

INTEGRA TELECOM

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**CALNET 3, Category 3:
Metropolitan Area Network (MAN) Ethernet**

Volume 2 – Response to Unique Category Requirements

SOW Technical Requirements Response

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Response to SOW Technical Requirements

Technical Requirements

Category 3 – Metropolitan Area Network ETHERNET

3.1 OVERVIEW

This Category 3 IFB provides the State's solicitation for best value solutions for Metropolitan Area Network Ethernet (MAE) services. This IFB 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).

3.1.1 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 Requirement and shall meet or 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:”

3.1.2 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.

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Costs associated with services shall be included in the prices provided by the Bidder for the individual items included in the Cost Worksheets. Items not listed in the 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 Cost Worksheets, the cost associated with the features shall not be included in the unsolicited price.

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

3.1.3 PACIFIC TIME ZONE

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

3.2 ETHERNET SERVICES

Contractors shall provide Ethernet network services in specific geographic locations throughout the state. The service shall provide for the transmission of digital signals in a dedicated high capacity channel. The service shall be available in multiple configurations, enabling Customers to connect two (2) or more Local Area Networks (LANs) at the native speed of the LAN backbone.

3.2.1 METROPOLITAN AREA NETWORK ETHERNET (MAE) SERVICES

Contractors shall provide switched Ethernet point-to-point and multipoint LAN services for use in a metropolitan area which allows Customers to connect two (2) or more locations.

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

3.2.1.1 General Requirements

3.2.1.1.1 Standards

Contractor's service shall provide Ethernet services that comply with all applicable standards as set by the following standard bodies:

1. Metro Ethernet Forum (MEF);
2. Internet Engineering Task Force;
3. International Telecommunications Union (ITU); and,
4. Institute of Electrical and Electronics Engineers, Inc. (IEEE).

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

3.2.1.1.2 End-to-End Ethernet Delivery

Contractors shall provide a seamless end-to-end service traversing from the Customer Premise Equipment (CPE) through the Contractor's network minimizing conversion of protocols.

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

3.2.1.1.3 Ethernet Virtual Connections (EVC)

Contractor's service shall provide EVCs, which are used to define the association of two (2) or more User-to-Network Interfaces (UNI's).

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

3.2.1.1.4 Ethernet User-to-Network Interface (UNI)

Contractor's service shall provide delivery of the service via a User-to-Network Interface (UNI). The service shall provide bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 Ethernet interface (UNI). Table 3.2.1.1.4 lists the UNI physical interfaces.

Table 3.2.1.1.4 – UNI Physical Interfaces

UNI Speed	UNI Physical Interface
10 Mbps	10BaseT
100 Mbps	100BaseT
1 Gbps	1000BaseT or 1000BaseSX

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

3.2.1.1.5 Multiple Classes of Service (CoS)

The service shall provide Class of Service (CoS) options that allow for differentiated service performance levels for different types of network traffic.

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

3.2.1.1.6 Service Frame Delivery Options

Service Frame Delivery options supported shall include

1. Unicast Frame Delivery;
2. Multicast Frame Delivery as per RFC 11 12; and,
3. Broadcast Frame Delivery as per IEEE 802.3.

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

3.2.1.1.7 Ethernet Service Frame Disposition

The service shall deliver all service frames associated with the EVC unconditionally across the network as specified in Table 3.2.1.1.7.

Table 3.2.1.1.7 –Service Frame Delivery Disposition

Service Frame Type	Service Frame Delivery
Unicast	All Frames delivered unconditionally
Multicast	All Frames delivered unconditionally
Broadcast	All Frames delivered unconditionally

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

3.2.1.1.8 **VLAN Tag Preservation**

The service shall support IEEE 802.1Q VLAN-tagged Customer packets. All Customer VLAN IDs and priority code points (IEEE 802.1p) for CoS shall be transmitted and received unaltered by the service. Untagged packets shall be mapped to the native VLAN specified by Customer. Customers may configure their own VLANs on their Customer owned CPE without coordination with the Contractor.

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

3.2.1.1.9 **Maximum Frame Size**

The service shall support a Maximum Transmission Unit (MTU) packet size of 1600 bytes to support untagged or 802.1Q tagged packet sizes.

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

3.2.1.1.10 **Performance Monitoring**

The Contractor shall conduct proactive Performance Monitoring that includes the following:

1. Signal failure;
2. Signal degradation;
3. Connectivity or Loss of connectivity;
4. Frame loss;
5. Errored frames;
6. Looping;
7. Mis-inserted frames; and,
8. Maintenance parameters.

Bidder shall describe their proactive Performance Monitoring (PM) that will be deployed for CALNET 3.

Bidder understands the requirements in Section 3.2.1.1.10 and shall meet or exceed them? Yes X No ___

Description:

Integra provides a web based customer facing portal to view Service Level Agreement (SLA) performance statistics for all MAE Ethernet Virtual Connections. The portal will also provide a location map depicting a logical map view of the customer's purchased MAE network. The performance monitoring portal will detect signal failure, degradation, loss of connectivity, frame loss, errored frames, and Ethernet MAC loops within the Integra network through the compilation of service statistics. Those statistics include a depiction of usage, one-way and two-way delay, delay variation (jitter), packet loss, and availability. The statistics page provides a 5-min average view of service performance at the UNI and EVC level. Resolution can be adjusted to view performance trends for the last hour or the last 6-months.

Looping:

Looping generally causes a packet storm which Integra can detect and act on as well as report.

Mis-inserted frames:

Integra does not insert nor remove frames unless the customer desires to Peer with layer 2 control protocols which is rare.

Maintenance activities:

Trouble resolution and notification

Circuit equipment provides alarm notifications to Integra's Network Notification System (NSS) which filters event data. This data is correlated to Customer circuit IDs, NNS service status, and contact information. The customer profile is maintained in Integra Customer Care (ICC) database.

Integra monitors equipment for alarms, cross references TIDs / AIDs (Target Identifier, Access Identifier) to MSS ECKKTs (database circuit information) and determines if the alarming circuit is designated as NNS by referencing the customer profile (ICC). If so, a Trouble Ticket is initiated.

The Trouble Management System (TMS) processes the Trouble Ticket created from the Network Monitoring systems and uses the NNS information from ICC to notify the customer via emails and/or SMS messages at key milestones during the life of the Trouble Ticket. Once the Trouble Ticket is cleared, the customer is sent a final update.

Scheduled Maintenance Activities

Scheduled Maintenance Procedure (SMP) notifications will be managed outside of the "proactive" surveillance process.

Communications with customers and internal workgroups will be made to inform each as to the upcoming network maintenance. Work is schedule in a maintenance window of 23:00 PT to 05:00 PT. If a network emergency arises, all proactive notification is best effort and all diligence is used to minimize disruption.

3.2.1.1.11 Network Monitoring

The Contractor shall monitor all services on a 24x365 basis.

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

3.2.1.1.12 Technical Support

Contractor shall provide technical support service issues via a toll-free telephone number that operates on a 24x365 basis.

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

3.2.1.1.13 Maintenance

The Contractor shall perform maintenance during a set maintenance window. Maintenance shall be coordinated between the Contractor and the Customer. Contractor shall provide a minimum of 48 hour notice to the Customer for non-service impacting scheduled maintenance. Contractor shall provide a minimum of seven (7) days' notice for service impacting planned maintenance. Emergency maintenance shall be performed as needed.

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

3.2.1.1.14 Equipment and Environment

The Contractor shall provide and install all network terminating Equipment (NTE) in Customer provided racking and utilize State provided AC power. The NTE shall connect to either a Customer router with an Ethernet blade or a Customer Ethernet switch equipped to support Ethernet located within fifty feet.

All Equipment shall adhere to the Telcordia Network Equipment Building System (NEBS).

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

3.2.1.2 Ethernet Private Line (EPL) MAE Service

The Contractor shall provide Ethernet Private Line (EPL) MAE service. This service shall provide a logical Point-to-Point connection between two (2) Customer locations or a Customer location and an Internet Service Provider Point of Presence (POP), Interexchange Carrier POP, or another 3rd party location. EPL service shall enable Customers to use any VLANs or Ethernet control protocol across the service without coordination with the Contractor.

EPL service shall enable Customers to connect their Customer Premise Equipment (CPE) using an Ethernet interface and provide one (1) Ethernet Virtual Connection (EVC) between two (2) Customer locations.

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

3.2.1.3 Ethernet Virtual Private Line (EVPL) MAE Service

The Contractor shall provide Ethernet Virtual Private Line (EVPL) MAE service. This service shall provide an Ethernet Virtual Connection (EVC) between two (2) Customer locations similar to Ethernet Private Line service but shall support the added flexibility to multiplex multiple services (EVCs) on a single UNI at a Customer's hub or aggregation site. Bidder understands the Requirement and shall meet or exceed it? Yes No

3.2.1.4 EPL and EVPL MAE Service Multiplexing

The EPL and EVPL MAE service shall enable Customers to multiplex multiple services (EVCs) on a given UNI eliminating the need for multiple ports on the Customer's router or Ethernet switch.

