## INVITATION FOR BID

## IFB C4DNC\$19 Data Networks and Communications Services

# CATEGORY 24 – FLAT RATE INTERNET SERVICES

Level 3 Communications, LLC dba CenturyLink dba LUMEN

Statement of Work

TECHNICAL REQUIREMENTS

March 5, 2020

**BAFO** 

Issued by:

STATE OF CALIFORNIA

California Department of Technology Statewide Procurement

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Disclaimer: The original PDF version and any subsequent addendums of the IFB released by the Procurement Official of this Bid remain the official version. In the event of any inconsistency between the Bidder's versions, articles, attachments, specifications or provisions which constitute the Contract, the official State version of the IFB in its entirety shall take precedence.

## AMENDMENT LOG

Amendment #	Date	Amendment Description
1	4/9/2021	Updated Table 24.2.5.2.b – Unsolicited Internet Flat Rate with Managed Router Service Feature name line item #4 Updated Table 24.2.7 – Additional Unsolicited Internet Services Updated Table 24.4.4.b - DDoS Detection and Mitigation Services Updated Table 24.5.2.2 – Unsolicited Services Related Infrastructure

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## TECHNICAL REQUIREMENTS CATEGORY 24 – Flat Rate Internet Services

## 24.1 OVERVIEW

This Category 24 IFB C4DNCS19 (IFB) provides the State's solicitation for best value solutions for Flat Rate Internet Services. This IFB also describes the technical requirements necessary to support the CALNET program requirements.

This IFB will be awarded to Bidders that meet the award criteria as described in IFB C4DNC\$19 Part 1, Bid Evaluation. The CALNET Data Networks and Communications (DNC\$) Contract(s) that result from the award of this IFB will be managed on a day-to-day basis by the CALNET Contractor Management Organization (CALNET CMO).

## 24.1.1 Bidder Response Requirements

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

1. Example A (for responses that require confirmation that the Bidder understands and accepts the requirement):

"Bidder understands this requirement and shall meet or exceed it?"

Or,

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

"Bidder understands the requirements and shall meet or exceed them?"

Description:"

Or,

3. Example C (for responses contained in Technical Feature and/or Service Tables):

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No.
1					Choose an item.

## 24.1.2 Designation of Requirements

All Technical Requirements specified in this IFB are Mandatory and must be responded to as identified in IFB Part 1, SOW Mandatory Technical Requirements by the Bidder. Additionally, some Mandatory requirements are "Mandatory-Scorable" and are designated as "(M-S)".

Costs associated with services shall be included in the prices provided by the Bidder for the individual items included in the Category Cost Worksheets.

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

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

#### 24.1.3 Pacific Time Zone

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

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

#### 24.2 FLAT RATE INTERNET SERVICE

The Contractor shall provide dedicated Internet access service that provides high-speed Internet access through communications facilities managed by the Contractor.

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

## 24.2.1 Internet Services General Requirements

The Contractor's network shall connect a Customer's Local Area Network (LAN) or application to the Internet by providing highly reliable transport and Internet Protocol (IP) connectivity. The service shall use the Transmission Control Protocol/Internet Protocol (TCP/IP) to interconnect customer premise equipment (CPE) to the public Internet Service Provider (ISP) networks.

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

## 24.2.2 Network Capabilities

The Contractor's network shall have:

1. Established public peering arrangements from the Contractor's network to the Internet.

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

2. Private peering arrangements established from the Contractor's network with redundant links to connect to its private peering partners.

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

3. Support for Customer assigned and Internet Corporation for Assigned Names and Numbers (ICANN) registered IP addresses and domain names.

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

4. Primary and Secondary Domain Name Service (DNS) to provide an authoritative name server for the Customer.

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

5. The Contractor shall provide support for the border gateway protocol (BGP) for Customers with registered Autonomous System (AS) numbers, if applicable.

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

## 24.2.2.1 Contractor Wi-Fi Hotspot Service Offerings

The Contractor shall not configure services utilizing state-funded (or leased) infrastructure or resources to provide Contractor branded Wi-Fi hotspots for a fee/subscription to the general public. Use of any publicly funded power, facilities, or infrastructure in State leased or owned buildings to provide Contractor fee based Wi-Fi services is considered a gift of public funds.

