rates.				
6	Inbound Toll- Free Calling for Calling Plan D	Inbound Toll-Free calling for SIP Calling Plan D Customers.	Y		ITFD0000
	Bidder's Product Description:  Verizon will provide Inbound Toll-Free calling for SIP Calling Plan D Customers.				

The Contractor may offer additional unsolicited SIP Calling Plans in Table 1.2.5.8.b.

# Table 1.2.5.8.b Unsolicited SIP Trunking Features

	Feature Name	Feature Description	Bidder's Product Identifier		
	SIP Calling Plan E	SIP Calling Plan E VoIP Simultaneous Call Package Unlimited Local and 250 LD.	IPTT1250		
1	Bidder's Product Description:  SIP Calling Plan E VoIP Simultaneous Call Package service (IP Trunking) routes call traffic be on and off the IP Network. Verizon IP Trunking uses PSTN gateways hosted within the network, further enabling the converged VoIP service for calls outside of the Customer Enterprise/Agency. Each IP Trunk includes unlimited calling between Intra/Inter Agency IP Trunks/HIPC, unlimited local calling (within 17 miles of the address) and 250 minutes per mo (50 United States, the District of Columbia, the Virgin Islands and Puerto Rico). Tiered overage that exceed 250 minutes per month will apply on a per minute bases. Minutes cannot be shared between service locations nor can they be rolled over from month to month. MPLS Access for IP Trunking and DID numbers are required and are not included in this line item. Customer responsible for SIP integration between IP PBX and Verizon demark.				
	SIP Calling Plan F	SIP Calling Plan F provides VoIP Simultaneous Call Package Unlimited Local and 750 LD.	IPTT1750		
2	Bidder's Product Description:  SIP Calling Plan F VoIP Simultaneous Call Package routes call traffic both on and off the IP Network. Verizon IP Trunking uses PSTN gateways hosted within the network, further enabling the converged VoIP service for calls outside of the Customer Enterprise/Agency. Each IP Trunking uses unlimited calling between Intra/Inter Agency IP Trunks/HIPC, unlimited local calling (within 17 miles of the address) and 750 minutes per month (50 United States, the District of Columbia, the Virgin Islands and Puerto Rico). Tiered overage charges that exceed 750 minutes per month will apply on a per minute bases. Minutes cannot be shared between service locations nor can they be rolled over from month to month. MPLS Access for IP Trunking and DID numbers are required and are not included in this line item. Customer responsible for SIP integration between IP PBX and Verizon demark.				
	SIP Calling Plan G	SIP Calling Plan G VoIP Simultaneous Call Package 250 LD ONLY.	SPCG0000		
3	Bidder's Product Description:  SIP Calling Plan G VoIP Simultaneous Call Package 250 LD ONLY service (IP Trunking) route call traffic both on and off the IP Network. Verizon IP Trunking uses PSTN gateways hosted within the network further enabling the converged VoIP service for calls outside of the				



Table 1.2.5.8.b Unsolicited SIP Trunking Features (continued)

	Trunking Federics (Continued)				
	Feature Name	Feature Description	Bidder's Product Identifier		
	SIP Calling Plan H	SIP Calling Plan H VoIP simultaneous Call Package 750 LD ONLY.	SPCH0000		
4	Bidder's Product Description:  SIP Calling Plan H VoIP Simultaneous Call Package 750 LD ONLY service (IP Trunking) route call traffic both on and off the IP Network. Verizon IP Trunking uses PSTN gateways hosted within the network, further enabling the converged VoIP service for calls outside of the Customer Enterprise/Agency. Each IP Trunk includes unlimited calling between Intra/Inter Agency IP Trunks/HIPC and 750 LD minutes per month (50 United States, the District of Columbia, the Virgin Islands and Puerto Rico). Tiered overage charges that exceed 750 minutes per month will apply on a per minute bases. Minutes cannot be shared between service locations nor can they be rolled over from month to month. MPLS Access for IP Trunking and DID numbers are required and are not included in this line item. Customer responsible for SIP integration between IP PBX and Verizon demark.				
	SIP Calling Plan Overage	SIP Calling Plan Overage for VoIP Simultaneous Call Package.	SPOV0000		
5	Bidder's Product Description: SIP Calling Plan Overage for VoIP Simultaneous Call Package (IP Trunking) Metered Usage charges apply on a per minute basis to Long Distance calls (IntraLATA, Intrastate and Interst in the 50 United States, the District of Columbia, the Virgin Islands and Puerto Rico) per IP Trunk, per location when the SIP Calling Plan LD minutes have been exceeded.				
	VoIP BEST Feature	VoIP BEST enables customers to use idle trunk capacity in one location to accommodate an increase in traffic at another location.	IPTB0000		
6	Bidder's Product Description:  VoIP BURSTABLE ENTERPRISE SHARED TRUNK (BEST) requires a VoIP Simultaneous Ca Package. This feature cannot be ordered by itself. BEST allows for IP Trunks to be shared across the customers multi-site enterprise network. Total number of BEST IP Trunks must be equal to or exceed total number of physical sites and is subject to bursting to an additional maximum of fifty (50) simultaneous calls in addition to what is provisioned at any single location. Verizon is not responsible for the design or configuration recommendations specific tan IP PBX platform. BEST includes a sharing of simultaneous call capacity, not minutes. If Customer uses BEST to share simultaneous call capacity between sites billed on tiered pricing models, the included number of LD minutes per concurrent call will not be shared between sites.				
7	VARRS	VoIP Alternate Route Recovery Service (VARRS) Feature provides Session Boarder Controller geo-redundancy option for VoIP Trunking enterprises that require additional protection against geographically-isolated network events or outages.	VARR0000		
	Bidder's Product Description:  VARRS provide Session Boarder Controller geo-redundancy option for VoIP Trunking enterprises that require additional protection against geographically-isolated network events or				



Table 1.2.5.8.b Unsolicited SIP Trunking Features (continued)

		Tranking reactives (continued)				
	Feature Name	Feature Description	Bidder's Product Identifier			
	outages. Enables to re-route inbound traffic and customers to re-route outbound traffic through a geographically diverse secondary SBC pair in the event of a network SBC outage or Customer element failure. MRC for VARRS is based on number of simultaneous calling units at each location, if customer elects to receive VARRS, it will be applied and provisioned for all simultaneous calling units at all customer locations receiving VoIP Trunking service.					
	Direct Inward Dial (DID) Blocks of 20	DID Number Block of 20 allows users to assign a public phone number to their SIP phone or a PBX phone behind an Enterprise gateway.	IDID0001			
8	Bidder's Product Description: Users can have a Direct Inward Dialing (DID) number (public phone number) assigned to their SIP phone or a PBX phone behind an Enterprise gateway. Local number portability will also be supported. Users are assigned a 10-digit directory number that can be used to place or receincalls directly to this phone, without forcing access via a central number. These are ordered in blocks of 20 numbers.					
	Redirect to Telephone Number	Redirect to Telephone Number is provisioned on a PBX group. All numbers in that group will be provisioned and billed with the feature.	RDTN0000			
9	groupings of numbers. When provisioned on a PBX group, a	on: er in a configured PBX group. A PBX group is defined Redirect to Telephone Number (PBX Group Unread all numbers in that group will be provisioned and bille D apply when this feature is activated under any of the	hable) is ed with the			
	Operator Service	Operator Services include collect, third party and person-to-person calls.	OPAC0001			
10	Bidder's Product Description:  Operator Services include collect, third party and person-to-person calls. Collect Calls are call that are not directly dialed and are placed as collect to the called party using an operator. Calls not directly dialed and placed as collect to the called party, using an operator. Third-Party Calls are calls that are not directly dialed and are requesting third party be billed, using an operator. Calls not directly dialed and request third-party billing, using an operator. Person-to-Person Calls include calls that are completed using an operator (Station-to-Station and Person-to-Person). Calls not directly dialed, using an operator, between stations.					
	Directory Assistance	Directory Assistance	DRAC0001			
11	Bidder's Product Description: Directory Assistance will be provided by the traditional method of dialing 1-Area code + 555-1212 or by dialing 00 and asking Directory Assistance to find any listed number whether it is local or long distance.					
.,	local or long distance.					



Table 1.2.5.8.b Unsolicited SIP Trunking Features (continued)

	Feature Name	Feature Description	Bidder's Product Identifier		
	Caller ID with Name (inbound)	Caller ID with Name (inbound)	CLID0000		
12	Bidder's Product Description:  Caller ID number will be populated for inbound calls. This is billed per month, per concurred call.				
	SIP Field Trial	SIP Field Trial	FTRL0000		
13	Bidder's Product Description: Session Initiation Protocol (SIP) Field Trial for SIP Calling Plans provides a SIP field trial test process for Verizon non-standard customer provided certified equipment or software versions. The field trial is required to confirm compatibility between Customer's call control system, Session Border Control (SBC) devices and Verizon SIP trunk services. The scope consist of supporting activities associated with Verizon owned assets and processes, along with coordinating activities between Customer and Verizon relative to the scope of the field trial.				

#### 1.2.5.9 SIP TRUNK INTERNATIONAL OFF-NET CALLING

The Contractor shall provide SIP Trunk international off-net calling to the countries listed in Table 1.2.5.9. Bidder's rates as provided in the Subcategory Cost Worksheets shall be based on time of day ("Peak Time" or "Off-Peak Time"). Peak Time is between 8:00 a.m. and 4:59 p.m., Monday through Friday based on the time at the CALNET caller's location. Off-Peak time is for all calls where Peak Time rates do not apply.

Note: If the Bidder charges the same rate for both Peak Time and Off-Peak time, Bidder may use the same Product Identifier for both products.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.5.9.1 International Mobile Termination Charges (IMTC)

Contractor shall provide the ability to terminate international calls on wireless devices. Contractor shall charge International Mobile Termination Charge (IMTC) as an additional per minute rate that is applied to international calls (direct dial business or credit card calls) originating in the U.S. and terminating in certain countries to either wireless communications devices including mobile telephones, pagers, personal computers, and personal digital assistants, or to a portable telephone number where a forwarding, tracking or other type of location service is used.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.5.9.2 U.S. Based Services Waiver

The provisions detailed in IFB Business Requirements Section A.2.4.4 (U.S. Based Services) will not apply to Contractor's International Long Distance Calling services.



Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

The Contractor shall offer the SIP Trunk Off-Net International Long Distance Calling configurations detailed in Table 1.2.5.9.a

Table 1.2.5.9.a SIP Trunk Off-Net International Long Distance Calling

	Country	Mee	ders ts or eds? N	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
1	Brazil:	Y		VBRZ0002	VBRZ0003	MBRZ0001
2	Canada:	Y		VCAN0002	VCAN0003	MBCN0001
3	China:	Υ		VCHN0002	VCHN0003	MBCH0001
4	France:	Υ		VFRN0002	VFRN0003	MFRN0001
5	Germany:	Υ		VGRM0002	VGRM0003	MGRM0001
6	Israel:	Υ		VISR0002	VISR0003	MISL0001
7	Italy:	Υ		VITL0002	VITL0003	MIVC0001
8	Japan:	Y		VJPN0002	VJPN0003	MJPN0001
9	Korea:	Υ		VKOR0002	VKOR0003	MKSR0001
10	Mexico:	Υ		VMXC0002	VMXC0003	MMXC0011
11	Spain:	Υ		VSPN0002	VSPN0003	MSWS0001
12	Switzerland:	Υ		VSWZ0002	VSWZ0003	MSWL0001
13	United Kingdom	Υ		VUKN0002	VUKN0003	MUNK0001

Bidder's may offer the SIP Trunk International Off-Net Calling to unsolicited countries listed in Table 1.2.5.9.b.

Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
1	Afghanistan	AFGH0001	AFGH0002	MAFG0001
2	Albania	ALBA0001	ALBA0002	MALB0001
3	Algeria	ALGR0001	ALGR0002	MALG0001
4	Andorra	ANDR0001	ANDR0002	MAND0001
5	Angola	ANGO0001	ANGO0002	MANG0001
6	Anguilla	ANGU0001	ANGU0002	MAGL0001



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	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
7	Antarctica (Casey)	ANTA0001	ANTA0002	MACS0001
8	Antarctica (Scott)	ANSB0001	ANSB0002	MATS0001
9	Antigua and Barbuda	ANTG0001	ANTG0002	MATG0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
10	Argentina	ARGN0001	ARGN0002	MARG0001
11	Armenia	ARMN0001	ARMN0002	MARM0001
12	Aruba	ARUB0001	ARUB0002	MARB0001
13	American Samoa	ASMA0001	ASMA0002	MASM0001
14	Ascension Island	ASCN0001	ASCN0002	MASI0001
15	Australia	ASTR0001	ASTR0002	MAUS0001
16	Austria	AUST0001	AUST0002	MAST0001
17	Azerbaijan	AZER0001	AZER0002	MAZR0001
18	Bahamas	BAHM0001	BAHM0002	MBAH0001
19	Bahrain	BAHR0001	BAHR0002	MBHR0001
20	Bangladesh	BNGL0001	BNGL0002	MBNG0001
21	Barbados	BARB0001	BARB0002	MBRD0001
22	Belarus	BELA0001	BELA0002	MBLR0001
23	Belgium	BELG0001	BELG0002	MBLG0001
24	Belize	BELZ0001	BELZ0002	MBLZ0001
25	Benin	BENN0001	BENN0002	MBNN0001
26	Bermuda	BERM0001	BERM0002	MBRM0001
27	Bhutan	BHUT0001	BHUT0002	MBHT0001
28	Bolivia	BOLV0001	BOLV0002	MBLV0001
29	Bosnia and Herzegovina	BASH0001	BASH0002	MBSH0001
30	Botswana	BTSW0001	BTSW0002	MBTS0001
31	Brunei	BRNI0001	BRNI0002	MBRN0001
32	Bulgaria	BULG0001	BULG0002	MBUL0001
33	Burkina Faso	BRKN0001	BRKN0002	MBRK0001
34	Burundi	BRND0001	BRND0002	MBUR0001
35	British Virgin Islands	BVRG0001	BVRG0002	MBVI0001
36	Central African Republic	CAFR0001	CAFR0002	MCAR0001
37	Cambodia	CMBD0001	CMBD0002	MCMB0001
38	Cameroon	CMRN0001	CMRN0002	MCMR0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
39	Cape Verde	CAPV0001	CAPV0002	MCPV0001
40	Cayman Islands	CYMN0001	CYMN0002	MCMI0001
41	Chad	CHAD0001	CHAD0002	MCHD0001
42	Chile	CHLE0001	CHLE0002	MCHL0001
43	Christmas and Cocos Islands	CHCO0001	CHCO0002	MCHC0001
44	Colombia	CLMB0001	CLMB0002	MCLM0001
45	Comoros	CMYI0001	CMYI0002	MCOM0001
46	Congo	CNGO0001	CNGO0002	MCNG0001
47	Cook Islands	CKIS0001	CKIS0002	MCKI0001
48	Costa Rica	CSTA0001	CSTA0002	MCSR0001
49	Croatia	CROA0001	CROA0002	MCRT0001
50	Cuba	CGBA0001	CGBA0002	MCBA0001
51	Cyprus	CPRS0001	CPRS0002	MCPR0001
52	Czech Republic	CZCR0001	CZCR0002	MCZR0001
53	Diego Garcia	DGRC0001	DGRC0002	MCDG0001
54	Djibouti	DJBT0001	DJBT0002	MDJB0001
55	Denmark	DNMK0001	DNMK0002	MDNM0001
56	Dominica	DMNC0001	DMNC0002	MDMN0001
57	Dominican Republic	DMCR0001	DMCR0002	MDMR0001
58	Ecuador	ECDR0001	ECDR0002	MECD0001
59	Egypt	EGPT0001	EGPT0002	MEGP0001
60	El Salvador	ELSV0001	ELSV0002	MESV0001
61	Equatorial Guinea	EQTG0001	EQTG0002	MEQG0001
62	Eritrea	ERTRO001	ERTRO002	MERT0001
63	Estonia	ESTN0001	ESTN0002	MEST0001
64	Ethiopia	ETHP0001	ETHP0002	METP0001
65	East Timor	ETMR0001	ETMR0002	MEAS0001
66	Faeroe Islands	FRIS0001	FRISO002	MFRI0001
67	Falkland Islands	FLKI0001	FLK10002	MFLI0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
68	Fiji Islands	FIJI0001	FIJI0002	MFJI0001
69	Finland	FNLD0001	FNLD0002	MFNL0001
70	French Antilles	FAMR0001	FAMR0002	MFAM0001
71	French Guiana	FRNG0001	FRNG0002	MFRG0001
72	French Polynesia	FRNP0001	FRNP0002	MFRP0001
73	Gabon Republic	GBON0001	GBON0002	MGBN0001
74	Gambia	GMBA0001	GMBA0002	MGMB0001
75	Georgia	GRGA0001	GRGA0002	MGRG0001
76	Ghana	GANA0001	GANA0002	MGHN0001
77	Gibraltar	GBRL0001	GBRL0002	MGBR0001
78	Greece	GREC0001	GREC0002	MGRC0001
79	Greenland	GRNL0001	GRNL0002	MGRN0001
80	Grenada	GRND0001	GRND0002	MGRD0001
81	Guadeloupe	GDLP0001	GDLP0002	MGDL0001
82	Guantanamo	GNTM0001	GNTM0002	MGNB0001
83	Guatemala	GTML0001	GTML0002	MGTM0001
84	Guinea-Bissau	GNBA0001	GNBA0002	MGBS0001
85	Guinea, People's Revolutionary Republic	GNEA0001	GNEA0002	MGPR0001
86	Guyana	GYNA0001	GYNA0002	MGYN0001
87	Haiti	HATI0001	HATI0002	MHTI0001
88	Hong Kong	HNKG0001	HNKG0002	MHNK0001
89	Honduras	HNDR0001	HNDR0002	MHND0001
90	Hungary	HNGR0001	HNGR0002	MHNG0001
91	Iceland	ICLN0001	ICLN0002	MICL0001
92	India	NDIA0001	NDIA0002	MIND0001
93	Indonesia	NDNS0001	NDNS0002	MNDS0001
94	Iran	IRAN0001	IRAN0002	MIRN0001
95	Iraq	IRAQ0001	IRAQ0002	MIRQ0001
96	Ireland	IRLN0001	IRLN0002	MIRL0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
97	Ivory Coast	ICST0001	ICST0002	MICT0001
98	Jamaica	JMCA0001	JMCA0002	MJMC0001
99	Jordan	JRDN0001	JRDN0002	MJRD0001
100	Kazakhstan	KZKH0001	KZKH0002	MKZK0001
101	Kenya	KNYA0001	KNYA0002	MKNY0001
102	Kiribati	KRBT0001	KRBT0002	MKRB0001
103	Korea, North	NKRE0001	NKRE0002	MKND0001
104	Kuwait	KWAT0001	KWAT0002	MKWT0001
105	Kyrgyzstan	KRYG0001	KRYG0002	MKRG0001
106	Laos	LAOS0001	LAOS0002	MLAS0001
107	Latvia	LTVA0001	LTVA0002	MLTV0001
108	Lebanon	LBNN0001	LBNN0002	MLBN0001
109	Lesotho	LSTH0001	LSTH0002	MLST0001
110	Liberia	LBRA0001	LBRA0002	MLBR0001
111	Libya	LBYA0001	LBYA0002	MLBY0001
112	Liechtenstein	LCHN0001	LCHN0002	MLCH0001
113	Lithuania	LTHN0001	LTHN0002	MLTH0001
114	Luxembourg	LXMB0001	LXMB0002	MLXB0001
115	Macao	MCAU0001	MCAU0002	MMCA0001
116	Macedonia	MCDN0001	MCDN0002	MMCD0001
117	Madagascar	MDSC0001	MDSC0002	MMDG0001
118	Malawi	MLWI0001	MLWI0002	MMLW0001
119	Malaysia	MLYS0001	MLYS0002	MMLY0001
120	Maldives	MLDV0001	MLDV0002	MMLD0001
121	Mali	MALI0001	MALI0002	MMLI0001
122	Malta	MLTA0001	MLTA0002	MMLT0001
123	Marshall Islands	MSHI0001	MSHI0002	MMIS0001
124	Mauritius	MAUR0001	MAUR0002	MMTS0001
125	Mauritania	MRIT0001	MRIT0002	MMRT0001



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Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
126	Mayotte Island	MYTE0001	MYTE0002	MYTI0001
127	Micronesia	MCRN0001	MCRN0002	MMCN0001
128	Moldova	MOLV0001	MOLV0002	MMLV0001
129	Monaco	MNCO0001	MNCO0002	MMNC0001
130	Mongolian People's Republic	MNGL0001	MNGL0002	MMGL0001
131	Montserrat	MNTS0001	MNTS0002	MMTR0001
132	Morocco	MRCC0001	MRCC0002	MMRC0001
133	Mozambique	MZMB0001	MZMB0002	MMZB0001
134	Myanmar	MYBR0001	MYBR0002	MMBR0001
135	Namibia	NMBA0001	NMBA0002	MNMB0001
136	Nauru	NURU0001	NURU0002	MNRU0001
137	New Caledonia	NCLD0001	NCLD0002	MNWC0001
138	Nepal	NPAL0001	NPAL0002	MNPL0001
139	Netherlands	NTHR0001	NTHR0002	MNTH0001
140	Nevis	NEVS0001	NEVS0002	MNVS0001
141	Nigeria	NGRI0001	NGRI0002	MNGA0001
142	Nicaragua	NCRG0001	NCRG0002	MNCG0001
143	Niger	NGER0001	NGER0002	MNGR0001
144	Niue	NIUE0001	NIUE0002	MNIS0001
145	Norfolk Island	NRFK0001	NRFK0002	MNFI0001
146	Norway	NRWY0001	NRWY0002	MNRW0001
147	Netherlands Antilles	NTHA0001	NTHA0002	MNTA0001
148	New Zealand	NZLN0001	NZLN0002	MNZA0001
149	Oman	OMAN0001	OMAN0002	MOMN0001
150	Pakistan	PKST0001	PKST0002	MPKS0001
151	Palau	PLISO001	PLISO002	MPLI0001
152	Panama	PLST0001	PLST0002	MPNM0001
153	Papua New Guinea	PNMA0001	PNMA0002	MPNG0001
154	Paraguay	PRGY0001	PRGY0002	MPRG0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
155	Peru	PERU0001	PERU0002	MPRU0001
156	Philippines	PHLP0001	PHLP0002	MPHL0001
157	Poland	PLND0001	PLND0002	MPLN0001
158	Portugal	PTGL0001	PTGL0002	MPRT0001
159	Qatar	QTAR0001	QTAR0002	MQTR0001
160	Reunion	RUNI0001	RUNI0002	MRUI0001
161	Romania	RMAN0001	RMAN0002	MRMN0001
162	South Africa	SAFR0001	SAFR0002	MSAF0001
163	Russia	RUSS0001	RUSS0002	MRUS0001
164	Rwanda	RWND0001	RWND0002	MRWN0001
165	Samoa	SAMO0001	SAMO0002	MSOM0001
166	Sao Tome	SAOT0001	SAOT0002	MSTO0001
167	Saudi Arabia	SARB0001	SARB0002	MSDA0001
168	Senegal Republic	SNGL0001	SNGL0002	MSNG0001
169	Seychelles Islands	SYCH0001	SYCH0002	MSYC0001
170	Sierra Leone	SRLN0001	SRLN0002	MSRL0001
171	Singapore	SNGP0001	SNGP0002	MSNP0001
172	Slovakia	SLVK0001	SLVK0002	MSLV0001
173	Slovenia	SLVN0001	SLVN0002	MSVN0001
174	San Marino	SMAR0001	SMAR0002	MSNM0001
175	Solomon Islands	SLMN0001	SLMN0002	MSIS0001
176	Somali Republic	SMLA0001	SMLA0002	MSMR0001
177	Sri Lanka	SRLK0001	SRLK0002	MSLK0001
178	St. Helena	STHL0001	STHL0002	MSTH0001
179	St. Kitts	SKTS0001	SKTS0002	MSKT0001
180	St. Lucia	SLUC0001	SLUC0002	MSTL0001
181	St. Pierre and Miquelon	STPR0001	STPR0002	MSPM0001
182	St. Vincent and The Grenadines	STVN0001	STVN0002	MSVG0001
183	Sudan	SUDN0001	SUDN0002	MSDN0001

Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
184	Suriname	SRNM0001	SRNM0002	MSRN0001
185	Swaziland	SWZL0001	SWZL0002	MSWZ0001
186	Sweden	SWDN0001	SWDN0002	MSWD0001
187	Syrian Arab Republic	SRIA0001	SRIA0002	MSRY0001
188	Taiwan	TWAN0001	TWAN0002	MTWN0001
189	Tajikistan	TDJK0001	TDJK0002	MTJK0001
190	Tanzania	TNZN0001	TNZN0002	MTNZ0001
191	Thailand	THLN0001	THLN0002	MTHL0001
192	Turks and Caicos Islands	TCAC0001	TCAC0002	MTCI0001
193	Togo	TOGO0001	TOGO0002	MTG00001
194	Tonga Islands	TNGA0001	TNGA0002	MTNG0001
195	Trinidad and Tobago	TRND0001	TRND0002	MTRT0001
196	Turkmenistan	TRKM0001	TRKM0002	MTRK0001
197	Tunisia	TNSA0001	TNSA0002	MTNS0001
198	Turkey	TRKY0001	TRKY0002	MTKY0001
199	Tuvalu	TVLU0001	TVLU0002	MTVL0001
200	United Arab Emirates	UAEM0001	UAEM0002	MUAE0001
201	Uganda	UGND0001	UGND0002	MUGN0001
202	Ukraine	UKRN0001	UKRN0002	MUKR0001
203	Uruguay	URGY0001	URGY0002	MURG0001
204	Uzbekistan	UZBK0001	UZBK0002	MUZK0001
205	Vanuatu	VNTU0001	VNTU0002	MVNT0001
206	Vatican City	VTCN0001	VTCN0002	MVTC0001
207	Venezuela	VNZL0001	VNZL0002	MVNZ0001
208	Vietnam	VTNM0001	VTNM0002	MVTN0001
209	Wallis and Fortuna Islands	WLSF0001	WLSF0002	MWLF0001
210	Yemen	YMNA0001	YMNA0002	MYMN0001
211	Yugoslavia (Federal Republic)	YGSL0001	YGSL0002	MYGS0001
212	Zaire	ZARE0001	ZARE0002	MZAR0001



Table 1.2.5.9.b Unsolicited SIP Trunk International Off-Net Calling (continued)

	Country	Peak Time Product Identifier	Off-Peak Product Identifier	IMTC Product Identifier
213	Zambia	ZMBA0001	ZMBA0002	MZBA0001
214	Zimbabwe	ZMBW0001	ZMBW0002	MZBW0001

# 1.2.6 SERVICE RESTORATION

# 1.2.6.1 TELECOMMUNICATIONS SERVICE PRIORITY (TSP) PROGRAM

The Contractor shall comply with the Telecommunications Service Priority (TSP) Program, a Federal Communications Commission (FCC) mandate for prioritizing Service Requests by identifying those services critical to National Security and Emergency Preparedness (NS/EP) and be in compliance with all CPUC and FCC Requirements.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.6.2 NETWORK DISASTER/OPERATIONAL RECOVERY

Public safety agencies, major data centers, agencies with supporting roles during disaster or emergency operations, and agencies with significant roles in post-disaster recovery have mission-critical needs to maintain network availability during disasters or emergencies.

It is essential that service be restored as soon as possible, and the services most critical to State operations remain operational during efforts to achieve full service recovery.

The Contractor shall implement processes that will assure the continuity of services for critical operations, producing the greatest benefit from remaining limited resources and achieving a systematic and orderly resumption of all contracted services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

# 1.2.7 DATA NETWORK MONITORING APPLICATION (DNMA)

The Contractor shall provide a web based Data Network Monitoring Application (DNMA) to provide near real-time and historical network performance and fault detection information to Customers. The DNMA shall identify the availability and performance of contracted MPLS services. Only CALNET 3 services will appear in the DNMA. The Contractor's DNMA shall provide the following features:

- 1. Dynamic GUI views that show the relationship between devices providing data network services;
- 2. Alarm indicators for adversely effected network components;
- 3. Immediate real-time network availability, throughput, congestion, utilization, and error statistics through inquiry responses;



- 4. Historical network availability, throughput, congestion, error statistics shall be available for a rolling six (6) month period;
- 5. Notification or indicators when components are in an administrative/ maintenance status;
- 6. Real-time event log showing network activity;
- 7. Views shall be partitioned by Customer and Customers will have access only to their department's network components and information. The level of access shall be determined by the Customer department management or Customer administrators;
- 8. The Contractor shall provide CALNET 3 CMO with an authorization level that provides access to all CALNET Customer network components and information. The Contractor shall provide single sign-on access to view any Customer network;
- 9. This tool shall provide the capability to run customized reports for the six (6) months of stored data;
- 10. The statistical information shall be in a data extractable format; and,
- 11. Contractor shall provide standard and customized reports as determined by CALNET 3 CMO.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

## 1.2.8 OTHER SERVICES

#### 1.2.8.1 HOURLY RATES FOR SERVICES

The hourly classifications of hours worked for services described in this section will be as follows:

- Regular Hours Hours worked between 8:00AM and 4:59PM, Monday through Friday.
- 2. Overtime Hours Hours worked between 5:00PM and 7:59AM, Monday through Friday and all day Saturday.
- 3. Sunday and Holiday Hours Any hours worked on Sunday or State of California holidays.

## 1.2.8.2 EXTENDED DEMARCATION WIRING SERVICES

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB for all Customer occupied buildings where services under this Contract are being offered. Extended Demarc wiring includes wiring and cable related activities required to extend the service demarcation point to the Customer defined termination location or cross-connect point from the Contractor's Minimum Point of Entry (MPOE).

Extended Demarc wiring shall include all necessary hardware including wire and/or cable, connectors, jumpers, patch panels, minor materials and jacks. Extended Demarc wiring shall also include all necessary labor required to complete the provisioning of service including installation, testing, trouble shooting, labeling and documentation.

Extended Demarc wiring is limited to the following:



- 1. Installation of cabling for extending services from the MPOE location to the Customer's point of utilization;
- 2. Installation of cross-connects or rearrangement of existing jumpers;
- 3. Identification and testing of existing cabling beyond the MPOE to the Customer's equipment location; or,
- 4. Testing, trouble shooting, labeling and completing documentation.

The Contractor shall provide installations in accordance with the timeframes identified for the services that this cabling will support, and shall be subject to the SLAs detailed in Section 1.2.9.8.11 (Provisioning SLAs) associated with that service.

The Contractor shall not be required to complete Extended Demarc wiring from the MPOE to the extended Demarc location if:

- The wire/cable pathway is blocked and cannot be cleared in less than 20 minutes or if the Contractor would cause damage to the Customer site or existing cabling in clearing the pathway;
- 2. The wire/cable pathway is in an asbestos environment or other environment hazardous to the Contractor's personnel, or where such work would be hazardous to the public or to the Customer's staff; or,
- 3. Written release of the responsibility to provide the Extended Demarc is provided by either the Customer or by CALNET 3 CMO.

Bidder shall provide a price in the Subcategory Cost Worksheets for all labor and materials required for Extended Demarc wiring necessary to complete the provisioning of one (1) Demarc extension as described above. Bidder shall provide one (1) price for each media identified.

The Contractor shall install wiring according to industry standards and cabling recommendations published in the State Telecommunications Management Manual (STMM), Facilities Management Chapter, Uniform Building Cabling/Wiring current at the time of this IFB and as periodically updated by CALNET 3 CMO. Additionally, the Contractor shall install and maintain all wiring in accordance with all applicable EIA/TIA, BICSI, and ITU-T recommended standards current at the time of installation or maintenance.

The Contractor shall provide extended Demarcation Services limited to one (1) occurrence or installation for the specific telecommunications service the cabling is meant to support and must be ordered in conjunction with the service being provisioned. All other cabling will be the responsibility of the Customer and will be acquired through other procurement vehicles.

Bidder understands the Requirement and shall meet or exceed it? Ye	s <u>X</u> 1	Vo
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The Contractor shall offer the wiring services for extended demarcation detailed in Table 1.2.8.2.a.



Table 1.2.8.2a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bide Meet Excee Y	s or eds?	Bidder's Product Identifier
	Extended Demarcation – Copper four- Pair – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Υ		IEXR0000
1	1 Bidder's Product Description:  Verizon will provide Extended Demarcation Copper Four Pair Wiring as described above that will include all necessary hardware including 300 feet of four-pair cable, connectors, jumpers, patch panels, minor materials and jacks. Extended Demarcation wiring will also include all necessary labor required to complete the provisioning of service including installation, testing, trouble shooting, labeling and documentation. Verizon assumes customer to have a clear pathway for cable installations.				
	Extended Demarcation – Copper four- Pair – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Υ		IEXO0004
2	Bidder's Product Description:  Verizon will provide Extended Demarcation – Copper four-Pair – Overtime Hours as described above that will include all necessary hardware including 300 feet of four-pair cable, connectors, jumpers, patch panels, minor materials and jacks. Extended Demarcation wiring will also include all necessary labor required to complete the provisioning of service including installation, testing, trouble shooting, labeling and documentation. Verizon assumes customer to have a clear pathway for cable installations.				
	Extended Demarcation – Copper four- Pair – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Y		IEXD0004
Bidder's Product Description:  Verizon will provide Extended Demarcation – Copper four-Pair – Sunday a Hours as described above that will include all necessary hardware including 3 four-pair cable, connectors, jumpers, patch panels, minor materials and jacks.  Demarcation wiring will also include all necessary labor required to complete t provisioning of service including installation, testing, trouble shooting, labeling documentation. Verizon assumes customer to have a clear pathway for cable					300 feet of Extended he and



Table 1.2.8.2a Extended Demarcation Wiring Services (continued)

	Feature Name	Feature Description	Bide Meet Excee Y	s or	Bidder's Product Identifier
4	Extended Demarcation – Copper 25 Pair – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		IEXR0025
	Bidder's Product Description:  Verizon will provide Extended Demarcation Copper 25 Pair Wiring services as described above. The station cabling provided to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment is up to 300 feet, will include ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. This includes associated troubleshooting, testing, and labeling. To provide this service, Verizon assumes customer to have a clear pathway for cable installations.				
5	Extended Demarcation – Copper 25 Pair – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		IEXO0025
					from the r trunking jumpers; one ion Frame testing, and



Table 1.2.8.2a Extended Demarcation Wiring Services (continued)

	Feature Name	Feature Description	Bide Meet Excee Y	s or eds?	Bidder's Product Identifier
6	Extended Demarcation – Copper 25 Pair – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		IEXH0025
	Bidder's Product Description:  Verizon will provide Extended Demarcation – Copper 25 Pair – Sunday and Holiday  Hours services as described above. The station cabling provided to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment is up to 300 feet, will include ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. This includes associated troubleshooting, testing, and labeling. To provide this service, Verizon assumes customer to have a clear pathway for cable installations.				
7	Extended Demarcation – Optical Fiber Link – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Y		IEXF0000
	Bidder's Produc	t Description: de an Extended Demarcation Optical Fiber Link	wirina	to exte	end Facilities

Verizon will provide an Extended Demarcation Optical Fiber Link wiring to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one-each service only. Verizon will include one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. This includes associated troubleshooting, testing and labeling. To provide this service, Verizon assumes customer to have a clear pathway.