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

3.2.1.5 EPL and EVPL MAE Classes of Service (CoS)

Contractor shall provide three (3) Classes of Service (CoS) options for the EPL/EVPL MAE service: BASIC, PRIORITY and PREMIUM. The CoS options shall allow for differentiated service performance levels for different types of network traffic. CoS options shall allow Customers to prioritize mission-critical traffic from lesser priority traffic in the network. The CoS shall be associated with the bandwidth usage rate Committed Information Rate (CIR) ordered by the Customer for each connection at the Customer locations. If the Customer requests multiple EVCs per location, then a CoS will be associated with each EVC.

3.2.1.5.1 BASIC CoS MAE

BASIC CoS supports data applications with more tolerance for delay and/or those with least priority. There are no service performance parameters associated with this Class of Service.

Bidders shall describe in detail their Basic CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.1 and shall meet or exceed them? Yes X No ___

Description:

Integra's Basic CoS MAE marketed as "Best Effort" is the lowest of priority options customers can choose from. In times of congestion, traffic classified by the customer as Best Effort will flow up to the capability of the access providing there is not higher priority traffic that contends for the same resource.

When customers choose Basic CoS, Integra assigns no CoS to all incoming traffic on a per EVC or per port basis. All incoming traffic from the customer marked as (802.1p = 0 or DSCP = 0) is encapsulated as Basic CoS with a Priority tag set to (802.1p Value = 0) for transmission across Integra's network.

Upon egress from Integra's network this Basic CoS tag is stripped before transmission back to the customer's network. The customer's traffic is not altered in any way.

Basic CoS treatment is used for applications that have no guarantee requirements whose associated traffic flows are tolerable of delay and jitter. These traffic flows are the lowest priority when compared to more critical applications that require more stringent SLAs.

Applications that might fit into this category would be general web browsing and other low priority data transmission.

3.2.1.5.2 PRIORITY CoS MAE

PRIORITY CoS shall support data applications with more tolerance for delay and/or those that are lower in priority. The service parameters associated with this class of service are listed in Table 3.2.1.5.2.

Table 3.2.1.5.2 lists the service performance objectives for PRIORITY CoS for distances within 250 network miles.

Table 3.2.1.5.2 – PRIORITY CoS Performance Objectives

Performance Objective (\leq 250 miles)	PRIORITY CoS
Latency (one way)	<35ms
Jitter (one way)	<40ms
Packet Loss (one way)	<0.5%
Availability	>99.99%

Bidders shall describe in detail their Priority CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.2 and shall meet or exceed them? Yes X No ___

Description:

Integra's Priority CoS MAE is marketed as "Business Class" and provides data prioritization for very important data applications that are of a high priority and involve business transactions.

Integra's Priority CoS is the 2nd highest of three priority options customers can choose from. In times of congestion, traffic treated as Priority CoS will take precedent over Best Effort and Basic CoS traffic. This Business Class CoS prioritizes any data frame with a CoS pBit of "4" that is sensitive to latency.

When customers choose Priority CoS, "Business Class", Integra assigns this CoS to all incoming traffic on a per EVC or per port basis. All incoming traffic from the customer marked as (802.1p = 2,3,4 or DSCP = CS2,CS3,CS4,AF2x,AF3x,AF4x) is encapsulated within a Priority tag (802.1p Value = 4) for transmission across Integra's network.

Note: Mapping of customer Priority CoS, traffic to Integra "Business Class" traffic is customizable. The mapping above is the default. More customized mapping can be supported.

Upon egress from Integra's network this Priority tag is stripped before transmission back to the customer's network. The customer's traffic is not altered in any way.

Priority CoS treatment is used for applications that have moderate to high guarantee requirements whose associated traffic flows are defined locally by the customer as critical.

These traffic flows are of moderately high priority when compared to more critical applications that are typically real-time in nature.

Applications that might fit into this category would be client-server applications, interactive messaging and transactional data. Mission critical data and video streaming might also fit into this category.

3.2.1.5.3 PREMIUM CoS MAE

PREMIUM CoS shall support applications that require minimal loss and low latency variation (i.e., jitter). The network will provision data in this class of service in a priority queue indicating that it is delay sensitive. The service parameters associated with this class of service are listed in Table 3.2.1.5.3.

Table 3.2.1.5.3 lists the service performance objectives for PREMIUM CoS for distances within 250 network miles.

Table 3.2.1.5.3 – Class of Service Options

Performance Objective (≤ 250 miles)	PREMIUM CoS
Latency (one way)	<25ms
Jitter (one way)	<25ms
Packet Loss (one way)	<0.1%
Availability	>99.99%

Bidders shall describe in detail their Premium CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.3 and shall meet or exceed them? Yes X No ___

Description:

Integra's Premium CoS is marketed as "Real Time" and is the highest of three priority options customers can choose from. In times of congestion, traffic treated as Premium CoS will take precedent over all other traffic flows.

When customers choose Premium CoS, "Real Time", Integra assigns this CoS to all incoming traffic on a per EVC or per port basis. All incoming traffic from the customer marked as (802.1p = 5,6,7 or DSCP = CS5,CS6,CS7,EF) is encapsulated within a Premium tag (802.1p Value = 5) for transmission across Integra's network.

Note: Mapping of customer Premium CoS, traffic to Integra "Real Time" traffic is customizable. The mapping above is the default. More customized mapping can be supported.

Upon egress from Integra's network this Premium tag is stripped before transmission back to the customer's network. The customer's traffic is not altered in any way.

Premium CoS treatment is used for applications that have the highest guarantee requirements and that are very sensitive to delay and jitter. These traffic flows are of the highest priority when compared to all other applications.

Applications that fit into this category are typically voice-bearing like VoIP or interactive video.

3.2.1.6 EPL and EVPL MAE Service Feature Description

Contractor shall provide MAE services as described below.

3.2.1.6.1 EPL and EVPL MAE Service Connections

EPL and EVPL MAE Service Connections shall include the Network Interface and the Access Link from the Customer premises to the Ethernet network, a port on the Ethernet network, the assigned bandwidth usage and one (1) Ethernet Virtual Connection (EVC).

1. Network Interface (NI): The point that the Customer's data transmission enters the network. The point of interconnection between the Contractor's communication facility and your end-user's terminal equipment.
2. Access Link: Connects a Customer facility at the NI to an Ethernet port on the Metro Ethernet network with a standard optical or copper connection.
3. Port: An Ethernet port is the physical entry point to the shared Metro Ethernet Network. Virtual Local Area Networks (VLANs) Ethernet Virtual Connections (EVCs) originate and terminate on a Metro Ethernet Port.

3.2.1.6.2 Managed Router Service:

Contractor shall offer a managed router service that includes the components described in Section 3.2.1.6.1 in a bundled format which includes a Contractor owned, maintained and managed router as identified in Table 3.2.1.6.a.

The Contractor's managed router service shall include proactive Customer notification.

Bidder shall describe in detail all equipment, maintenance and management services that, as the awarded Contractor, will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.6.2 and shall meet or exceed them? Yes X No _____

Description:

Integra will supply a router for each circuit that is ordered with a managed router. The physical CPE provided will have the following characteristics:

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Table 3.2.1.6.2 – Managed Router Service Characteristics					
Access Type	Bandwidth	Access Interface	Customers Interface (NI)	CPU throughput	RAM
T1	128 to 1.544mbs	1xT1	10/100/1000base-T	30 Mbs	Amount to support all routing tables
(2) T1 to (8) T1	3.088 to 12.352mbs	2-8xT1	10/100/1000base-T	30 Mbs	Amount to support all routing tables
DS3	15 to 45mb	DS3	10/100/1000base-T	90 Mbs	Amount to support all routing tables
Ethernet	10 to 100mb	10/100/1000base-T	10/100/1000base-T	Configured to handle the maximum assess link.	Amount to support all routing tables
Ethernet	101 to 1000mb	10/100/1000base-T	10/100/1000base-T	Configured to handle the maximum assess link.	Amount to support all routing tables
Ethernet	1001 to 10,000mb	10/100/1000base-T or 10GBASE-xx	10/100/1000base-T or 10GBASE-xx	Configured to handle the maximum assess link.	Amount to support all routing tables
SONET	155mbs	OC-3 SONET	10/100/1000base-T or 10GBASE-xx (or direct SONET if needed)	Configured to handle the maximum assess link.	Amount to support all routing tables
SONET	620mbs	OC-12 SONET	10/100/1000base-T or 10GBASE-xx (or direct SONET if needed)	Configured to handle the maximum assess link.	Amount to support all routing tables
SONET	2480mbs	OC-48 SONET	10/100/1000base-T or 10GBASE-xx (or direct SONET if needed)	Configured to handle the maximum assess link.	Amount to support all routing tables