The Contractor shall not provide Contractor branded Wi-Fi hotspot services for non-CALNET users by piggybacking onto CALNET Customer primary installations or by any other means that utilize publicly funded assets. This restriction includes but is not limited to installation of secondary equipment, circuits, or data channels both land based and wireless.

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

## 24.2.3 Standards

Dedicated Internet Services shall comply with the following standards, as applicable, and when commercially available by the Contractor:

- 1. Internet Engineering Task Force (IETF) Requests for Comments (RFCs);
- Bidder understands this Requirement and shall meet or exceed it? Yes
  - 2. ANSI T1;
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 3. ATM Forum
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 4. ITU TSS Recommendations;
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 5. Frame Relay Forum implementation agreements;
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 6. North American ISDN Users Forum (NIUF);
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 7. IEEE 802.3 Ethernet Standards:
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 8. Metro Ethernet Forum (MEF);
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 9. IETF RFCs for IPv6 when offered commercially by the Contractor;
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 10. All new versions, amendments, and modifications to the above documents and standards as they become commercially available.
- Bidder understands the Requirement and shall meet or exceed it? Yes
  - 24.2.4 Network Operations and Management
    - 24.2.4.1 General Description

The Contractor's data network(s) shall meet established industry standards.

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

## 24.2.4.2 Network Operations Center

The Contractor shall maintain a Network Operations Center (NOC) that is staffed 24x7 that coordinates and manages all data traffic.

The NOC shall perform the following services:

1. Network surveillance:

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

2. Fault management (trouble identification, isolation and notification); and,

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

3. Monitor network performance in near real-time to identify capacity blockages and implement controls to optimize network health and performance immediately.

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

## 24.2.4.3 Security

## 24.2.4.3.1 Physical Access

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

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

24.2.4.3.2 Network Security

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

- 1. The Contractor's network equipment locations and data centers shall use carrier grade platforms; and,
- 2. All equipment shall be in a hardened facility and all unnecessary services shall be disabled or removed.

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

## 24.2.4.3.3 Security Incident Notifications

Upon discovery, the Contractor shall provide the Customer and designated State representatives with Security Incident notifications that impact CALNET Customers, via telephonic means and email. For purposes of this section, Security Incident is defined in the State Administrative Manual (SAM), Section 5300.4.

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

24.2.4.3.4 Data Breach Reporting

If Contractor determines that a breach of data has occurred that may involve CALNET Customer data, the nature and scope of the breach (as it affects Customer data) shall be reported to both the Customer and the CALNET CMO within 24 hours of that determination.

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

## 24.2.5 Dedicated Internet Flat Rate Services Technical Requirements

The service shall connect a Customer's LAN or application to the Internet by providing highly reliable transport and IP connectivity to the internet.

The speeds in the Feature Names in Table 24.2.5.1b indicate download speeds. Bidder shall indicate the upload speeds in the Bidder's Product Description in Tables 24.2.5.1.b, 24.2.5.2.a, 24.2.5.3.b.

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

## 24.2.5.1 Internet Flat Rate Service (InFRa)

The Contractor shall provide Internet Flat Rate Service (InFRa) at the speeds identified in Table 24.2.5.1.b. The services shall consist of a dedicated Internet port and transport, on the Contractor's private network, from the Customer site to the nearest Contractor Point-of-Presence (POP). The service shall include all equipment, cabling and labor required to provide a User-to-Network Interface (UNI) at the Customer premise Minimum Point of Entry (MPOE).

The Bidder shall describe the User-to-Network Interface characteristics in the Bidder's Product Description, Features, Limitations and Restrictions column row provided in Table 24.2.4.1.b using Table 24.2.4.1.a below, which is provided only as a guide. Contractors shall follow the format as closely as possible if the guide content does not align with a particular Contractor technology or offering.

The Bidder's Product Description shall include the following at a minimum:

- 1. Interface/Access Type(s);
- 2. Network-Side Interface, if applicable;
- 3. Protocol(s) applicable to each speed; and,
- 4. Upload Speed.