Table 1.2.8.2a Extended Demarcation Wiring Services (continued)

Feature Name	Feature Description	Bide Meet Excee Y	s or	Bidder's Product Identifier
Extended Demarcation – Optical Fiber Link – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Y		IEFO0000

#### **Bidder's Product Description:**

Verizon will provide an **Extended Demarcation – Optical Fiber Link – Overtime Hours** wiring to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one-each service only. Verizon will include one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. This includes associated troubleshooting, testing and labeling. To provide this service, Verizon assumes customer to have a clear pathway.

Wiring services to extend Facilities from the Customers MPOE to the Customers point of utilization to include wiring installation and testing are available Overtime Hours – Hours worked between 5:00PM and 7:59AM, Monday through Friday and all day Saturday.



Table 1.2.8.2a Extended Demarcation Wiring Services (continued)

Feature Name	Feature Description	Bide Meet Excee Y	s or	Bidder's Product Identifier
Extended Demarcation – Optical Fiber Link – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Υ		IEXT0000

#### **Bidder's Product Description:**

Verizon will provide an Extended Demarcation – Optical Fiber Link – Sunday and Holiday Hours wiring to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one-each service only. Verizon will include one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. This includes associated troubleshooting, testing and labeling. To provide this service, Verizon assumes customer to have a clear pathway. Wiring services to extend Facilities from the Customers MPOE to the Customers point of utilization to include wiring installation and testing are available Sunday and Holiday Hours – Any hours worked on Sunday or State of California holidays.



The Contractor may offer additional unsolicited Extended Demarcation Wiring Services in Table 1.2.8.2.b.

Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder's Product Identifier	
	Pathway Components Services - Inner-duct CMP 300' package furnish and installed.	Extended Demarcation Wiring Services Pathway Components Services - Inner-duct CMP 300' package furnish and installed.	PTHI0000	
1	Bidder's Product Description:  Extended Demarcation Wiring Services Pathway Components Services - Inner-duct Orange Corrugated CMP 300' package furnish and installed. Inner-duct to be used for routing fiber cable in the intra building environment. To provide this service, Verizon assumes customer to have a clear pathway, and that the supporting structure is acceptable for Inner-duct installations. Labor rate is based upon working normal business hours.			
	Pathway Component Service J-Hook and Hangers 300' package furnish and installed.	Extended Demarcation Wiring Services Pathway Components Services - Standard J Hook. Verizon will Furnish and Install Standard J Hooks and Hangers in support of 300' cable package and Installation.	PTJH0000	
2	Bidder's Product Description: Pathway Components Services - Standard J Hook Extended Demarcation Wiring Services will furnish and install Standard J Hooks and hangers in support of 300' cable package and Installation. Labor rate is based upon working normal business hours.			
	Pathway Components Services - 4" Core	Extended Demarcation Wiring Services Pathway Components Services - 4" Core Verizon will provide labor and material to install a 4" Core, sleeve and firestop accordingly.	PTHC0004	
3	Bidder's Product Description: Pathway Components Services - 4" Core Extended Demarcation Wiring Services Labor and material to provide up to a 4" Core, sleeved and Firestopped accordingly, through Gypsum wall. Labor rate is based upon working normal business hours.			



Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services (continued)

Table	1.2.6.2.b Onsolicited Extended Demarcation Winnig Services (Continued)				
	Feature Name	Feature Description	Bidder's Product Identifier		
	Pathway Components Services - 2" Core	Extended Demarcation Wiring Services Pathway Components Services - 2" Core Verizon will provide labor and material to install a 2" Core, sleeve and firestop accordingly.	PTHC0002		
4					
	Pathway Components Services - 1" Core	Extended Demarcation Wiring Services Pathway Components Services - 1" Core Verizon will provide labor and material to install a 1" Core, sleeve and firestop accordingly.	PTHC0001		
5					
6	Pathway Components Services – Standard 1" Electrical Metallic Tubing (EMT) 10' package.	Extended Demarcation Wiring Services Pathway Components Services – Standard 1" Electrical Metallic Tubing (EMT – conduit) Intra Building EMT Furnish and Install 10' package.	PTHS0001		
	Bidder's Product Description:  Extended Demarcation Wiring Services Pathway Components Services – Standard 1" EMT (conduit) Intra Building Furnish and Install EMT in support of Station Wiring Services Copper Fiber. Labor rate is based upon working normal business hours.				
	Pathway Components Services – Standard 2" Electrical Metallic Tubing (EMT) 10' package.	Extended Demarcation Wiring Services Pathway Components Services – Standard 2" Electrical Metallic Tubing (EMT – conduit) Intra Building EMT Furnish and Install 10' package.	PTHS0002		
7	(conduit) Intra Building F	ription: Wiring Services Pathway Components Services – S Furnish and Install EMT in support of Station Wiring ed upon working normal business hours.			
7	Pathway Components Services – Standard 2" Electrical Metallic Tubing (EMT) 10' package.  Bidder's Product Desc Extended Demarcation (conduit) Intra Building F	Extended Demarcation Wiring Services Pathway Components Services – Standard 2" Electrical Metallic Tubing (EMT – conduit) Intra Building EMT Furnish and Install 10' package.   ription: Wiring Services Pathway Components Services – Services and Install EMT in support of Station Wiring	Standard 2" EMT		



Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services (continued)

	Feature Name	Feature Description	Bidder's Product Identifier
8	Pathway Components Services – National Electrical Manufacturers Association (NEMA) 1 Pull Box 12"X12"X6"	Extended Demarcation Wiring Services Pathway Components Services – National Electrical Manufacturers Association (NEMA) 1 Pull Box 12"X12"X6" Furnish and Install.	PCSN0001
		Niring Services Pathway Components Services – F Il box in support of Station Wiring Services Copper	
9	Pathway Components Services – National Electrical Manufacturers Association (NEMA) 3 Pull Box 12"X12"X8".	Extended Demarcation Wiring Services Pathway Components Services – National Electrical Manufacturers Association (NEMA) 3 Pull Box 12"X12"X8" Furnish and Install.	PCSN0003
		Wiring Services Pathway Components Services –Fill box in support of Station Wiring Services Copper	
	Pathway Components Services – National Electrical Manufacturers Association (NEMA) 1 Pull Box 8"X8"X6".	Extended Demarcation Wiring Services Pathway Components Services – National Electrical Manufacturers Association (NEMA) 1 Pull Box 8"X8"X6" Furnish and Install.	PCNE0001
10		Wiring Services Pathway Components Services –Flox in support of Station Wiring Services Copper or	



Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
11	Pathway Components Services – National Electrical Manufacturers Association (NEMA) 3 Pull Box 8"X8"X6".	Extended Demarcation Wiring Services Pathway Components Services – National Electrical Manufacturers Association (NEMA) 3 Pull Box 8"X8"X6" Furnish and Install.	PCNE0003	
		Wiring Services Pathway Components Services –Frox in support of Station Wiring Services Copper or		
12	Pathway Components Services - Surface Raceway 1" Top and Base with End Caps Non-Metallic 10' package.	Extended Demarcation Wiring Services Pathway Components Services - Surface Raceway 1" Top and Base with End Caps Non- Metallic 10' package.	PCSR0001	
	Bidder's Product Description:  Extended Demarcation Wiring Services Pathway Components Services – Surface Raceway Surface Raceway 1" Top and Base with End Caps Non-Metallic 10' package. Labor rate is based upon working normal business hours.			
13	Pathway Components Services - Surface Raceway 2" Top and Base with End Caps Non-Metallic 10' package.	Extended Demarcation Wiring Services Pathway Components Services - Surface Raceway 2" Top and Base with End Caps Non- Metallic 10' package.	PCSR0002	
	Bidder's Product Description:  Extended Demarcation Wiring Services Pathway Components Services – Surface Raceway Surface Raceway 2" Top and Base with End Caps Non-Metallic 10' package. Labor rate is based upon working normal business hours.			
14	MDF/IDF Components Services – Cable Ladder Rack 12" and Installation (10' package).	Extended Demarcation Wiring Services MDF/IDF Components Services – Cable Ladder Rack 12" and Installation (10' package) includes associated mounting hardware.	MIDE0001	
	Ladder Rack 12" and Ins	ription: Wiring Services MDF/IDF Components Services – Istallation (10' package) includes associated mountiiing normal business hours.		



Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services (continued)

	: 1.2.6.2.b Onsolicited Extended Demarcation Willing Services (Continued)				
	Feature Name	Feature Description	Bidder's Product Identifier		
15	MDF/IDF Components Services – Standard 2 Post Equipment Rack 7', 19" Rack Mountable and Installation.	Extended Demarcation Wiring Services MDF/IDF Components Services – Standard 2 Post Equipment Rack 7', 19" Rack Mountable and Installation. Includes associated mounting hardware.	MIDE0002		
	Equipment Rack 7, 19" I	ription: Wiring Services MDF/IDF Components Services – S Rack mountable and Installation. Includes associate based upon working normal business hours.	Standard 2 Post ed mounting		
16	MDF/IDF Components Services - Wire Management 6"X7" Horizontal and Installation.	Extended Demarcation Wiring Services MDF/IDF Components Services - Wire Management 6"X7" Horizontal and Installation for horizontal hardware.	MIDE0003		
	Bidder's Product Description:  Extended Demarcation Wiring Services MDF/IDF Components Services - Wire Management 6"X7" Horizontal and Installation. Labor rate is based upon working normal business hours.				
17	MDF/IDF Components Services - Wire Management Vertical and Installation.	Extended Demarcation Wiring Services MDF/IDF Components Services - Wire Management Vertical and Installation for vertical hardware.	MIDE0004		
	Bidder's Product Description:  Extended Demarcation Wiring Services MDF/IDF Components Services - Wire Management Vertical and Installation. Labor rate is based upon working normal business hours.				
	MDF/IDF Components Services - Fire Rated Back Board and Installation, minimum 8'X8'.	Extended Demarcation Wiring Services MDF/IDF Components Services - Fire Rated Back Board -Minimum size 8'X8' FRACX and Installation.	MIDE0005		
18		ription: Wiring Services MDF/IDF Components Services - F (8' FRACX and Installation. Labor rate is based upo			



Table 1.2.8.2.b Unsolicited Extended Demarcation Wiring Services (continued)

	Feature Name	Feature Description	Bidder's Product Identifier	
19	MDF/IDF Components Services - Cabinet and Installation of a Generic 36" high.	Extended Demarcation Wiring Services MDF/IDF Components Services - Cabinet and Installation of a Generic 36" high.	MIDE0006	
	Bidder's Product Description:  Extended Demarcation Wiring Services MDF/IDF Components Services - Ca Installation of a Generic 36" high. Labor rate is based upon working normal b			
	MDF/IDF Components Services Grounding and Bonding – Installation of Telecommunications Main Ground Busbar (TMGB)	Extended Demarcation Wiring Services MDF/IDF Components Services Grounding and Bonding – Installation of Telecommunications Main Ground Busbar (TMGB).	MIDE0007	
20	Bidder's Product Description:  Extended Demarcation Wiring Services MDF/IDF Components Services - MDF/IDF  Components Services Grounding and Bonding – Installation of Telecommunications Main  Ground Busbar (TMGB). Installation of the TMGB from an approved building ground includes up to 75' of ground wire, ground busbar, busbar mounting hardware, and (2) connectors.  Verizon assumes that appropriate, approved building ground is available within 75' of the installation location with free and clear access. Labor rate is based upon working normal business hours.			