Each router will have a modem installed and attached to an analog telephone line for an alternate remote access. The routers will be configured by Integra operations staff and will be monitored on a continual bases. Integra will manage, maintain, configure, archive and upgrade a managed router as part of the service. The router remains the property of Integra

Contractors shall provide the services and Features described in Table 3.2.1.6.a

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
1	EPL MAE Service Connection 10/100 Mbps	10/100 Mbps Ethernet port per location; Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301001
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID) with one EVC. All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks as a UNI (User Network Interface).</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p>					
2	EPL MAE Service Connection 10/100 Mbps with Managed Router	10/100 Mbps Ethernet port per location with managed router; Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301002
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface).</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100base-t electrical UNI.</i></p>					

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Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
3	EPL MAE Service Connection Gigabit Ethernet (1 Gbps)	1000 Mbps Ethernet port per location; Assessed per interface at bandwidths of 1Gbps Ethernet. The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301003
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p>					
4	EPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed Router	1000 Mbps Ethernet port per location, with managed router; Assessed per interface at bandwidths of 1Gbps Ethernet. The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301004
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100/1000BASE-T electrical or as a 1000BASE-SX optical UNI.</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
5	EVPL MAE Service Connection 10/100 Mbps	Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301005
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p>					
6	EVPL MAE Service Connection 10/100 Mbps with Managed Router	Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T) with managed router. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301006
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100base-t electrical UNI.</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
7	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps)	Assessed per interface at bandwidths of 1Gbps Ethernet. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301007
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p>					
8	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed Router	Assessed per interface at bandwidths of 1Gbps Ethernet with managed router. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		301008
<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via full duplex, Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface). The UNI may be service multiplexed.</i></p> <p><i>The NID is a monitored fulltime and reports circuit status via telemetry to the Integra's network monitoring systems. All monitoring and management of the far end of the circuit is performed via the NID.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100/1000BASE-T electrical or as a 1000BASE-SX optical UNI.</i></p>					

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Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
9	Additional MAE MAC Addresses (51-100)	MAC Address rate element is a data link layer protocol used for Layer 2 connectivity. Standard service allows up to 50 MAC addresses to be present per EPL/EVPL connection. This optional feature increases that limit to up to 100 MAC addresses per EPL/EVPL connection. A technical review will be necessary to determine if service can be provided and for approval to exceed the limit.	Y		301009
Bidder's Product Description: <i>The increase of MAC addresses learned at UNI exceeding 50. Requires a free engineering study to determine the viability of the added MAC addresses being supported.</i>					
10	Ethernet Virtual Connection (EVC) MAE	EVC rate element. EVCs shall be assigned in 1 Mbps increments within each port range. Customer may order additional EVCs to establish additional virtual connections over the same physical connections. When additional EVCs are ordered, the Customer must designate the portion of the CIR bandwidth assigned to each EVC.	Y		301010
Bidder's Product Description: <i>An EVC element in 1 meg increments from 1 to 100 for "EPL MAE Service Connection 10/100 Mbps" and "EVPL MAE Service Connection 10/100 Mbps" over the same UNI will be provided. No one EVC can exceed the UNI bandwidth and the customer must designate the CIR for each EVC. The total CIR of all EVC's cannot exceed 100% of the UNI. It is possible for the customer to add EVC's beyond 100% EIR, but this bandwidth is not guaranteed.</i>					
CIR (BASIC CoS MAE):					
11	BASIC CIR - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301201

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>				
12	BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301202
	<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>				
13	BASIC CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301203
	<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>				

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
CIR (PRIORITY CoS):					
14	PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301401
<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
15	PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301402
<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
16	PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301403
<p>Bidder's Product Description:</p> <p><i>5 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
17	PRIORITY CIR MAE -8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301404
	<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>				
18	PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301405
	<p>Bidder's Product Description:</p> <p><i>10 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>				
19	PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301406
	<p>Bidder's Product Description:</p> <p><i>20 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>				

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
20	PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301407
<p>Bidder's Product Description:</p> <p><i>50 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
21	PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301408
<p>Bidder's Product Description:</p> <p><i>100 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
22	PRIORITY CIR MAE - 150 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301409
<p>Bidder's Product Description:</p> <p><i>150 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
23	PRIORITY CIR MAE - 250 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301410
<p>Bidder's Product Description:</p> <p><i>250 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
24	PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301411
<p>Bidder's Product Description:</p> <p><i>500 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					

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Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
25	PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301412
<p>Bidder's Product Description:</p> <p><i>600 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
26	PRIORITY CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301413
<p>Bidder's Product Description:</p> <p><i>1000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>					
CIR (PREMIUM CoS):					
27	PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301601
<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
28	PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301602
<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
29	PREMIUM CIR MAE – 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301603
<p>Bidder's Product Description:</p> <p><i>5 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
30	PREMIUM CIR MAE – 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301604
<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
31	PREMIUM CIR MAE – 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301605
<p>Bidder's Product Description:</p> <p><i>10 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
32	PREMIUM CIR MAE – 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301606
<p>Bidder's Product Description:</p> <p><i>20 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
33	PREMIUM CIR MAE – 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301607
<p>Bidder's Product Description:</p> <p><i>50 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
34	PREMIUM CIR MAE – 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301608
<p>Bidder's Product Description:</p> <p><i>100 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
35	PREMIUM CIR MAE – 150 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301609
<p>Bidder's Product Description:</p> <p><i>150 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
36	PREMIUM CIR MAE – 250 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301610
<p>Bidder's Product Description:</p> <p><i>250 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					

Table 3.2.1.6.a-MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
37	PREMIUM CIR MAE – 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301611
<p>Bidder's Product Description:</p> <p><i>500 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
38	PREMIUM CIR MAE – 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301612
<p>Bidder's Product Description:</p> <p><i>600 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					
39	PREMIUM CIR MAE – 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		301613
<p>Bidder's Product Description:</p> <p><i>1000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EPL and EVPL Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Premium CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Real-Time Class of Service (CoS).</i></p>					

The Contractor may offer additional unsolicited MAE services and features in Table 3.2.1.6.b.

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
1	<i>Standard CoS MAE (EP-LAN)</i>	<i>Standard CoS supports data applications with less tolerance for delay than those with least priority. There are service performance parameters associated with this Class of Service.</i>	301614
	<p>Bidder's Product Description:</p> <p><i>Integra's "Standard Class" is a service between Basic and Priority CoS and provides data prioritization for important data applications that are of higher priority than basic web browsing, e-mail traffic or other non-essential traffic.</i></p> <p><i>This "Standard Class" CoS prioritizes any data with a CoS pBit set to "1" that is somewhat sensitive to latency. All other traffic that has the CoS pBit set to "0" is managed as "Best Effort" to the level of bandwidth purchased.</i></p> <p><i>Upon egress from Integra's network this Standard Class CoS tag is stripped before transmission back to the customer's network. The customer's traffic is not altered in any way.</i></p> <p><i>Standard CoS treatment is used for applications that have moderate guarantee requirements whose associated traffic flows somewhat tolerable of delay and jitter. These traffic flows are the lower priority when compared to more critical applications that require more stringent SLAs.</i></p> <p><i>Applications that might fit into this category would be email, FTP and lower priority database replication.</i></p>		
2	<i>Ethernet Private LAN (EP-LAN) MAE Service</i>	<i>Ethernet Private LAN (EP-LAN) Description</i>	301615

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
		<p>Bidder's Product Description:</p> <p><i>This service shall provide a logical Multipoint-to-Multipoint connection between three (3) or more Customer locations or Customer locations and the Service Provider Point of Presence (POP), Interexchange Carrier POP, or another 3rd party location. An EP-LAN service shall enable Customers to use any VLANs or layer 2 control protocols across the service without coordination with the Contractor. The EP-LAN service complies with the same Industry requirements as the EPL services such as MEF, IEEE, IETF, and the ITU.</i></p> <p><i>The EP-LAN service shall enable Customers to connect their Customer Premise Equipment (CPE) using an Ethernet interface and provide one (1) Ethernet Virtual Connection (EVC) between multiple Customer locations either within or across metro regions as a fully meshed wide area network.</i></p> <p><i>EP-LAN services support the customer's four CoS options of Basic, Standard, Priority, and Premium. Unicast, Multicast and Broadcast frames will be supported and delivered unconditionally. EP-LAN will support IEEE 802.1Q. MTU size of 1600 Bytes will be supported on an E-LAN service. UNI interfaces for E-LAN will support 10/100/1000BaseT, 1000BaseSX, or 10GBase-SR interfaces.</i></p> <p><i>Product Benefits:</i></p> <p><i>E-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p>	
		<p><i>Service Limitations:</i></p> <p><i>Service availability for EVCs greater than 1 Gbps is limited to those areas deemed as on-net or near-net fiber locations for Integra.</i></p>	
<p>3</p>	<p><i>EP-LAN MAE Service Connection 10/100 Mbps</i></p>	<p><i>10/100 Mbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) Best Effort EVC and the NI.</i></p>	<p>301616</p>