Table 24.2.5.1.a – InFRA UNI Guide

Line	Interface/Access		
Item	Туре	Network-Side Interface	Protocol
1	Cable High Speed Access	DOCSISX	Point-to-Point Protocol, IPv4/v6
2	Ethernet Interface	1 Mbps up to 1 GbE (Gigabit Ethernet) 10 GbE	Point-to-Point Protocol, IPv4/v6
3	IP over SONET Service	OC-3c OC-12c OC-48c OC-192c	IP/PPP over SONET
4	Private Line Service (PLS)	T1 Fractional T3 T3 OC-3c OC-12c OC-48c OC-192c	IPv4/v6 over PLS
5	DSL Service	xDSL Access	Point-to-Point Protocol IPv4/v6
6	Other		

Bidders must provide at least one service/solution for each InFRa speed listed in Table 24.2.5.1.b. Additional Internet Flat Rate Services that utilize different UNI's with different product identifiers and associated costs should be listed in an Unsolicited table in the same fashion as Table 24.2.5.1.b.

## Table 24.2.5.1.b – Internet Flat Rate Service

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
1	InFRa @ 1.544 Mbps	Internet Flat Rate Service (InFRa) at 1.544 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: T1 Private Line Service Network-side Interface: T1 Protocol: IPv4/v6 over PLS Upload Speed: 1.544 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0001	Yes
2	InFRa @ 5 Mbps	Internet Flat Rate Service (InFRa) at 5 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 5 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0002	Yes
3	InFRa @ 10 Mbps	Internet Flat Rate Service (InFRa) at 10 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 10 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0003	Yes

			Bidder's Product	Bidder's	Bidder Meets or
Line Item	Feature Name	Feature Description	Description, Restrictions and Limitations	Product Identifier	Exceeds? Yes/No
4	InFRa @ 15 Mbps	Internet Flat Rate Service (InFRa) at 15 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 15 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0004	Yes
5	InFRa @ 20 Mbps	Internet Flat Rate Service (InFRa) at 20 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 20 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0005	Yes
6	InFRa @ 25 Mbps	Internet Flat Rate Service (InFRa) at 25 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 25 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0006	Yes

			Bidder's Product	Bidder's	Bidder Meets or
Line Item	Feature Name	Feature Description	Description, Restrictions and Limitations	Product Identifier	Exceeds? Yes/No
7	InFRa @ 30 Mbps	Internet Flat Rate Service (InFRa) at 30 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 30 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0007	Yes
8	InFRa @ 35 Mbps	Internet Flat Rate Service (InFRa) at 35 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 35 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0008	Yes
9	InFRa @ 40 Mbps	Internet Flat Rate Service (InFRa) at 40 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 40 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0009	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
10	InFRa @ 45 Mbps	Internet Flat Rate Service (InFRa) at 45 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 45 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0010	Yes
11	InFRa @ 50 Mbps	Internet Flat Rate Service (InFRa) at 50 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 50 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0011	Yes
12	InFRa @ 55 Mbps	Internet Flat Rate Service (InFRa) at 55 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 55 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0012	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
13	InFRa @ 60 Mbps	Internet Flat Rate Service (InFRa) at 60 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 60 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0013	Yes
14	InFRa @ 100 Mbps	Internet Flat Rate Service (InFRa) at 100 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 100 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0014	Yes
15	InFRa @ 150 Mbps	Internet Flat Rate Service (InFRa) at 150 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 150 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0015	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
16	InFRa @ 200 Mbps	Internet Flat Rate Service (InFRa) at 200 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 200 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0016	Yes
17	InFRa @ 500 Mbps	Internet Flat Rate Service (InFRa) at 500 Mbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 500 Mbps Product Description: Dedicated Symmetrical Internet Service	DIA-0017	Yes
18	InFRa @ 1 Gbps	Internet Flat Rate Service (InFRa) at 1 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 1 Gbps Product Description: Dedicated Symmetrical Internet Service	DIA-0018	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
19	InFRa @ 10 Gbps	Internet Flat Rate Service (InFRa) at 10 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 10 Gbps Product Description: Dedicated Symmetrical Internet Service	DIA-0019	Yes

The Contractor may offer Unsolicited Flat Rate Internet Service or features in Table 24.2.5.1.c.