#### 1.2.8.3 SERVICES RELATED HOURLY SUPPORT

The Contractor shall provide labor for the diagnosis and/or repair of services listed in this Contract and all costs for repair are the responsibility of the service provider unless it is specifically determined that the cause of service failure is outside the scope of the Contractor's responsibilities. Work performed under this Section 1.2.8.3 is authorized only for situations where the Contractor has dispatched personnel to diagnose a service problem that is discovered to be caused by factors outside the responsibility of the Contractor or no trouble is found.

In Subcategory Cost Worksheet 1.2.8.3, the Contractor shall provide a fixed hourly rate schedule for the labor classifications required to diagnose and/or repair the contracted services. The rates identified shall only be used for the diagnosis and/or repair of contracted services and no materials shall be included in the rates. The total amount of labor hours permitted to be performed is ten (10) hours per dispatch/occurrence.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

The Contractor shall offer Services Related Hourly Support as detailed in Table 1.2.8.3.



Table 1.2.8.3 Services Related Hourly Support

	Labor Classification Name	Classification Description	Mee	der ts or eds? N	Bidder's Product Identifier	
1	Field Service Repair Technician Regular Hours	Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Υ		FTRH0000	
	Bidder's Product Desc	ription:				
	dispatched to diagnose	eld technician properly trained to an exper and/or repair a CALNET 3 service problem onsibility of the Contractor.				
2	Field Service Repair TechnicianOvertime Hours				FTOT0000	
	Bidder's Product Description:					
	Verizon will provide a Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.					
3	Field Service Repair Technician Sunday and Holiday Hours  Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.		Y		FTSH0000	
	Bidder's Product Desc	ription:	1	1		
	Verizon will provide a Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.					

## 1.2.8.4 Intentionally Deleted



## 1.2.9 SERVICE LEVEL AGREEMENTS (SLA)

The Contractor shall provide Service Level Agreements (SLAs) as defined below. The intent of this section is to provide Customers, CALNET 3 CMO and the Contractor with requirements that define and assist in the management of the SLAs. This section includes the SLA formats, general requirements, stop clock conditions, and the Technical SLAs for the services identified in this Category solicitation.

#### 1.2.9.1 SERVICE LEVEL AGREEMENT FORMAT

The Contractor shall adhere to the following format and include the content as described below for each Technical SLA added by the Contractor throughout the Term of the Contract:

- 1. SLA Name Each SLA Name must be unique;
- 2. Definition Describes what performance metric will be measured;
- 3. Measurements Process Provides instructions how the Contractor will continuously monitor and measure SLA performance to ensure compliance. The Contractor shall provide details describing how and what will be measured. Details should include source of data and define the points of measurement within the system, application, or network;
- 4. Service(s) All applicable services will be listed in each SLA;
- 5. Objective(s) Defines the SLA performance goal/parameters; and,
- 6. Rights and Remedies
  - a. Per Occurrence: Rights and remedies are paid on a per event basis during the bill cycle; and,
  - b. Monthly Aggregated Measurements: Rights and remedies are paid once during the bill cycle based on an aggregate of events over a defined period of time.

The Contractor shall proactively apply a credit or refund when a SLA objective is not met. CALNET SLA Rights and Remedies do not require the Customer to submit a request for credit or refund.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

#### 1.2.9.2 TECHNICAL REQUIREMENTS VERSUS SLA OBJECTIVES

Sections 1.2.2 through 1.2.7 define the technical requirements for each service. These requirements are the minimum parameters each Bidder must meet in order to qualify for Contract award. Upon Contract award the committed technical requirements will be maintained throughout the remainder of the Contract.

Committed SLA objectives are minimum parameters which the Contractor shall be held accountable for all rights and remedies throughout Contract Term.



#### 1.2.9.3 TWO METHODS OF OUTAGE REPORTING: CUSTOMER OR CONTRACTOR

There are two (2) methods in which CALNET 3 service failures or quality of service issues may be reported and Contractor trouble tickets opened: Customer reported or Contractor reported.

The first method of outage reporting results from a Customer reporting service trouble to the Contractor's Customer Service Center via phone call or opening of a trouble ticket using the online Trouble Ticket Reporting Tool (IFB-A Business Requirements Section A.9.4., Trouble Ticket Reporting Tool (TTRT)).

The second method of outage reporting occurs when the Contractor opens a trouble ticket as a result of network/system alarm or other method of service failure identification. In each instance the Contractor shall open a trouble ticket using the Trouble Ticket Reporting Tool (IFB-A Business Requirements Section A.9.4, Trouble Ticket Reporting Tool (TTRT) and monitor and report to Customer until service is restored.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_

#### 1.2.9.4 BIDDER RESPONSE TO SERVICE LEVEL AGREEMENTS

Many of the Service Level Agreements described below include multiple objective levels - Basic, Standard and Premier. Bidders shall indicate one (1) specific objective level they are committing to for each service in space provided in the "Objective" section of each SLA description.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_

#### 1.2.9.5 CONTRACTOR SLA MANAGEMENT PLAN

Within 90 calendar days of Contract award, the Contractor shall provide CALNET 3 CMO with one (1) SLA Management Plan that describes how the Contractor will monitor and manage the Technical SLAs for services in this IFB. The SLA Management plan shall provide processes and procedures to be implemented by the Contractor. The SLA Management Plan shall define the following:

- 1. Contractor SLA Manager and supporting staff responsibilities;
- Contractor process for measuring objectives for each SLA. The process shall explain how 2. the Contractor will continuously monitor and measure SLA performance to ensure compliance. The Contractor shall provide details describing how and what will be measured. Details should include source of data and define the points of measurement within the system, application, or network. Process may differ per service type;
- Creation and delivery of SLA Reports (IFB-A Business Requirements SectionA.9.5). The 3. Contractor shall include a sample report in accordance with the SLA Reports (IFB-A Business Requirements Section A.9.5) for the following: SLA Service Performance Report (IFB-A Business Requirements Section A.9.5.1), SLA Provisioning Report (IFB-A Business Requirements Section A.9.5.2), and SLA Catastrophic Outage Reports (IFB-A Business Requirements Section A.9.5.3). The Contractor shall commit to a monthly due date that reports shall be provided to the CALNET 3 CMO via the Private Oversight Website (IFB-A Business Requirements Section A.9.2);
- 4. SLA invoicing credit and refund process;



- 5. Contractor SLA problem resolution process for Customer SLA and SLA reporting issues. The Contractor shall provide a separate process for Customers and CALNET 3 CMO; and,
- 6. Contractor SLA Manager to manage all SLA compliance and reporting. The Contractor shall include the SLA Manager contact information for SLA inquiries and issues resolution for Customer and CALNET 3 CMO.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

#### 1.2.9.6 TECHNICAL SLA GENERAL REQUIREMENTS

The Contractor shall adhere to the following general requirements which apply to all CALNET 3 Technical SLAs (Section 1.2.9.8):

- 1. With the exception of Provisioning SLA (Section 1.2.9.8.11), the total SLA rights and remedies for any given month shall not exceed the sum of 100 percent of the Total Monthly Recurring Charges (TMRC);
- 2. If a circuit or service fails to meet one (1) or more of the performance objectives, only the SLA with the largest monthly Rights and Remedies will be credited to the Customer, per event;
- 3. The Contractor shall apply CALNET 3 SLAs and remedies for services provided by Affiliates and/or Subcontractors under this Contract;
- 4. The Definition, Measurement Process, Objectives, and Rights and Remedies shall apply to all services identified in each SLA. If a Category or Subcategory is listed in the SLA, then all services under that Category or Subcategory are covered under the SLA. Exceptions must be otherwise stated in the SLA;
- 5. TMRC rights and remedies shall include the service, option(s), and feature(s) charges.
- 6. The Contractor shall proactively and continuously monitor and measure all SLA objectives;
- 7. The Contractor shall proactively credit all rights and remedies to the Customer within 60 calendar days of the trouble resolution date on the trouble ticket or within 60 calendar days of the Due Date on the Service Request form for the Provisioning SLA (Section 1.2.9.8.11);
- 8. To the extent that Contractor offers additional SLAs, or SLAs with more advantageous rights and/or remedies for same or similar services offered through tariffs, online service guides, or other similarly situated government contracts (Federal, State, County, City), the State will be entitled to the same rights and/or remedies therein. The Contractor shall present SLAs to CALNET 3 CMO for possible inclusion via amendments;
- 9. The Contractor shall apply CALNET 3 SLAs and remedies to services provided in geographic areas which the Contractor is required to provide service;
- 10. The election by CALNET 3 CMO of any SLA remedy covered by this Contract shall not exclude or limit CALNET 3 CMO's or any Customer's rights and remedies otherwise available within the Contract or at law or equity;



- 11. The Contractor shall apply rights and remedies when a service fails to meet the SLA objective even when backup or protected services provide Customer with continuation of services:
- 12. The Contractor shall act as the single point of contact in coordinating all entities to meet the State's needs for provisioning, maintenance, restoration and resolution of service issues or that of their Affiliates, Subcontractors or resellers under this Contract;
- 13. The Customer Escalation Process (IFB-A Business Requirements Section A.3.4.2) and/or the CALNET 3 CMO Escalation Process (IFB-A Business Requirements Section A.3.4.1) shall be considered an additional right and remedy if the Contractor fails to resolve service issues within the SLA objective(s);
- 14. Trouble reporting and restoration shall be provided 24x365 for CALNET 3 services;
- 15. SLAs apply 24x365 unless SLA specifies an exception;
- 16. Contractor invoices shall clearly cross reference the SLA credit to the service Circuit ID in accordance with IFB-A Business Requirements Section A.5.1 (Billing and Invoicing Requirements, #14);
- 17. The Contractor shall provide a CALNET 3 SLA Manager responsible for CALNET 3 SLA compliance. The SLA Manager shall attend regular meetings and be available upon request to address CALNET 3 CMO SLA oversight, report issues, and problem resolution concerns. The CALNET 3 SLA Manager shall also coordinate SLA support for Customer SLA inquiries and issue resolution;
- 18. The Contractor shall provide Customer and CALNET 3 CMO support for SLA inquiries and issue resolution; and,
- 19. Any SLAs and remedies negotiated between Contractor and third party service provider in territories closed to competition shall be passed through to the CALNET 3 Customer.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.9.7 TROUBLE TICKET STOP CLOCK CONDITIONS

The following conditions shall be allowed to stop the trouble ticket outage duration for CALNET 3 Contractor trouble tickets. The Contractor shall document the trouble ticket outage duration using the Stop Clock Condition (SCC) listed in Table 1.2.9.7 and include start and stop time stamps in the Contractor's Trouble Ticket Reporting Tool (IFB-A Business Requirements Section A.9.4) for each application of a SCC. The Contractor shall not consider "cleared while testing" or "no trouble found" as a SCC unless cause is ultimately determined to have been the fault of a third party outside the control of the Contractor.

Note: The Glossary (SOW Appendix A) defines term "End-User" as the "individual within an Entity that is utilizing the feature or service provided under the Contract."

Stop Clock Conditions are limited to the conditions listed in Table 1.2.9.7.