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID) with one EVC. All electrical handoffs are via Ethernet 10/100/1000BASE-T (RJ48) jacks as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p>		
	<i>EP-LAN MAE Service Connection 10/100 Mbps with Managed Router</i>	<i>10/100 Mbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) Best Effort EVC and the NI.</i>	301617
4	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID) with one EVC. All electrical handoffs are via Ethernet 10/100/1000BASE-T (RJ48) jacks as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100/1000BASE-T electrical or as a 1000BASE-SX optical UNI.</i></p>		
5	<i>EP-LAN MAE Service Connection Gigabit Ethernet (1 Gbps)</i>	<i>1000 Mbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 1Gbps Ethernet. The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.</i>	301618

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p>		
	<i>EP-LAN MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed Router</i>	<i>1000 Mbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 1Gbps Ethernet. The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.</i>	301619
6	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All electrical handoffs are via Ethernet 10/100/1000BASE-T (RJ48) jacks or as a 1000BASE-SX optical interface as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be an RJ48 10/100/1000BASE-T electrical or as a 1000BASE-SX optical UNI.</i></p>		
7	<i>EP-LAN MAE Service Connection Gigabit Ethernet (10 Gbps)</i>	<i>10 Gbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 10Gbps Ethernet. The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.</i>	301620

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All optical handoffs are via a 10GBASE-SX optical interface as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p>		
	<i>EP-LAN MAE Service Connection Gigabit Ethernet (10 Gbps) with Managed Router</i>	<i>10 Gbps Ethernet port per location (UNI); Assessed per interface at bandwidths of 10Gbps Ethernet. The EP-LAN connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.</i>	301621
8	<p>Bidder's Product Description:</p> <p><i>Ethernet services at this level are provided at the customer's demarcation point via the installation of a Network Interface Device (NID). All optical handoffs are via a 10GBASE-SX optical interface as a UNI (User Network Interface).</i></p> <p><i>Product Benefits:</i></p> <p><i>EP-LAN allows remote locations or nodes to share Ethernet traffic as if they were all locally connected to the same in-building network. It is a service type for multipoint Layer-2 Virtual Private LANs (VPNs), transparent LAN service, and multicast networks.</i></p> <p><i>An Integra provided, configured and managed router will be included with the MAE service and will be installed between the customers LAN and the NI. The interface will be a 10GBase-SR optical interface UNI.</i></p>		
9	<i>Ethernet Virtual Connection (EVC) MAE (also to be used with EP-LAN)</i>	<i>EVC rate element. EVCs shall be assigned in 1 Mbps increments within each port range. Customer may order additional EVCs to establish additional virtual connections over the same physical connections. When additional EVCs are ordered, the Customer must designate the portion of the CIR bandwidth assigned to each EVC</i>	301010

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>An EVC element in 1 Mbps increments from 1 to 100 for "EP-LAN MAE Service Connection 10/100 Mbps" over the UNI will be provided. An EVC element in 50 Mbps increments from 100 to 1000 "EP-LAN MAE Service Connection 1000 Mbps" over the UNI will be provided. An EVC element in 1 Gbps increments from 1 to 4 "EP-LAN MAE Service Connection 10 Gbps" over the UNI will be provided. The EVC element cannot exceed the UNI bandwidth and the customer must designate the CIR for the EVC. The CIR off the EVC cannot exceed bandwidth capacity of the UNI.</i></p>		
	CIR (BASIC CoS MAE) for EP-LAN:		
10	<i>EP LAN BASIC CIR - 2 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301623
	<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>		
11	<i>EP LAN BASIC CIR MAE - 4 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301624
	<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>		
12	<i>EP LAN BASIC CIR MAE - 8 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301625

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Basic CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Basic CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 0, or Best Effort Class of Service (CoS).</i></p>		
	CIR (Standard CoS) for EP-LAN:		
13	<i>STANDARD CIR MAE - 2 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301626
	<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
14	<i>STANDARD CIR MAE - 4 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301627
	<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
15	<i>STANDARD CIR MAE - 5 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301628

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
		<p>Bidder's Product Description:</p> <p><i>5 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>	
16	<i>STANDARD CIR MAE - 8 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301629
		<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>	
17	<i>STANDARD CIR MAE - 10 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301630
		<p>Bidder's Product Description:</p> <p><i>10 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>	
18	<i>STANDARD CIR MAE - 20 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301631

Volume 2: Category 3 – Metropolitan Area Network (MAN) Ethernet

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>20 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
19	<i>STANDARD CIR MAE - 50 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301632
	<p>Bidder's Product Description:</p> <p><i>50 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
20	<i>STANDARD CIR MAE - 100 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301633
	<p>Bidder's Product Description:</p> <p><i>100 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
21	<i>STANDARD CIR MAE - 150 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301634

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>150 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
22	<i>STANDARD CIR MAE - 250 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301635
	<p>Bidder's Product Description:</p> <p><i>250 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
23	<i>STANDARD CIR MAE - 500 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301636
	<p>Bidder's Product Description:</p> <p><i>500 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
24	<i>STANDARD CIR MAE - 600 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301637

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>600 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
25	<i>STANDARD CIR MAE - 1000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301638
	<p>Bidder's Product Description:</p> <p><i>1000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
26	<i>STANDARD CIR MAE - 2000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301639
	<p>Bidder's Product Description:</p> <p><i>2000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</i></p>		
27	<i>STANDARD CIR MAE - 3000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301640

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>3000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</p>		
28	<i>STANDARD CIR MAE - 4000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301641
	<p>Bidder's Product Description:</p> <p><i>4000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Standard CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p>Standard CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 1, or Business Class of Service (CoS).</p>		
	CIR (PRIORITY CoS) for EP-LAN:		
29	<i>PRIORITY CIR MAE - 2 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301642
	<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</p>		
30	<i>PRIORITY CIR MAE - 4 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301643

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
31	<i>PRIORITY CIR MAE - 5 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301644
	<p>Bidder's Product Description:</p> <p><i>5 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
32	<i>PRIORITY CIR MAE - 8 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301645
	<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
33	<i>PRIORITY CIR MAE - 10 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301646
	<p>Bidder's Product Description:</p> <p><i>10 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
34	<i>PRIORITY CIR MAE - 20 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301647
	<p>Bidder's Product Description:</p> <p><i>20 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
35	<i>PRIORITY CIR MAE - 50 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301648
	<p>Bidder's Product Description:</p> <p><i>50 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
36	<i>PRIORITY CIR MAE - 100 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301649
	<p>Bidder's Product Description:</p> <p><i>100 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
37	<i>PRIORITY CIR MAE - 150 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301650

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>150 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
38	<i>PRIORITY CIR MAE - 250 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301651
	<p>Bidder's Product Description:</p> <p><i>250 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
39	<i>PRIORITY CIR MAE - 500 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301652
	<p>Bidder's Product Description:</p> <p><i>500 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
40	<i>PRIORITY CIR MAE - 600 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301653

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>600 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
41	<i>PRIORITY CIR MAE - 1000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301654
	<p>Bidder's Product Description:</p> <p><i>1000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
42	<i>PRIORITY CIR MAE - 2000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301655
	<p>Bidder's Product Description:</p> <p><i>2000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
43	<i>PRIORITY CIR MAE - 3000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301656

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>3000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
44	<i>PRIORITY CIR MAE - 4000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301657
	<p>Bidder's Product Description:</p> <p><i>4000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Priority CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 4, or Business Class of Service (CoS).</i></p>		
	CIR (PREMIUM CoS) for EP-LAN:		
45	<i>PREMIUM CIR MAE - 2 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301658
	<p>Bidder's Product Description:</p> <p><i>2 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
46	<i>PREMIUM CIR MAE - 4 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301659

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>4 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
47	<i>PREMIUM CIR MAE - 5 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301660
	<p>Bidder's Product Description:</p> <p><i>5 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
48	<i>PREMIUM CIR MAE - 8 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301661
	<p>Bidder's Product Description:</p> <p><i>8 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
49	<i>PREMIUM CIR MAE - 10 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301662
	<p>Bidder's Product Description:</p> <p><i>10 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		