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Table 24.2.5.1.c – Unsolicited Internet Flat Rate Service Offering

Line	Feature		Bidder's Product Description,	Bidder's Product
Item	Name	Feature Description	Restrictions and Limitations	Identifier
1	InFRa @ 2 Gbps	Internet Flat Rate Service (InFRa) at 2 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 2 Gbps Product Description: Dedicated	
2	InFRa @ 3 Gbps	Internet Flat Rate Service (InFRa) at 3 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 3 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0001
3	InFRa @ 4 Gbps	Internet Flat Rate Service (InFRa) at 4 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 4 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0003
4	InFRa @ 5 Gbps	Internet Flat Rate Service (InFRa) at 5 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 5 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0004

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5	InFRa@6	Internet Flat Rate	Interface/Access Type: Ethernet	
	Gbps	Service (InFRa) at 6	Interface	
		Gbps. Includes dedicated Internet	Network-side Interface: 10 GbE	
			Protocol: Point-to-Point Protocol, IPv4/v6	
		port and transport.	Upload Speed: 6 Gbps	
			Product Description: Dedicated	
			Symmetrical Internet Service	DIAU-0005
6	InFRa @ 7	Internet Flat Rate	Interface/Access Type: Ethernet	DI7 (0-0005
	Gbps	Service (InFRa) at 7	Interface	
		Gbps. Includes	Network-side Interface: 10 GbE	
		dedicated Internet	Protocol: Point-to-Point Protocol,	
		port and transport.	IPv4/v6	
			Upload Speed: 7 Gbps	
			Product Description: Dedicated	
			Symmetrical Internet Service	DIAU-0006
7	InFRa @ 8	Internet Flat Rate	Interface/Access Type: Ethernet	
	Gbps	Service (InFRa) at 8	Interface	
		Gbps. Includes	Network-side Interface: 10 GbE	
		dedicated Internet	Protocol: Point-to-Point Protocol,	
		port and transport.	IPv4/v6	
			Upload Speed: 8 Gbps	
			Product Description: Dedicated	511110007
0	L-FD- O	I.I I Flat Data	Symmetrical Internet Service	DIAU-0007
8	InFRa@9	Internet Flat Rate	Interface/Access Type: Ethernet	
	Gbps	Service (InFRa) at 9	Interface Network-side Interface: 10 GbE	
		Gbps. Includes dedicated Internet	Protocol: Point-to-Point Protocol,	
		port and transport.	IPv4/v6	
		por and narsport.	Upload Speed: 9 Gbps	
			Product Description: Dedicated	
			Symmetrical Internet Service	DIAU-0008
9	InFRa @ 20	Internet Flat Rate	Interface/Access Type: Ethernet	
	Gbps	Service (InFRa) at 20	Interface	
		Gbps. Includes	Network-side Interface: 100 GbE	
		dedicated Internet	Protocol: Point-to-Point Protocol,	
		port and transport.	IPv4/v6	
			Upload Speed: 20 Gbps	
			Product Description: Dedicated	
			Symmetrical Internet Service	DIAU-0009

10	InFRa @ 30 Gbps	Internet Flat Rate Service (InFRa) at 30 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 30 Gbps	
			Product Description: Dedicated Symmetrical Internet Service	DIAU-0010
11	InFRa @ 40 Gbps	Internet Flat Rate Service (InFRa) at 40 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 40 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0011
12	InFRa @ 50 Gbps	Internet Flat Rate Service (InFRa) at 50 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 50 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0012
13	InFRa @ 60 Gbps	Internet Flat Rate Service (InFRa) at 60 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 60 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0013
14	InFRa @ 70 Gbps	Internet Flat Rate Service (InFRa) at 70 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 70 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0014

	T	1		
15	InFRa @ 80 Gbps	Internet Flat Rate Service (InFRa) at 80 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 80 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0015
16	InFRa @ 90 Gbps	Internet Flat Rate Service (InFRa) at 90 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 90 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0016
17	InFRa @ 100 Gbps	Internet Flat Rate Service (InFRa) at 100 Gbps. Includes dedicated Internet port and transport.	Interface/Access Type: Ethernet Interface Network-side Interface: 100 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 100 Gbps Product Description: Dedicated Symmetrical Internet Service	DIAU-0017

## 24.2.5.2 Internet Flat Rate with Managed Router Service (InFRaM)

The Contractor shall provide Internet Flat Rate with Managed IP Enabled Routing Device Service at the speeds identified in Table 24.2.5.2.a. The services shall consist of a dedicated Internet Port and Transport from the Customer site to the nearest contractor POP. The service shall include all equipment, cabling and labor required to provide a UNI at the Customer premise MPOE and a Contractor owned, maintained and managed IP enabled routing device.