Table 1.2.9.7 – Stop Clock Conditions (SCC)

	<b>a. a.</b> .	
#	Stop Clock Condition (SCC)	SCC Definition
1	END-USER REQUEST	Periods when a restoration or testing effort is delayed at the specific request of the End-User. The SCC shall exist during the period the Contractor was delayed, provided that the End-User's request is documented and time stamped in the Contractor's trouble ticket or order system and shows efforts are made to contact the End-User during the applicable Stop Clock period.
2	OBSERVATION	Time after a service has been restored but End-User request ticket is kept open for observation. If the service is later determined by the End-User to not have been restored, the Stop Clock shall continue until the time the End-User notifies the Contractor that the Service has not been restored.
3	END-USER NOT AVAILABLE	Time after a service has been restored but End-User is not available to verify that the Service is working. If the service is later determined by the End-User to not have been restored, the Stop Clock shall apply only for the time period between Contractor's reasonable attempt to notify the End-User that Contractor believes the service has been restored and the time the End-User notifies the Contractor that the Service has not been restored.
4	WIRING	Restoration cannot be achieved because the problem has been isolated to wiring that is not maintained by Contractor or any of its Subcontractors or Affiliates. If it is later determined the wiring is not the cause of failure, the SCC shall not apply.
5	POWER	Trouble caused by a power problem outside of the responsibility of the Contractor. Power is a stop clock condition for a Customer owned LAN switch and router, but not a stop clock condition for a Contractor owned router when used for Converged VoIP.
6	FACILITIES	Lack of building entrance Facilities or conduit structure that are the End-User's responsibility to provide.
7	ACCESS	<ul> <li>Limited access or contact with End-User provided the Contractor documents in the trouble ticket several efforts to contact End-User for the following: <ul> <li>a. Access necessary to correct the problem is not available because access has not been arranged by site contact or End-User representative;</li> <li>b. Site contact refuses access to technician who displays proper identification;</li> <li>c. Customer provides incorrect site contact information which prevents access, provided that Contractor takes reasonable steps to notify End-User of the improper contact information and takes reasonable steps to obtain the correct information; and,</li> <li>d. Site has limited hours of business that directly impacts the Contractor's ability to resolve the problem.</li> <li>If it is determined later that the cause of the problem was not at the site in question, then the Access SCC shall not apply.</li> </ul> </li> </ul>

Table 1.2.9.7 – Stop Clock Conditions (SCC) (continued)

#	Stop Clock Condition (SCC)	SCC Definition			
7	ACCESS	Limited access or contact with End-User provided the Contractor documents in the trouble ticket several efforts to contact End-User for the following:  e. Access necessary to correct the problem is not available because access has not been arranged by site contact or End-User representative;  f. Site contact refuses access to technician who displays proper identification;  g. Customer provides incorrect site contact information which prevents access, provided that Contractor takes reasonable steps to notify End-User of the improper contact information and takes reasonable steps to obtain the correct information; and,  h. Site has limited hours of business that directly impacts the Contractor's ability to resolve the problem.  If it is determined later that the cause of the problem was not at the site in question, then the Access SCC shall not apply.			
8	STAFF	Any problem or delay to the extent caused by End-User's staff that prevents or delays Contractor's resolution of the problem. In such event, Contractor shall make a timely request to End-User staff to correct the problem or delay and document in trouble ticket.			
9	APPLICATION	End-User software applications that interfere with repair of the trouble.			
10	СРЕ	Repair/replacement of CPE not provided by Contractor if the problem has been isolated to the CPE. If determined later that the CPE was not the cause of the service outage, the CPE SCC will not apply.			
11	NO RESPONSE	Failure of the trouble ticket originator or responsible End-User to return a call from Contractor's technician for on-line close-out of trouble tickets after the Service has been restored as long as Contractor can provide documentation in the trouble ticket substantiating the communication from Contractor's technician.			
12	MAINTENANCE	An outage directly related to any properly performed scheduled maintenance or upgrade scheduled for CALNET 3 service. Any such stop clock condition shall not extend beyond the scheduled period of the maintenance or upgrade. SLAs shall apply for any maintenance caused outage beyond the scheduled maintenance period. Outages occurring during a scheduled maintenance or upgrade period and not caused by the scheduled maintenance shall not be subject to the Maintenance SCC.			



Table 1.2.9.7 – Stop Clock Conditions (SCC) (continued)

#	Stop Clock Condition (SCC)	SCC Definition
13	THIRD PARTY	Any problem or delay caused by a third party not under the control of Contractor, not preventable by Contractor, including, at a minimum, cable cuts not caused by the Contractor. Contractor's Affiliates and Subcontractors shall be deemed to be under the control of Contractor with respect to the equipment, services, or Facilities to be provided under this Contract.
14	FORCE MAJEURE	Force Majeure events, as defined in the terms and conditions of the PMAC General Provisions - Telecommunications, Section 28 (Force Majeure).



#### 1.2.9.8 TECHNICAL SERVICE LEVEL AGREEMENTS

The Contractor shall provide and manage the following Technical SLAs.

#### 1.2.9.8.1 Availability (M-S)

**SLA Name:** Availability

**Definition:** The percentage of time a CALNET service is fully functional and available for use each calendar month.

**Measurement Process:** The monthly Availability Percentage shall be based on the accumulative total of all Unavailable Time derived from all trouble tickets closed, for the affected Circuit ID (as defined in the Data Dictionary), per calendar month. The monthly Availability Percentage equals the Scheduled Uptime per month less Unavailable Time per month divided by Scheduled Uptime per month multiplied by 100. Scheduled Uptime is 24 x number of days in the month. All Unavailable Time applied to other SLAs, which results in a remedy, will be excluded from the monthly accumulated total.

For VSAT service only:

- The measurement of Availability is between the VSAT Router at customer premise and the router at Verizon Teleport
- VSAT services using .<1.2 Meter Antenna are excluded from this SLA</li>
- The Availability measurement will begin 24 hours after the opening of a trouble ticket for Portable Quick/Auto Deploy and VSAT Fixed Router/Modem that are located outside 150 driving miles from the service cities (Anaheim, Costa Mesa, Fallbrook, Folsom, Lakewood, Lodi, Long Beach, Modesto, Ontario, Redding, Riverside, Rocklin, Sacramento, Santa Ynez, Stockton, Suisun City, Torrance)

## Objective(s) A applies to the following Services:

- Converged VoIP Service (1.2.3.2)
- Converged VoIP Voice Mail Service (1.2.3.5)
- Audio Conferencing (1.2.4)
- SIP Trunk
- Secure Gateway
- Managed Application Assurance (MAAS)
- Managed WAN (MWAN)
- Managed LAN (MLAN)
- Managed Video
   Conferencing

### Objective(s) A:

Objective(s) A	<u>-                                      </u>			
	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
Converged VoIP Service	≥ 98.7%	≥ 99.2%	≥ 99.5%	Р
Converged VoIP Voice Mail Service	≥ 98.9%	≥ 99.2%	≥ 99.5%	Р
SIP Trunk	≥ 98.9%	≥ 99.2%	≥ 99.5%	Р
Secure Gateway			≥ 99.5%	Р
MAAS			≥ 99.5%	Р
MWAN			≥ 99.5%	Р
MLAN			≥ 99.5%	Р
Managed Video Conferencing			≥ 99.5%	Р



### 1.2.9.8.1 Availability (M-S) (continued)

## Objective(s) B applies to the following Service(s):

- MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)
- VSAT

#### Objective(s) B:

The objectives will be based on the transport type. The speeds appear in ranges.

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
DS1	≥ 99.2%	≥ 99.5%	≥ 99.8%	Р
DS3	≥ 99.7%	≥ 99.8%	≥ 99.9%	Р
OCx	≥ 99.7%	≥ 99.8%	≥ 99.9%	Р
Ethernet	≥ 99.2%	≥ 99.5%	≥ 99.8%	Р

VSAT	99.7%
VSAT	99.7%

Per Occurrence: N/A

#### **Monthly Aggregated Measurements:**

First month the service fails to meet the committed SLA objective shall result in a 15 percent rebate of the TMRC and two (2) Business Days of the ADUC, when usage applies.

## Rights and Remedies

The second consecutive month the service fails to meet the committed SLA objective shall result in a 30 percent rebate of TMRC and two (2) Business Days of the ADUC, when usage applies.

Each additional consecutive month the service fails to meet the Committed SLA objective shall result in a 50 percent rebate of the TMRC, and two (2) Business Days of the ADUC, when usage applies.



### 1.2.9.8.2 Catastrophic Outage 1 (CAT 1) (M-S)

**SLA Name:** Catastrophic Outage 1 (CAT 1)

**Definition:** The total loss of service at a single address based on a common cause resulting in one (1) or more of the following:

- Failure of two (2) or more service types, or
- Failure of ten (10) access circuits, or
- Failure of 50 or more End-User VoIP service package or VoIP voice mail service (seat)
- Failure of a single MPLS port or access circuit with a transport speed greater than or equal to 200 Mbps

**Measurement Process:** The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by a Customer, or the Contractor, whichever occurs first. The Contractor open a trouble ticket for each service (Circuit ID) affected by the common cause. Each End-User service is deemed out of service from the first notification until the Contractor determines End-User the service (Circuit ID) is restored, minus SCC. Any service reported by Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):	
Converged VoIP Service (1.2.3.2)	
VoIP Voice Mail Service (1.2.3.5)	MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)
Secure Gateway	Managed Application Assurance (MAAS)
Managed WAN (MWAN)	Managed LAN (MLAN)
Managed Video Conferencing	



## 1.2.9.8.2 Catastrophic Outage 1 (CAT 1) (M-S) (continued)

Objective (s): The objective restoral time shall be:						
·	Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)	
	MPLS	≤ 3 hours	≤2 hours	≤1 hour	Р	
	Secure Gateway			≤1 hour	Р	
	MAAS			≤1 hour	Р	
	MWAN			≤1 hour	Р	
	MLAN			≤1 hour	Р	
	Managed Video Conferencing			≤1 hour	Р	
	VoIP Voice Mail	≤ 3 hours	≤2 hours	≤1 hour	Р	
	Converged VoIP Service	≤ 8 hours	≤2 hours	≤1 hour	Р	
Rights and Remedies Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 1 fault						er service not
	Monthly Aggregated Measurements: N/A					



#### 1.2.9.8.3 Catastrophic Outage 2 (CAT 2) (M-S)

**SLA Name:** Catastrophic Outage 2 (CAT 2)

#### **Definition:**

Any service affecting failure in the Contractor's (or subcontractor's or Affiliate's) network up to and including the Provider Edge (PE) equipment.

**Measurement Process:** The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or Customer reported trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

#### Service(s):

MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)	
Converged VoIP Service (1.2.3.2)	Audio Conferencing (1.2.4)
VoIP Voice Mail Service (1.2.3.5)	SIP Trunking (1.2.5)
Secure Gateway	Managed Application Assurance (MAAS)
Managed WAN (MWAN)	Managed LAN (MLAN)
Managed Video Conferencing	

### Objective (s):

The objective restoral time shall be:

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MPLS:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
Secure Gateway			≤ 15 minutes	Р
MAAS			≤ 15 minutes	Р
MWAN			≤ 15 minutes	Р
MLAN			≤ 15 minutes	Р
Managed Video Conferencing			≤ 15 minutes	Р
Converged VoIP Service:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
VoIP Voice Mail Service:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
Aud □ o Conferencing:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
SIP Trunking	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р



### 1.2.9.8.3 Catastrophic Outage 2 (CAT 2) (M-S) (continued)

Obi	ective	(s)	):

The objective restoral time shall be:

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MPLS:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
Secure Gateway			≤ 15 minutes	Р
MAAS			≤ 15 minutes	Р
MWAN			≤ 15 minutes	Р
MLAN			≤ 15 minutes	Р
Managed Video Conferencing			≤ 15 minutes	Р
Converged VoIP Service:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
VoIP Voice Mail Service:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
Aud □o Conferencing:	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р
SIP Trunking	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	Р

## Rights and Remedies

**Per Occurrence:** 100 percent of the TMRC and ten (10) Business Days of the ADUC (when applicable) for each End-User service not meeting the committed objective for each CAT 2 fault.