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Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
50	<i>PREMIUM CIR MAE - 20 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301663
	<p>Bidder's Product Description:</p> <p><i>20 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
51	<i>PREMIUM CIR MAE - 50 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301664
	<p>Bidder's Product Description:</p> <p><i>50 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
52	<i>PREMIUM CIR MAE - 100 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301665
	<p>Bidder's Product Description:</p> <p><i>100 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
53	<i>PREMIUM CIR MAE - 150 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301666

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>150 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
54	<i>PREMIUM CIR MAE - 250 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301667
	<p>Bidder's Product Description:</p> <p><i>250 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
55	<i>PREMIUM CIR MAE - 500 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301668
	<p>Bidder's Product Description:</p> <p><i>500 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
56	<i>PREMIUM CIR MAE - 600 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301669

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	<p>Bidder's Product Description:</p> <p><i>600 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
57	<i>PREMIUM CIR MAE - 1000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301670
	<p>Bidder's Product Description:</p> <p><i>1000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
58	<i>PREMIUM CIR MAE - 2000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301671
	<p>Bidder's Product Description:</p> <p><i>2000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i></p> <p><i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i></p>		
59	<i>PREMIUM CIR MAE - 3000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301672

Table 3.2.1.6.b – Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: <i>3000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i> <i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i>		
60	<i>PREMIUM CIR MAE - 4000 Mbps</i>	<i>The guaranteed average bandwidth of the virtual circuit.</i>	301673
	Bidder's Product Description: <i>4000 Mbps traffic within the Committed Information Rate ("CIR") profile is sent across Integra's network in adherence to Class of service profile Premium CoS and the associated Service Level Objectives for EP-LAN Services. Input traffic on an EVC exceeding these CIR profiles is subject to discard.</i> <i>Priority CIR is defined on the Integra network as Ethernet frames with a pBit identifier of 5, or Business Class of Service (CoS).</i>		

3.2.1.7 MAE Service Geographic Requirements

Bidders shall identify the locations where their Ethernet Services are available in Table 3.2.1.7.a. By indicating "X" in the table below, Contractor commits to provide the services in the cities identified below. Commitment is subject to facility availability either through Contractor owned facilities or third-party agreements. Contractor's rates for the MAE services shall be the same for all geographic locations. Bidders may reference Table 3.2.1.7.a or Table 3.2.1.7.b in their Catalog A, Geographic Availability response. Bidders Catalog A language shall not conflict with the requirements described herein.

Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
1	Adelanto				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
2	Agoura Hills				
3	Alameda				
4	Albany				
5	Alhambra				
6	Aliso Viejo				
7	Alturas				
8	Amador				
9	American Canyon				
10	Anaheim				
11	Anderson				
12	Angels Camp				
13	Antioch				
14	Apple Valley				
15	Arcadia				
16	Arcata				
17	Arroyo Grande				
18	Artesia				
19	Arvin				
20	Atascadero				
21	Atherton				
22	Atwater				
23	Auburn				
24	Avalon				
25	Avenal				
26	Azusa				
27	Bakersfield				
28	Baldwin Park				
29	Banning				
30	Barstow				
31	Beaumont				
32	Bell				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
33	Bell Gardens				
34	Bellflower				
35	Belmont				
36	Belvedere				
37	Benicia				
38	Berkeley				
39	Beverly Hills				
40	Big Bear Lake				
41	Biggs				
42	Bishop				
43	Blue Lake				
44	Blythe				
45	Bradbury				
46	Brawley				
47	Brea				
48	Brentwood				
49	Brisbane				
50	Buellton				
51	Buena Park				
52	Burbank				
53	Burlingame				
54	Calabasas				
55	Calexico				
56	California City				
57	Calimesa				
58	Calipatria				
59	Calistoga				
60	Camarillo				
61	Campbell				
62	Canyon Lake				
63	Capitola				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
64	Carlsbad				
65	Carmel-By-The-Sea				
66	Carpinteria				
67	Carson				
68	Cathedral City				
69	Ceres				
70	Cerritos				
71	Chico				
72	Chino				
73	Chino Hills				
74	Chowchilla				
75	Chula Vista				
76	Citrus Heights	X	X	X	X
77	Claremont				
78	Clayton				
79	Clearlake				
80	Cloverdale				
81	Coachella				
82	Coalinga				
83	Colfax				
84	Colma				
85	Colton				
86	Colusa				
87	Commerce				
88	Compton				
89	Concord				
90	Corcoran				
91	Corning				
92	Corona				
93	Coronado				
94	Corte Madera				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
95	Costa Mesa				
96	Cotati	X	X	X	X
97	Covina				
98	Crescent City				
99	Cudahy				
100	Culver City				
101	Cupertino				
102	Cypress				
103	Daly City				
104	Dana Point				
105	Danville				
106	Davis				
107	Del Mar				
108	Del Rey Oaks				
109	Delano				
110	Desert Hot Springs				
111	Diamond Bar				
112	Dinuba				
113	Dixon				
114	Dorris				
115	Dos Palos				
116	Downey				
117	Duarte				
118	Dublin				
119	Dunsmuir				
120	East Palo Alto				
121	El Cajon				
122	El Centro				
123	El Cerrito				
124	El Monte				
125	El Paso De Robles				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
126	El Segundo				
127	Elk Grove	X	X	X	X
128	Emeryville				
129	Encinitas				
130	Escalon				
131	Escondido				
132	Etna				
133	Eureka				
134	Exeter				
135	Fairfax				
136	Fairfield				
137	Farmersville				
138	Ferndale				
139	Fillmore				
140	Firebaugh				
141	Folsom	X	X	X	X
142	Fontana				
143	Fort Bragg				
144	Fort Jones				
145	Fortuna				
146	Foster City				
147	Fountain Valley				
148	Fowler				
149	Fremont				
150	Fresno				
151	Fullerton				
152	Galt				
153	Garden Grove				
154	Gardena				
155	Gilroy				
156	Glendale				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
157	Glendora				
158	Goleta				
159	Gonzales				
160	Grand Terrace				
161	Grass Valley				
162	Greenfield				
163	Gridley				
164	Grover Beach				
165	Guadalupe				
166	Gustine				
167	Half Moon Bay				
168	Hanford				
169	Hawaiian Gardens				
170	Hawthorne				
171	Hayward				
172	Healdsburg				
173	Hemet				
174	Hercules				
175	Hermosa Beach				
176	Hesperia				
177	Hidden Hills				
178	Highland				
179	Hillsborough				
180	Hollister				
181	Holtville				
182	Hughson				
183	Humboldt				
184	Huntington Beach				
185	Huntington Park				
186	Huron				
187	Imperial				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
188	Imperial Beach				
189	Indian Wells				
190	Indio				
191	Industry				
192	Inglewood				
193	Inyo				
194	Ione				
195	Irvine				
196	Irwindale				
197	Isleton				
198	Jackson				
199	Kerman				
200	Kern				
201	King City				
202	Kings				
203	Kingsburg				
204	La Canada Flintridge				
205	La Habra				
206	La Habra Heights				
207	La Mesa				
208	La Mirada				
209	La Palma				
210	La Puente				
211	La Quinta				
212	La Verne				
213	Lafayette				
214	Laguna Beach				
215	Laguna Hills				
216	Laguna Niguel				
217	Laguna Woods				
218	Lake				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
219	Lake Elsinore				
220	Lake Forest				
221	Lakeport				
222	Lakewood				
223	Lancaster				
224	Larkspur				
225	Lassen				
226	Lathrop				
227	Lawndale				
228	Lemon Grove				
229	Lemoore				
230	Lincoln				
231	Lindsay				
232	Live Oak				
233	Livermore				
234	Livingston				
235	Lodi				
236	Loma Linda				
237	Lomita				
238	Lompoc				
239	Long Beach				
240	Loomis				
241	Los Alamitos				
242	Los Altos				
243	Los Altos Hills				
244	Los Angeles				
245	Los Banos				
246	Los Gatos				
247	Loyalton				
248	Lynwood				
249	Madera				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
250	Malibu				
251	Mammoth Lakes				
252	Manhattan Beach				
253	Manteca				
254	Maricopa				
255	Marina				
256	Martinez				
257	Marysville				
258	Maywood				
259	Mcfarland				
260	Mendota				
261	Menlo Park				
262	Merced				
263	Mill Valley				
264	Millbrae				
265	Milpitas	X	X	X	X
266	Mission Viejo				
267	Modesto				
268	Monrovia				
269	Montague				
270	Montclair				
271	Monte Sereno				
272	Montebello				
273	Monterey				
274	Monterey Park				
275	Moorpark				
276	Moraga				
277	Moreno Valley				
278	Morgan Hill				
279	Morro Bay				
280	Mount Shasta				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
281	Mountain View				
282	Murrieta				
283	Napa				
284	National City				
285	Needles				
286	Nevada City				
287	Newark				
288	Newman				
289	Newport Beach				
290	Norco				
291	Norwalk				
292	Novato				
293	Oakdale				
294	Oakland	X	X	X	X
295	Oakley				
296	Oceanside				
297	Ojai				
298	Ontario				
299	Orange				
300	Orange Cove				
301	Orinda				
302	Orland				
303	Oroville				
304	Oxnard				
305	Pacific Grove				
306	Pacifica				
307	Palm Desert				
308	Palm Springs				
309	Palmdale				
310	Palo Alto	X	X	X	X
311	Palos Verdes Estates				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
312	Paradise				
313	Paramount				
314	Parlier				
315	Pasadena				
316	Patterson				
317	Perris				
318	Petaluma	X	X	X	X
319	Pico Rivera				
320	Piedmont				
321	Pinole				
322	Pismo Beach				
323	Pittsburg				
324	Placentia				
325	Placerville				
326	Pleasant Hill				
327	Pleasanton	X	X	X	X
328	Plymouth				
329	Point Arena				
330	Pomona				
331	Port Hueneme				
332	Porterville				
333	Portola				
334	Portola Valley				
335	Poway				
336	Rancho Cordova	X	X	X	X
337	Rancho Cucamonga				
338	Rancho Mirage				
339	Rancho Palos Verdes				
340	Rancho Santa Margarita				
341	Red Bluff				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
342	Redding				
343	Redlands				
344	Redondo Beach				
345	Redwood City				
346	Reedley				
347	Rialto				
348	Richmond				
349	Ridgecrest				
350	Rio Dell				
351	Rio Vista				
352	Ripon				
353	Riverbank				
354	Riverside				
355	Rocklin				
356	Rohnert Park	X	X	X	X
357	Rolling Hills				
358	Rolling Hills Estates				
359	Rosemead				
360	Roseville				
361	Ross				
362	Sacramento	X	X	X	X
363	Salinas				
364	San Anselmo				
365	San Bernardino				
366	San Bruno				
367	San Buenaventura				
368	San Carlos				
369	San Clemente				
370	San Diego				
371	San Dimas				
372	San Fernando				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
373	San Francisco	X	X	X	X
374	San Gabriel				
375	San Jacinto				
376	San Joaquin				
377	San Jose	X	X	X	X
378	San Juan Bautista				
379	San Juan Capistrano				
380	San Leandro				
381	San Luis Obispo				
382	San Marcos				
383	San Marino				
384	San Mateo				
385	San Pablo				
386	San Rafael	X	X	X	X
387	San Ramon				
388	Sand City				
389	Sanger				
390	Santa Ana				
391	Santa Barbara				
392	Santa Clara	X	X	X	X
393	Santa Clarita				
394	Santa Cruz				
395	Santa Fe Springs				
396	Santa Maria				
397	Santa Monica				
398	Santa Paula				
399	Santa Rosa	X	X	X	X
400	Santee				
401	Saratoga				
402	Sausalito				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
403	Scotts Valley				
404	Seal Beach				
405	Seaside				
406	Sebastopol				
407	Selma				
408	Shafter				
409	Shasta Lake				
410	Sierra Madre				
411	Signal Hill				
412	Simi Valley				
413	Solana Beach				
414	Soledad				
415	Solvang				
416	Sonoma				
417	Sonora				
418	South El Monte				
419	South Gate				
420	South Lake Tahoe				
421	South Pasadena				
422	South San Francisco				
423	St Helena				
424	Stanton				
425	Stockton				
426	Suisun City				
427	Sunnyvale	X	X	X	X
428	Susanville				
429	Sutter Creek				
430	Taft				
431	Tehachapi				
432	Tehama				
433	Temecula				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
434	Temple City				
435	Thousand Oaks				
436	Tiburon				
437	Torrance				
438	Tracy				
439	Trinidad				
440	Truckee				
441	Tulare				
442	Tulelake				
443	Turlock				
444	Tustin				
445	Twentynine Palms				
446	Ukiah				
447	Union City				
448	Upland				
449	Vacaville				
450	Vallejo				
451	Vernon				
452	Victorville				
453	Villa Park				
454	Visalia				
455	Vista				
456	Walnut				
457	Walnut Creek				
458	Wasco				
459	Waterford				
460	Watsonville				
461	Weed				
462	West Covina				
463	West Hollywood				
464	West Los Angeles				