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

The service shall include a Contractor owned, maintained and managed IP enabled routing device. Bidder shall provide a description of the type of

equipment, maintenance and management services that the Contractor will deploy to satisfy this requirement.

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

All Bidder equipment, tasks and services required for provisioning of the services described in Table 24.2.5.2.a will be included in the charges for the features/services listed in those tables unless specifically identified as not part of the mandatory service and proposed in Table 24.2.5.2.b.

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

The Contactor's managed IP enabled routing device service shall include proactive Customer notification as identified in the Service Level Agreements.

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

The Contractor shall provide customers full read only access to the managed router or managed IP enabled routing device.

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

The Contractor shall offer the InFRaM Services detailed in Table 24.2.5.2.a.

The Bidder shall describe the User-to-Network Interface characteristics in the Bidder's Product Description, Restrictions, and Limitations column row provided in Table 24.2.5.2.a using Table 24.2.5.1.a, which is provided only as a guide. Contractors shall follow the format as closely as possible if the guide content does not align with a particular Contractor technology or offering.

The Bidder's Product Description shall include the following at a minimum:

- Interface/Access Type(s);
- 2. Network-Side Interface, if applicable;
- 3. Protocol(s) applicable to each speed; and,
- 4. Upload Speed.

Table 24.2.5.2.a – Internet Flat Rate with Managed Router Service

Line Item	Feature	Factore Description	Bidder's Product Description, Restrictions	Bidder's Product	Bidder Meets or Exceeds?
1	Name InFRaM @ 1.544 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 1.544 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP	Interface/Access Type: T1 Private Line Service Network-side Interface: T1 Protocol: IPv4/v6 over PLS Upload Speed: 1.544 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	Identifier	Yes/No Yes
		enabled routing device.	Maintained IP Router	DIAM- 0001	
2	InFRaM @ 5 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 5 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 5 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0002	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product  Description, Restrictions  and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
3	InFRaM @ 10 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 10 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 10 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided,		Yes
		enabled routing device.	Managed, and 24x7 Maintained IP Router	DIAM- 0003	
4	InFRaM @ 15 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 15 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 15 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0004	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product  Description, Restrictions  and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
5	InFRaM @ 20 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 20 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 20 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided,		Yes
		enabled routing device.	Managed, and 24x7 Maintained IP Router	DIAM- 0005	
6	InFRaM @ 25 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 25 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 25 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0006	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
7	InFRaM @ 30 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 30 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 30 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided,		Yes
		enabled routing device.	Managed, and 24x7 Maintained IP Router	DIAM- 0007	
8	InFRaM @ 35 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 35 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 35 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	DIAM-	Yes
		and managed IP	CenturyLink Provided,	DIAM- 0008	

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
9	InFRaM @ 40 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 40 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 40 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	DIAM-	Yes
10	InFRaM @ 45 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 45 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Maintained IP Router Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 45 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	0009 DIAM- 0010	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
11	InFRaM @ 50 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 50 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 50 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	DIAM-	Yes
		device.	Maintained IP Router	0011	
12	InFRaM @ 55 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 55 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: Fast Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 55 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0012	Yes

13 InFRaM 60 Mb	bps Service with Managed IP Enabled Rou Device (InFR	Ethernet Interface Network-side Interface:
_	60 Mbps. Inc dedicated In port, transpo a Contracto owned, mail and manage	ort, and Dedicated Symmetrical Internet Service with
_	enabled rou device.	uting Managed, and 24x7 DIAM- Maintained IP Router 0013
		Ethernet Interface Network-side Interface: Past Ethernet Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 100 Mbps Product Description: Dedicated Symmetrical