Monthly Aggregated Measurements: N/A



#### 1.2.9.8.3.1 VSAT Catastrophic Outage 2

SLA Name: VSAT Catastrophic Outage 2

**Definition:** Any component failure that results in loss of service to 15 or more sites.

#### **Measurement Process:**

The Outage Duration begins when a network alarm is received by the Contractor from a service impacting event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or Customer reported trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):			
VSAT			
Objectives: The objective restoral time shall be less than12 hours			
Rights and Remedies			
	Monthly Rights and Remedies: N/A		



#### 1.2.9.8.4 Catastrophic Outage 3 (CAT 3) (M-S)

**SLA Name:** Catastrophic Outage 3 (CAT 3)

**Definition:** The total loss of more than one (1) CALNET 3 service type in a central office, or the loss of any service type on a system wide basis

**Measurement Process:** The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall open a trouble ticket and compile a list of each End-User service (Circuit ID) affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network switches or trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines service is restored. Any service reported by End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):		
MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7))		
Converged VoIP Service (1.2.3.2)	Converged VoIP Service (1.2.3.2)	
Audio Conferencing (1.2.4)	Audio Conferencing (1.2.4)	
Secure Gateway	Managed Application Assurance (MAAS)	
Managed WAN (MWAN)	Managed LAN (MLAN)	
Managed Video Conferencing		



## 1.2.9.8.4 Catastrophic Outage 3 (CAT 3) (M-S) (continued)

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitmen t (B or P)
MPLS	≤ 30 minutes	N/A	≤ 15 minutes	Р
Secure Gateway			≤ 15 minutes	Р
MAAS			≤ 15 minutes	Р
MWAN			≤ 15 minutes	Р
MLAN			≤ 15 minutes	Р
Managed Video Conferencing			≤ 15 minutes	Р
Converged VoIP Service	≤ 30 minutes	N/A	≤ 15 minutes	Р
VoIP Voice Mail Service	≤ 30 minutes	N/A	≤ 15 minutes	Р
Audio Conferencing	≤ 30 minutes	N/A	≤ 15 minutes	Р
SIP Trunking	≤ 30 minutes	N/A	≤ 15 minutes	Р

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

Monthly Aggregated Measurements: N/A



## 1.2.9.8.4.1 VSAT Catastrophic Outage 3 (M)

SLA Name: VSAT Catastrophic Outage 3				
<b>Definition:</b> The tota	l loss of any service typ	e on a system wide basis.		
Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall open a trouble ticket and compile a list of each End-User service (Circuit ID) affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded in the trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines service is restored. Any service reported by End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.				
Service(s):				
VSAT				
Objectives: Less than 4 hours				
Rights and Remedies	Immediate Rights and Remedies 100 percent of the TMRC and ten (10) Business Days of the ADUC (when applicable) for each End-User service not meeting the committed occurrence objective for each Cat 3 fault.  Monthly Rights and Remedies: N/A			



#### 1.2.9.8.5 Delay - Round Trip Transmission for MPLS Services (M-S)

**SLA Name:** Delay – Round Trip Transmission for MPLS Services

**Definition:** the average round trip transfer delay measured from the Customer Edge (CE) to the remote CE back to CE (Site A to Site Z to Site A) within the geographic confines of the state of California.

**Measurement Process:** The End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the delay is not meeting the committed level. CALNET 3 CMO shall determine the sample interval, provided that a minimum of 100 pings or more shall constitute test. The Contractor shall provide timely verification, consistent with industry standards. Trouble tickets opened as Delay – Round Trip Transmission for MPLS Services shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

#### Service(s):

MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)

Secure Gateway Managed Video Conferencing

Objective (s): based on a 1,000 byte ping:

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (S or P)
MPLS ≥ 128 Kbps to < 1.536 Mbps	N/A	<400ms	<340ms	Р
MPLS ≥ 1.536 Mbps to < 40 Mbps	N/A	<120ms	<95ms	Р
Secure Gateway ≥ 128 Kbps to < 1.536 Mbps			<340ms	P
Secure Gateway ≥ 1.536 Mbps to < 40 Mbps			<95ms	Р
Secure Gateway ≥ 40 Mbps			<90ms	Р
Managed Video Conferencing ≥ 128 Kbps to < 1.536 Mbps			<340ms	Р
Managed Video Conferencing ≥ 1.536 Mbps to < 40 Mbps			<95ms	Р
Managed Video Conferencing ≥ 40 Mbps			<90ms	Р
MPLS ≥ 40 Mbps	N/A	<110ms	<90ms	Р



## 1.2.9.8.5 Delay - Round Trip Transmission for MPLS Services (M-S) (continued)

	Per Occurrence: N/A
Rights and Remedies	Monthly Aggregated Measurements: 25 percent of TMRC per occurrence for the reported service. The second consecutive month service fails to meet the committed SLA objectives shall result in a 35 percent rebate of TMRC.  Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC.



#### 1.2.9.8.5.1 VSAT Service Network Packet Delivery / Transit Delay (D)

#### SLA Name: VSAT Service Network Packet Delivery / Transit Delay

**Definition:** Network Packet Delivery and Transit Delay are measured from the VSAT hub located at the Verizon Business teleport to the customer's VSAT modem and back to the VSAT hub.

#### **Measurement Process:**

The VSAT latency values are derived from samples collected within the Satellite Network Management System (NMS) every 20 seconds. They are aggregated to a 5 minute resolution for each individual circuit. Then for each VSAT circuit that is in primary or backup active traffic carrying mode (Not in backup / idle mode) within the network during each 5 minute period then the latency is aggregated to represent the overall network performance for that 5 minute period and then the five minute results are then averaged over the month to provide a monthly average.

Service(	

**VSAT** 

#### Objective(s):

_ <u> </u>	/5116		L NI ( I	
Region	Antenna/BUC	Maximum	Network	Network
	Size	Throughput	Transit Delay	Packet
			(round trip)	Delivery
			Milliseconds	(Greater or
			(Less or equal	equal to)
			to)	oqual (0)
	1.0 /0	<b>-</b> 40.10	,	222/
CA	1.2m/3w	<= 512 Kbps	800	99%
	1.8m/3w			
CA	1.2m/4w	<= 1024 Kbps	800	99%
	1.8m/3w	·		
CA	1.2m/8W	<= 2048 Kbps	800	99%
	1.8m/4w			
	2.4m/4w			
CA	1.8m/6w	<= 3 Mbps	800	99%
	2.4m/6w			
CA	1.2m/16w	<= 4 Mbps	800	99%
	1.8m/8w			
	2.4m/8w			

Does not apply for <1.2 Meter Antennas

Per Occurrence: N/A

Rights and Remedies

#### **Monthly Aggregated Measurements:**

For each Month in which VzB fails to meet the Network Packet Delivery or Network Transit Delay SLA, customer us eligible for a credit equal to 1/30<sup>th</sup> of the TMRC for the VSAT service.



#### 1.2.9.8.6 VolP Delay, One-Way Transmission (M-S)

**SLA Name:** VoIP Delay – One-Way Transmission

Definition: Average one-way transfer delay measured from Customer Equipment (CE) to the

remote CE

**Measurement Process:** End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the VoIP delay is not meeting the committed level. The problem requires timely verification, consistent with industry Standards, by the Contractor. Tickets opened as VoIP Delay One-Way Transmission SLA shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

#### Service(s):

Converged VoIP Service (1.2.3.2)

#### Objective (s):

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
Converged VoIP Service	≤ 170 ms	≤ 130 ms	≤ 90 ms	Р

## Rights and Remedies

Monthly Aggregated Measurements:

Per Occurrence: N/A

25 percent of TMRC per occurrence for the reported service.

The second month service fails to meet the committed SLA objectives shall result in a 35 percent rebate of TMRC.

Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC.



#### 1.2.9.8.7 Excessive Outage (M-S)

**SLA Name:** Excessive Outage

**Definition:** A Service failure that remains unresolved for more than the committed objective,.

**Measurement Process:** This SLA is based on the trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time.

Service(s	3)
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MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)	Audio Conferencing (1.2.4)	
Converged VoIP Service (1.2.3.2)	SIP Trunking (1.2.5)	
VoIP Voice Mail Service (1.2.3.5)		
Secure Gateway	Managed Application Assurance (MAAS)	
Managed WAN (MWAN)	Managed LAN (MLAN)	
Managed Video Conferencing	VSAT	

#### Objective (s):

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MPLS	16 hours	12 hours	8 hours	Р
Secure Gateway			8 hours	Р
MAAS			8 hours	Р
MWAN			8 hours	Р
MLAN			8 hours	Р
Managed Video Conferencing			8 hours	Р
Converged VoIP Service	16 hours	12 hours	8 hours	Р
VoIP Voice Mail Service	16 hours	12 hours	8 hours	Р
Audio Conferencing	16 hours	12 hours	8 hours	Р
SIP Trunking	16 hours	12 hours	8 hours	Р
VSAT	48 hours			



## 1.2.9.8.7 Excessive Outage (M-S) (continued)

Rights and Remedies	<b>Per Occurrence:</b> 100 percent of the TMRC and ten (10) Business Days of the ADUC (when applicable) per occurrence for each service (Circuit ID) out of service for a period greater than the committed objective level.				
	Upon request from the Customer or the CALNET 3 CMO, the Contractor shall provide a briefing on the excessive outage restoration.				
	Monthly Aggregated Measurements: N/A				



#### 1.2.9.8.8 Jitter (M-S)

SLA Name: Jitter

Definition: Variations in transfer delay measured from the Customer Edge (CE) to the remote CE

**Measurement Process:** End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Jitter exceeds the committed level. The problem requires timely verification, consistent with industry Standards, by the Contractor. Tickets identified as a jitter issue shall not count in availability or Time-to-Repair measurements unless and until the End-User reports service as unusable for its intended uses. This measurement applies to local loop transport (1) under the control of the Contractor or (2) not under the control of Contractor that do not exceed 70% peak utilization for three (3) consecutive Business Days.

#### Service(s):

Converged VoIP Service (1.2.3.2)

#### Objective (s):

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or S)
Converged VoIP Service	≤ 30ms	≤ 15ms	N/A	S

## Rights and Remedies

**Per Occurrence:** 25 percent of TMRC and two (2) Business Days of the ADUC per occurrence for the reported service.

Second month service fails to meet the committed SLA objectives shall result in a 35 percent rebate of TMRC and two (2) Business Days of ADUC.

Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC and two (2) Business Days of the ADUC.

Monthly Aggregated Measurements: N/A

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.9.8.9 Notification

**SLA Name:** Notification



**Definition:** The Contractor notification to CALNET 3 CMO and designated stakeholders in the event of a CAT 2 or CAT 3 failure, terrorist activity, threat of natural disaster, or actual natural disaster which results in a significant loss of telecommunication services to CALNET 3 End-Users or has the potential to impact services in a general or statewide area. The State understands initial information requiring the nature of the outage may be limited.

**Measurement Process:** The Contractor shall adhere to the Network Outage Response requirements (IFB-A Business Requirements Section A.3.3) and notify the CALNET 3 CMO and designated stakeholders for all CAT 2 and CAT 3 Outages or for network outages resulting in a significant loss of service. Notification objectives will be based on the start time of the outage failure determined by the opening of a trouble ticket or network alarm, whichever occurs first. For events based on information such as terrorist activity or threat of natural disaster, the Contractor shall notify CALNET 3 CMO and designated stakeholder when information is available for dissemination to Customers.

Service(s): All services

**Objective (s):** Within 60 minutes of the above mentioned failures' start time, the Contractor shall notify CALNET 3 CMO and designated stakeholders using a method defined in IFB-A Business Requirements Section A.3.3 (Network Outage Response).

At 60 minute intervals, updates shall be given on the above mentioned failures via the method defined in IFB-A Business Requirements Section A.3.3 (Network Outage Response).

This objective is the same for Basic, Standard and Premium commitments

Rights and Remedies

Per Occurrence: Senior Management Escalation

**Monthly Aggregated Measurements:** N/A

Bidder understands the Requirement and shall meet or exceed it? Yes X No

#### 1.2.9.8.10 Packet Loss (M-S)

**SLA Name:** Packet Loss



**Definition:** A measurement of lost or dropped packet traveling across the Contractor's, Affiliate's or Subcontractor's network. Packet loss is measured from Contractor's handoff to the Customer at each end of the data channel measured port to port.

**Measurement Process:** End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the data loss exceeds the committed level. The problem requires timely verification, consistent with industry standards, by the Contractor. Tickets identified as a packet loss issue shall not count in availability or Time-to-Repair measurements unless and until the End-User reports service as unusable for its intended uses.