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Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
465	West Sacramento	X	X	X	X
466	Westlake Village				
467	Westminster				
468	Westmorland				
469	Wheatland				
470	Whittier				
471	Williams				
472	Willits				
473	Willows				
474	Windsor				
475	Winters				
476	Woodlake				
477	Woodland				
478	Woodside				
479	Yorba Linda				
480	Yountville				
481	Yreka				
482	Yuba City				
483	Yucaipa				
484	Yucca Valley				

Bidders may identify additional unsolicited locations where their Ethernet Services are available in Table 3.2.1.7.b. By indicating "X" in the table below, Contractor commits to providing the Services identified in this section. Commitment is subject to facility availability either through Contractor owned facilities or third-party agreements. Contractor's rates for the MAE services shall be the same for all geographic locations. Additional lines may be added as necessary. Bidders may reference Table 3.2.1.7.a or Table 3.2.1.7.b in their Catalog A, Geographic Availability response. Bidder's Catalog A language shall not conflict with the requirements described herein.

If Bidder is unable to identify all service areas within Table 3.2.1.7.a, Bidder shall provide additional information in the form of a coverage map that includes unincorporated areas.

Table 3.2.1.7.b – Unsolicited Bidder’s EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPLMAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

3.3 NETWORK DISASTER/OPERATIONAL RECOVERY

3.3.1 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 related CPUC and FCC requirements.

Bidder understands the Requirement and shall meet or exceed it? Yes X No___

3.3.2 DATA 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.

Bidder understands the Requirement and shall meet or exceed it? Yes X No___

3.4 OTHER SERVICES

3.4.1 HOURLY RATES FOR SERVICES

The hourly classifications of hours worked for services described in this section will be as follows:

1. 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.

3.4.2 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 3.5.8.9 (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:

1. 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.

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Bidder shall provide a price in the 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? Yes X No

The Contractor shall offer the wiring services for extended demarcation detailed in Table 3.4.2.a.

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
1	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 RJ48s or equivalent jack.	Y		302001
Bidder's Product Description: <i>The extension of any copper 4 pair category 5 or 5E facility from the Customers MPOE to any point up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, jumpers and connectors including the proper RJ 48 jacks or equivalent. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i> <i>This element is for such services performed Monday through Friday from 8:00AM to 4:59PM (PST or PDT), excepting State of California Holidays.</i>					

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
2	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 RJ48s or equivalent jack.	Y		302002
Bidder's Product Description: <i>The extension of any copper 4 pair category 5 or 5E facility from the Customers MPOE to any point up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, jumpers and connectors including the proper RJ 48 jacks or equivalent. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i> <i>This element is for such services performed Monday through Friday from 5:00PM to 7:59AM (PST or PDT) and all day Saturday, excepting State of California Holidays.</i>					
3	Extended Demarcation – Copper four-Pair – Sundays 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 RJ48s or equivalent jack.	Y		302003
Bidder's Product Description: <i>The extension of any copper 4 pair category 5 or 5E facility from the Customers MPOE to any point up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, jumpers and connectors including the proper RJ 48 jacks or equivalent. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i> <i>This element is for such services performed anytime on Sunday or State of California holidays.</i>					

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
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		302004
<p>Bidder's Product Description:</p> <p><i>The extension of any copper 25 pair category 5 or 5E facility from the Customers MPOE to the point of utilization, up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, Ten (10) 3 meter jumpers and connectors including one (1) patch panel and mounting hardware at the (IDF) and one(1) 24-port patch panel at the MPOE. The installation will be tested, labeled and documented. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed Monday through Friday from 8:00AM to 4:59PM (PST or PDT), excepting State of California Holidays.</i></p>					
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		302005
<p>Bidder's Product Description:</p> <p><i>The extension of any copper 25 pair category 5 or 5E facility from the Customers MPOE to the point of utilization, up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, Ten (10) 3 meter jumpers and connectors including one (1) patch panel and mounting hardware at the (IDF) and one(1) 24-port patch panel at the MPOE. The installation will be tested, labeled and documented. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed Monday through Friday from 5:00PM to 7:59AM (PST or PDT) and all day Saturday, excepting State of California Holidays.</i></p>					

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
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		302006
<p>Bidder's Product Description:</p> <p><i>The extension of any copper 25 pair category 5 or 5E facility from the Customers MPOE to the point of utilization, up to 300 feet in the customers provided conduit or wiring space as defined in 3.4.2. The service will include cable, attachments, Ten (10) 3 meter jumpers and connectors including one (1) patch panel and mounting hardware at the (IDF) and one(1) 24-port patch panel at the MPOE. The installation will be tested, labeled and documented. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed anytime on Sunday or State of California holidays.</i></p>					
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		302007
<p>Bidder's Product Description:</p> <p><i>The extension of one (1) each 62.5/125 – or 50/125 – micron, <u>two-strand</u> 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. This facility is from the Customers MPOE to the point of utilization, up to 1000 feet in the customers provided conduit or wiring space as defined in 3.4.2. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed Monday through Friday from 8:00AM to 4:59PM (PST or PDT), excepting State of California Holidays.</i></p>					

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
8	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		302008
<p>Bidder's Product Description:</p> <p><i>The extension of one (1) each 62.5/125 – or 50/125 – micron, <u>two-strand</u> 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. This facility is from the Customers MPOE to the point of utilization, up to 1000 feet in the customers provided conduit or wiring space as defined in 3.4.2. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed Monday through Friday from 5:00PM to 7:59AM (PST or PDT) and all day Saturday, excepting State of California Holidays.</i></p>					
9	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.	Y		302009
<p>Bidder's Product Description:</p> <p><i>The extension of one (1) each 62.5/125 – or 50/125 – micron, <u>two-strand</u> 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. This facility is from the Customers MPOE to the point of utilization, up to 1000 feet in the customers provided conduit or wiring space as defined in 3.4.2. Work shall conform to the State Telecommunications Management Manual Facilities Management Chapter, Uniform Building Cabling/Wiring standards.</i></p> <p><i>This element is for such services performed anytime on Sunday or State of California holidays.</i></p>					

The Contractor may offer additional extended demarcation wiring services in Table 3.4.2.b.

Table 3.4.2.b Unsolicited Extended Demarcation Wiring Services

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

3.4.3 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 Contractors responsibilities Work performed under this Section 3.4.3 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 Cost Worksheet 3.4.3, 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 emergency restoration services as detailed in Table 3.4.3.

Table 3.4.3 Services Related Hourly Support

	Labor Classification Name	Classification Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
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.	Y		303001
Bidder's Product Description: <i>One hour of service as labor performed by a properly trained field service technician familiar with the suppliers network service components, cabling and systems. This element is for such services performed Monday through Friday from 8:00AM to 4:59PM (PST or PDT), excepting State of California Holidays.</i>					
2	Field Service Repair Technician Overtime 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		303002
Bidder's Product Description: <i>One hour of service as labor performed by a properly trained field service technician familiar with the suppliers network service components, cabling and systems. This element is for such services performed Monday through Friday from 5:00PM to 7:59AM (PST or PDT) and all day Saturday, excepting State of California Holidays.</i>					
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		303003
Bidder's Product Description: <i>One hour of service as labor performed by a properly trained field service technician familiar with the suppliers network service components, cabling and systems. This element is for such services performed anytime on Sunday or State of California holidays.</i>					

3.5 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 solicitation.

3.5.1 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 shall include source of data and define the points of measurement within the system, application, or network;
4. Service(s) - All applicable Categories or Subcategories 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 an invoice credit or refund when an 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 ___

3.5.2 TECHNICAL REQUIREMENTS VERSUS SLA OBJECTIVES

Sections 3.2 (Ethernet Services), 3.3 (Network Disaster/Operational Recovery) and 3.4 (Other Services) 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.

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

3.5.3 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 on-line Trouble Ticket Reporting Tool (IFB STPD 12-001-B Business Requirements Section B.9.4).

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 STPD 12-001-B Business Requirements Section B.9.4) and monitor and report to Customer until service is restored.

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

3.5.4 **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 No

3.5.5 CONTRACTOR SLA MANAGEMENT PLAN

Within 90 calendar days of Contract award, the Contractor shall provide CALNET 3 CMO with a detailed SLA Management Plan that describes how the Contractor will 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;
2. Contractor's process for measuring objectives for each SLA. The process shall explain 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;
3. Creation and delivery of SLA Reports (IFB STPD 12-001-B Business Requirements Section B.9.5). The Contractor shall include a sample report in accordance with IFB STPD 12-001-B Business Requirements Section B.9.5 (SLA Reports) for the following: SLA Service Performance Report (Section IFB STPD 12-001-B Business Requirements Section B.9.5.1), SLA Provisioning Report (IFB STPD 12-001-B Business Requirements Section B.9.5.2), and SLA Catastrophic Outage Reports (IFB STPD 12-001-B Business Requirements Section B.9.5.3). The Contractor shall commit to a monthly due date. The reports shall be provided to the CALNET 3 CMO via the Private Oversight Website (IFB STPD 12-001-B Business Requirements Section B.9.2);
4. SLA invoicing credit and refund process;
5. Contractor SLA problem resolution process for SLA management and SLA reporting. 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 SLA Manager contact information for SLA inquiries and issue resolution for Customer and CALNET 3 CMO.

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

3.5.6 TECHNICAL SLA GENERAL REQUIREMENTS

The Contractor shall adhere to the following general requirements which apply to all CALNET 3 Technical SLAs (Section 3.5.8):

1. With the exception of the Provisioning SLA, 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). Services with usage charges shall apply the Average Daily Usage Charge (ADUC) in addition to any applicable TMRC rights and remedies;
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;

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3. The Contractor shall apply CALNET 3 SLAs and remedies for services provided by Subcontractors and/or Affiliates;
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 Technical 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 for the Provisioning SLA;
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 the SLAs to CALNET 3 CMO for possible inclusion via amendments;
9. The Contractor shall apply CALNET 3 SLAs and remedies to services provided in all areas the Contractor provides service and/or open to competition (as defined by the CPUC). Any SLAs and remedies negotiated between Contractor and Incumbent Local Exchange Carriers in territories closed to competition shall be passed through to the CALNET 3 Customer;
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 Subcontractors, Affiliates or resellers under this Contract;
13. The Customer Escalation Process (IFB STPD 12-001-B Business Requirements Section B.3.4.2) and/or the CALNET 3 CMO Escalation Process (IFB STPD 12-001-B Business Requirements Section B.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 STPD 12-001-B Business Requirements Section B.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 ___

3.5.7 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 3.5.7 and include start and stop time stamps in the Contractor’s Trouble Ticket Reporting Tool (IFB STPD 12-001-B Business Requirements Section B.9.4) for each application of a SCC.

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 3.5.7.

Table 3.5.7 – Stop Clock Conditions (SCC)

#	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 Service Request 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.

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Table 3.5.7 – Stop Clock Conditions (SCC)

#	Stop Clock Condition (SCC)	SCC Definition
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.
6	FACILITIES	Lack of building entrance Facilities or conduit structure that are the End-User's responsibility to provide.
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: <ul style="list-style-type: none"> a. Access necessary to correct the problem is not available because access has not been arranged by site contact or End-User representative; b. Site contact refuses access to technician who displays proper identification; 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 steps to obtain the correct information ; or, d. 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	CPE	Repair/replacement of Customer Premise Equipment (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.

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Table 3.5.7 – Stop Clock Conditions (SCC)

#	Stop Clock Condition (SCC)	SCC Definition
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.
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 Subcontractors and Affiliates 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 PMAC General Provisions - Telecommunications, Section 28 (Force Majeure).

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

3.5.8 TECHNICAL SERVICE LEVEL AGREEMENTS

The Contractor shall provide and manage the following Technical SLAs.

3.5.8.1 Availability (M-S)

SLA Name: Availability																					
Definition: The percentage of time a CALNET 3 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 service (Per Circuit ID), 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.																					
Services:																					
MAE Service																					
Objective(s): The objective shall be based on the UNI physical interface:																					
	<table border="1"> <thead> <tr> <th></th> <th>Basic (B)</th> <th>Standard (S)</th> <th>Premier (P)</th> <th>Bidders Objective Commitment (B, S or P)</th> </tr> </thead> <tbody> <tr> <td>EPL, EP-LAN and EVPL MAE Service 10/100 Mbps</td> <td>≥ 99.2%</td> <td>≥ 99.5%</td> <td>≥ 99.9%</td> <td>P</td> </tr> <tr> <td>EPL, EP-LAN and EVPL MAE Service 1Gbps</td> <td>≥ 99.2%</td> <td>≥ 99.5%</td> <td>≥ 99.9%</td> <td>P</td> </tr> <tr> <td>EPL, EP-LAN and EVPL MAE Service 10 Gbps</td> <td>≥ 99.2%</td> <td>≥ 99.5%</td> <td>≥ 99.9%</td> <td>P</td> </tr> </tbody> </table>		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)	EPL, EP-LAN and EVPL MAE Service 10/100 Mbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P	EPL, EP-LAN and EVPL MAE Service 1Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P	EPL, EP-LAN and EVPL MAE Service 10 Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)																	
EPL, EP-LAN and EVPL MAE Service 10/100 Mbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P																	
EPL, EP-LAN and EVPL MAE Service 1Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P																	
EPL, EP-LAN and EVPL MAE Service 10 Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P																	
Rights and Remedies	Per Occurrence: N/A																				
	<p>Monthly Aggregated Measurements: First month the service fails to meet the committed SLA objective shall result in a 15 percent rebate of the TMRC. The second consecutive month the service fails to meet the committed SLA objective shall result in a 30 percent rebate of TMRC. Each additional consecutive month the service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC.</p>																				