This measurement includes the local loop transport under the control of the Contractor and any local loops acquired from a third party by the Contractor.

#### Service(s):

MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)

Secure Gateway

Converged VoIP Service (1.2.3.2) Managed Video Conferencing

#### Objective (s):

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MPLS	≤ .75% packet loss	≤ .5% packet loss	≤ .25% packet loss	Р
Secure Gateway			≤ .25% packet loss	Р
Managed Video Conferencing			≤ .25% packet loss	Р
Converged VoIP Service	≤ .75% packet loss	≤ .5% packet loss	≤ .25% packet loss	Р

# Rights and Remedies

**Per Occurrence:** 25 percent of TMRC per occurrence for the reported service.

Next consecutive month to fail to meet the committed SLA objectives shall result in a 35 percent rebate of TMRC.

Each additional consecutive month to fail to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC.

Monthly Aggregated Measurements: N/A

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

### 1.2.9.8.11 Provisioning (M-S)

**SLA Name:** Provisioning



**Definition:** Provisioning shall include new services, moves, adds and changes, completed by the Contractor on or before the due dates. The Provisioning SLA shall be based on committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor documented on the Contractor's order confirmation notification or Contracted Service Project Work Scope of Work in accordance with Section A.2.5.4 #7 (Provisioning and Implementation). The Contractor shall meet the committed interval dates or due date negotiated with the Customer. If the Customer agrees to a negotiated due date, the negotiated due date supersedes the committed interval. At the Customer's discretion, if the scope of the Service Requests(s) meets the Coordinated or Managed Project criteria, negotiated due dates will be established and documented in the Project Timeline per IFB-

A Business Requirements Section A.6 (Contracted Service Project Work).

Provisioning SLAs have two (2) objectives:

Objective 1: Individual Service Request

Objective 2: Successful Install Monthly Percentage by Service Type

Note: Provisioning timelines include extended demarcation wiring, when appropriate.

#### **Measurement Process:**

<u>Objective 1: Individual Service Request:</u> Install intervals are based on the committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor. This objective requires the Contractor to meet the due date for each individual Service Request.

Objective 2: Successful Install Monthly Percentage per Service Type: The Contractor shall sum all individual Service Requests per service, as listed below, meeting the objective in the measurement period (per month) and divide by the sum of all individual Service Requests due per service in the measurement period and multiply by 100 to equal the percentage of Service Requests installed on time. The Contractor must meet or exceed the objective below in order to avoid the rights and remedies.

Service (Features must be installed in conjunction with the service except when listed below)	Committed Interval Calendar Days	Coordinated/Managed Project
MPLS Port Transport (1.2.2.8.1)	35	Coordinated/Managed Project
MPLS Port and Access Bundle Transport (1.2.2.8.2)	35	Coordinated/Managed Project
MPLS Port, Access and Router Transport (1.2.2.8.3)	45	Coordinated/Managed Project
MPLS Port, Access and Router Bundled On- Net Transport Speeds (1.2.2.8.4)	45	Coordinated/Managed Project
MPLS Port, Access and Router Bundled Off- Net Transport Speeds (1.2.2.8.5)	45	Coordinated/Managed Project
MPLS Port, Access and Router Bundled Ethernet On-Net Transport (1.2.2.8.6)	45	Coordinated/Managed Project



## 1.2.9.8.11 Provisioning (M-S) (continued)

Service (Features must be installed in conjunction with the service except when listed below)	Committed Interval Calendar Days	Coordinated/Managed Project
MPLS Port, Access and Router Bundled Ethernet Off-Net Transport (1.2.2.8.7)	45	Coordinated/Managed Project
Converged VoIP Service (1.2.3.2)	45	Coordinated/Managed Project
VoIP Voice Mail Services (1.2.3.5)	30	Coordinated/Managed Project
Audio Conferencing (1.2.4)	30	Coordinated/Managed Project
SIP Trunking (1.2.5)	35	Coordinated/Managed Project
Secure Gateway	Managed Project	Coordinated/Managed Project
Managed Application Assurance (MAAS)	Managed Project	Coordinated/Managed Project
Managed WAN (MWAN)	45	Coordinated/Managed Project
Managed LAN (MLAN)	45	Coordinated/Managed Project
Managed Video Conferencing	Managed Project	Coordinated/Managed Project
VSAT	Managed Project	Coordinated/Managed Project



### 1.2.9.8.11 Provisioning (M-S) (continued)

#### Objective (s):

Individual Service Requests: Service installed on or before the committed or negotiated due date. Successful Install Monthly Percentage per Service:

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MPLS Port Transport:	N/A	≥ 90%	≥ 95%	Р
MPLS Port and Access Bundle Transport:	N/A	≥ 90%	≥ 95%	Р
MPLS Port, Access and Router Transport:	N/A	≥ 90%	≥ 95%	Р
Converged VoIP Service:	N/A	≥ 90%	≥ 95%	Р
VoIP Voice Mail Service:	N/A	≥ 90%	≥ 95%	Р
Audio Conferencing:	N/A	≥ 90%	≥ 95%	Р
SIP Trunking	N/A	≥ 90%	≥ 95%	Р
MPLS Port, Access and Router Bundled On-Net Transport Speeds	N/A	≥ 90%	≥ 95%	Р
MPLS Port, Access and Router Bundled Off-Net Transport Speeds	N/A	≥ 90%	≥ 95%	Р
MPLS Port, Access and Router Bundled Ethernet On-Net Transport	N/A	≥ 90%	≥ 95%	Р
MPLS Port, Access and Router Bundled Ethernet Off-Net Transport	N/A	≥ 90%	≥ 95%	Р
Secure Gateway			≥ 95%	Р
Managed Application Assurance (MAAS)			≥ 95%	Р
Managed WAN (MWAN)			≥ 95%	Р
Managed LAN (MLAN)			≥ 95%	Р
Managed Video Conferencing			≥ 95%	Р
VSAT			≥ 95%	Р

#### Per Occurrence:

Objective 1: Individual Service Requests: 50 percent of installation fee credited to Customer for any missed committed objective.

# Rights and Remedies

### **Monthly Aggregated Measurements:**

Objective 2: 100 percent of the installation fee credited to Customer for all Service Requests (per same service type) that did not complete on time during the month if the successful install monthly percentage is below the committed objective.



#### 1.2.9.8.12 Time to Repair (TTR) (M-S)

**SLA Name:** Time to Repair (TTR)

Definition: A service outage that remains unresolved for more than the objective level.

**Measurement Process:** This SLA is based on trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time. This SLA is applied per occurrence.

#### Service(s):

MPLS (1.2.2) (Includes 1.2.2.8.1 through1.2.2.8.7)	
Converged VoIP Service (1.2.3.2)	Audio Conferencing (1.2.4)
VoIP Voice Mail Service (1.2.3.5)	SIP Trunking (1.2.5)
Secure Gateway	Managed Application Assurance (MAAS)
Managed WAN (MWAN)	Managed LAN (MLAN)
Managed Video Conferencing	

#### Objective (s):

The Unavailable Time objective shall not exceed:

Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or S)
MPLS:	6 hours	4 hours	N/A	s
Secure Gateway		4 hours		s
MAAS		4 hours		S
MWAN		4 hours		S
MLAN		4 hours		S
Managed Video Conferencing		4 hours		S
Converged VoIP Service:	8 hours	4 hours	N/A	S
VoIP Voice Mail Service:	6 hours	4 hours	N/A	S
Audio Conferencing:	6 hours	4 hours	N/A	s
SIP Trunking	6 hours	4 hours	N/A	S

# Rights and Remedies

**Per Occurrence:** 25 percent of the TMRC three (3) Business Days ADUC, when applicable per occurrence for each service (Circuit ID) out of service for a period greater than the committed objective level.

Monthly Aggregated Measurements: N/A



#### 1.2.9.8.13 Managed Service Proactive Notification

**SLA Name:** Managed Service Proactive Notification

**Definition:** The proactive outage notification SLA provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET 3 CMO.

An Outage is defined as an unscheduled period in which the managed service interrupted and unavailable for use by Customer for 60 continuous seconds or more than 60 cumulative seconds within a 15-minute period measured by the Contractor.

**Measurement Process:** The Outage Duration start shall be determined by the first Contractor network alarm resulting from the outage-causing event or the opening of a trouble ticket by the Customer, whichever occurs first. The Contractor has fifteen (15) minutes (Notification Period) to open a trouble ticket and notify the Customer from the start point of the first network alarm. The Contractor is in compliance with the proactive outage notification SLA if the Customer opened the trouble ticket prior to the network alarm or Customer is notified by the Contractor within the Notification Period.

#### Service(s):

MPLS Port, Access and Router Bundled Transport Speeds (Section 1.2.2.8.3)

MPLS Port, Access and Router Bundled On-Net Transport Speeds (Section 1.2.2.8.4)

MPLS Port, Access and Router Bundled Off-Net Transport Speeds (Section 1.2.2.8.5)

MPLS Port, Access and Router Bundled Ethernet On-Net Transport Speeds (Section 1.2.2.8.6)

MPLS Port, Access and Router Bundled Ethernet Off-Net Transport Speeds (Section 1.2.2.8.6)

Managed WAN (MWAN)

Managed LAN (MLAN)

VSAT (Except Quick Deploy / Auto-Pointing Systems)

Objective (s): 15 Minutes

# Rights and Remedies

**Per Occurrence:** Customer will receive a credit equal to ten percent (10%) of the TMRC for each Contractor Managed Service (Circuit ID) that was impacted during an outage if the Customer was not proactively notified within the notification period.

Monthly Aggregated Measurements: N/A



#### 1.2.9.8.14 Excessive Usage of Site Survivability Network Failure Service (M-S)

SLA Name: Excessive Usage of Site Survivability Network Failure Service

Definition: The usage of Site Survivability Network Failure Service shall not exceed the objective commitment identified below in a month, per site.

Measurement Process: The monthly usage duration shall be based on the accumulated total of all service activation events during a given month. A service usage event shall begin from alarm or activation of service and ending when a Site Survivability Network Failure Service resumes to a standby state and no traffic traverses the PSTN on the back-up circuit.

Objective (s) applied to the following Services:

Converged VoIP Site Survivability Network Failure

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$\mathbf{v}$	COLIVO		,

Service	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
Converged VoIP Site Survivability Network Failure	240 hours	120 hours	72 hours	Р

Per Occurrence: N/A

#### **Monthly Aggregated Measurements:**

First month the service fails to meet the committed SLA objective shall result in a 15 percent rebate of the TMRC and two (2) Business Days of the ADUC of all usage charges as a result of the activation of the Site Survivability Network Failure Service.

#### Rights and Remedies

The second consecutive month the service fails to meet the committed SLA objective shall result in a 30 percent rebate of TMRC and five (5) Business Days of ADUC of all usage charges as a result of the activation of Site Survivability Network Failure Service.

Each additional consecutive month the service fails to meet the Committed SLA objective shall result in a 50 percent rebate of the TMRC, and ten (10) Business Days of the ADUC of all usage charges as a result of the activation of Site Survivability Network Failure Service.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_\_

#### 1.2.9.8.15 Unsolicited Service Enhancement SLAs

All unsolicited service enhancements shall be considered a feature of the service, and therefore shall be included as such under the SLAs as defined in this Section.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_

### 1.2.9.8.16 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined throughout SLA Section 1.2.9 (Availability, Catastrophic Outage, Provisioning etc.) for each unsolicited offering determined by the CALNET 3 CMO not to be a feature of a service or a component of an unbundled service identified in the



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technical requirements. SLA tables shall be amended after Contract award to include all new unsolicited services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No\_\_\_\_

#### 1.2.9.8.17 Contract Amendment Service Enhancement SLAs

All Contract amendment service enhancements shall be considered a feature of the service, therefore included as such under the SLAs as defined in this Section 1.2.9.8.