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

3.5.8.2 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 the failure of five (5) UNIs or any cumulative UNI failure equal to, or greater than, 10 Gbps.											
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 shall open a trouble ticket for each service (Circuit ID) affected by a common cause. Each End-User service is deemed out of service from the first notification until the Contractor determines the End-User 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):											
MAE Service											
Objective (s): The objective restoral time shall be:											
	<table border="1"> <thead> <tr> <th></th> <th>Basic (B)</th> <th>Standard (S)</th> <th>Premier (P)</th> <th>Bidders Objective Commitment (B, S or P)</th> </tr> </thead> <tbody> <tr> <td>MAE Service</td> <td>≤ 3 hours</td> <td>≤ 2 hours</td> <td>≤ 1 hour</td> <td>S</td> </tr> </tbody> </table>		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)	MAE Service	≤ 3 hours	≤ 2 hours	≤ 1 hour	S
	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)							
MAE Service	≤ 3 hours	≤ 2 hours	≤ 1 hour	S							
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										
	Monthly Aggregated Measurements: N/A										

Bidder understands the Requirement and shall meet or exceed it? Yes X No___

3.5.8.3 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 a 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):				
MAE Service				
Objective (s): The objective restoral time shall be:				
				Bidders Objective Commitment (B, S or P)
	Basic (B)	Standard (S)	Premier (P)	
MAE Service	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	S
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 2 fault			
	Monthly Aggregated Measurements: N/A			

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

3.5.8.4 Catastrophic Outage 3 (CAT 3) (M-S)

SLA Name: Catastrophic Outage 3 (CAT 3)											
Definition: The total loss of one (1) or more CALNET 3 services on a system wide basis.											
<p>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 a common cause. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or 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.</p>											
Service(s):											
MAE Service											
<p>Objectives:</p> <p>The objective restoral time shall be:</p> <table border="1" data-bbox="479 1010 1377 1163"> <thead> <tr> <th></th> <th>Basic (B)</th> <th>Standard (S)</th> <th>Premier (P)</th> <th>Bidders Objective Commitment (B or P)</th> </tr> </thead> <tbody> <tr> <td>MAE Service</td> <td>≤ 30 minutes</td> <td>N/A</td> <td>≤ 15 minutes</td> <td>B</td> </tr> </tbody> </table>			Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or P)	MAE Service	≤ 30 minutes	N/A	≤ 15 minutes	B
	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or P)							
MAE Service	≤ 30 minutes	N/A	≤ 15 minutes	B							
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 3 fault.										
	Monthly Aggregated Measurements: N/A										

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

3.5.8.5 Excessive Outage (M-S)

SLA Name: Excessive Outage					
Definition: A service failure that remains unresolved for more than the committed 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.					
Service(s):					
MAE Service					
Objective (s): The Unavailable Time objective shall not exceed:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	MAE Service	16 hours	12 hours	8 hours	S
Rights and Remedies	Per Occurrence: 100 percent of the TMRC 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				

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

3.5.8.6 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, Contractor, Subcontractor or Affiliate network event, 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 regarding the nature of the outage may be limited.	
Measurement Process: The Contractor shall adhere to the Network Outage Response requirements (IFB STPD 12-001-B Business Requirements Section B.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 natural disaster, the Contractor shall notify CALNET 3 CMO and designated stakeholder when information is available.	
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 STPD 12-001-B Business Requirements Section B.3.3 (Network Outage Response). At 60 minute intervals, updates shall be given on the above mentioned failures via the method defined in Section IFB STPD 12-001-B Business Requirements Section B.3.3 (Network Outage Response). This objective is the same for Basic, Standard and Premier 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___

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3.5.8.7 Latency (M-S)

SLA Name: Latency				
Definition: Latency is the amount of time necessary for a typical Ethernet frame to traverse one way from the originating UNI, across the Contractor's, Affiliate, or Subcontractor's network, to the remote UNI(s) on each EVC identified by the Customer.				
Measurement Process: End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Latency exceeds the committed level. Latency shall be measured from the first bit of and Ethernet frame entering the ingress UNI to when the last bit of the same frame leaves the egress UNI. The problem requires timely verification, consistent with industry standards, by the Contractor. Tickets identified as a Latency 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):				
MAE Service				
Objective (s): The Unavailable Time objective shall not exceed:				
				Bidders Objective Commitment (B, S or P)
	Basic (B)	Standard (S)	Premier (P)	
MAE Service	≤ 75ms	≤ 50ms	≤ 25ms	P
Rights and Remedies	Per Occurrence: 15 percent of the TMRC for the reported service Next consecutive month to fail to meet the committed SLA objectives shall result in a 25 percent rebate of TMRC. Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35 percent rebate of TMRC.			
	Monthly Aggregated Measurements: N/A			

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

3.5.8.8 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 the difference between the number of packets transmitted at the ingress UNI and the total number of packets received at the egress UNI.					
Measurement Process: End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the packet 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):					
MAE Service					
Objective (s): The Packet Loss objective shall not exceed:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	MAE Service	≤ .7% packet loss	≤ .5% packet loss	≤ .2% packet loss	S
Rights and Remedies	Per Occurrence: 15 percent of the TMRC for the reported service Next consecutive month to fail to meet the committed SLA objectives shall result in a 25 percent rebate of TMRC. Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35 percent rebate of TMRC.				
	Monthly Aggregated Measurements: N/A				

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

3.5.8.9 Provisioning (M-S)

SLA Name: Provisioning					
<p>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 SOW in accordance with IFB STPD 12-001-B Section B.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 Request(s) meets the Coordinated or Managed Project criteria, negotiated due dates will be established and documented in the Project Schedule per IFB STPD 12-001-B Business Requirements Section B.6 (Contracted Service Project Work).</p> <p>Provisioning SLAs have two (2) objectives:</p> <p>Objective 1: Individual Service Request; and</p> <p>Objective 2: Successful Install Monthly Percentage by Service Type.</p> <p>Note: Provisioning timelines include extended demarcation wiring, when appropriate.</p>					
<p>Measurement Process:</p> <p><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.</p> <p><u>Objective 2: Successful Install Monthly Percentage per service Type:</u> 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.</p>					
Service (Features must be installed in conjunction with the service except when listed below)		Committed Interval Calendar Days	Coordinated/Managed Project		
MAE Service		30	Coordinated/Managed Project		
<p>Objective (s):</p> <p>Objective 1: Individual Service Request: Service installed on or before the Committed Interval or negotiated due date.</p> <p>Objective 2: Successful Install Monthly Percentage per Service:</p>					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (S or P)
MAE Service		N/A	≥ 90%	≥ 95%	S
Rights and Remedies	<p>Per Occurrence:</p> <p>Objective 1: Individual Service Requests: 50 percent of installation fee credited to Customer for any missed committed objective.</p>				
	<p>Monthly Aggregated Measurements:</p> <p>Objective 2: 100 percent of the installation fee credited to Customer for all Service Requests (per service type) that did not complete on time during the month if the Successful Install Monthly Percentage is below the committed objective.</p>				

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

3.5.8.10 Time to Repair (TTR) (M-S)

SLA Name: Time to Repair (TTR)					
Definition: A service outage that remains unresolved for more than the committed 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):					
MAE Service					
Objective (s): The Unavailable Time objective shall not exceed:					
	Service	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or S)
	MAE Service	6 hours	4 hours	N/A	S
Rights and Remedies	Per Occurrence: 25 percent of the TMRC per occurrence for each service (Circuit ID) out of service for a period greater than the committed objective level.				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes X No___

3.5.8.11 Managed Service Proactive Notification (M-S)

SLA Name: Managed Service Proactive Notification	
<p>Definition: The proactive outage notification provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed router service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET 3 CMO.</p> <p>An Outage is defined as an unscheduled period in which the managed router service is 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.</p>	
<p>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 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</p>	
Service(s):	
MAE Services, with Managed Router	
Objective (s): 15 Minutes	
Rights and Remedies	Per Occurrence: Customer will receive a credit equal to ten percent of the TMRC for Managed Internet 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

Bidder understands the Requirement and shall meet or exceed it? Yes_ ___ No ___

3.5.8.12 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 No

3.5.8.13 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 3.5 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 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 No

3.5.8.14 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 3.5.8.

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