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
15	InFRaM @ 150 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 150 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 150 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	DIAM-	Yes
		device.	Maintained IP Router	0015	
16	InFRaM @ 200 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 200 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 200 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0016	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
17	InFRaM @ 500 Mbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 500 Mbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 500 Mbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7	DIAM-	Yes
		device.	Maintained IP Router	0017	
18	InFRaM @ 1 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 1 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: GigE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 1 Gbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0018	Yes

Line Item #	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes/No
19	InFRaM @ 10 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 10 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 10 Gbps Product Description: Dedicated Symmetrical Internet Service with CenturyLink Provided, Managed, and 24x7 Maintained IP Router	DIAM- 0019	Yes

The Contractor may offer Unsolicited Flat Rate Internet Service or features in Table 24.2.5.2.b.

Table 24.2.5.2.b – Unsolicited Internet Flat Rate with Managed Router Service

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
1	InFRaM @ 2 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 2 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 2 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	DIAMU-0001

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
2	InFRaM @ 3 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 3 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 3 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	
3	InFRaM @ 4 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 4 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 4 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	DIAMU-0002

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
4	InFRaM @ 5 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 5 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 5 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	
5	InFRaM @ 6 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 6 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 6 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	DIAMU-0004  DIAMU-0005

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
6	InFRaM @ 7 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 7 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 7 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	
7	InFRaM @ 8 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 8 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 8 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	DIAMU-0006  DIAMU-0007

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
8	InFRaM @ 9 Gbps	Internet Flat Rate Service with Managed IP Enabled Routing Device (InFRaM) at 9 Gbps. Includes dedicated Internet port, transport, and a Contractor owned, maintained and managed IP enabled routing device.	Interface/Access Type: Ethernet Interface Network-side Interface: 10 GbE Protocol: Point-to-Point Protocol, IPv4/v6 Upload Speed: 9 Gbps Product Description: Dedicated Symmetrical Internet Service with Managed IP Router	DIAMU-0008

# 24.2.5.3 LTE Backup Service Options

If the Contractor provides LTE backup services for Managed Equipment the Contractor shall use current CALNET Cellular providers. All Bidders are required to indicate below that they understand the requirement regardless of their intent to provide LTE backup services.

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

# 24.2.6 Internet Service Geographic Service Areas

Bidder shall identify the locations where their InFRa, InFRaM, BHIS and BHIMS Internet Services are available in Table 24.2.6.a. The Contractor shall provide the service where commercially available through Contractor owned facilities, third-party agreements, and as allowed by State or Federal regulations. Commitment to provide service is subject to facility availability as determined by the Bidder at time of bid submission and may be reassessed by Contractor at time of service order.

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

Special construction charges that may be required to provide this service are not included in this offering or contained within the CALNET contracts and must be acquired by the customer directly through other procurement means.

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

Bidders may reference Table 24.2.6.a in their Catalog A.

Table 24.2.6.a – Bidder's Flat Rate Internet Service Locations

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
1	Adelanto	Yes	Yes	
2	Agoura Hills	Yes	Yes	
3	Alameda	Yes	Yes	
4	Albany	Yes	Yes	
5	Alhambra	Yes	Yes	
6	Aliso Viejo	Yes	Yes	
7	Alturas	Yes	Yes	
8	Amador	Yes	Yes	
9	American Canyon	Yes	Yes	
10	Anaheim	Yes	Yes	
11	Anderson	Yes	Yes	
12	Angels Camp	Yes	Yes	
13	Antioch	Yes	Yes	
14	Apple Valley	Yes	Yes	
15	Arcadia	Yes	Yes	
16	Arcata	Yes	Yes	
17	Arroyo Grande	Yes	Yes	
18	Artesia	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
19	Arvin	Yes	Yes	
20	Atascadero	Yes	Yes	
21	Atherton	Yes	Yes	
22	Atwater	Yes	Yes	
23	Auburn	Yes	Yes	
24	Avalon	Yes	Yes	
25	Avenal	Yes	Yes	
26	Azusa	Yes	Yes	
27	Bakersfield	Yes	Yes	
28	Baldwin Park	Yes	Yes	
29	Banning	Yes	Yes	
30	Barstow	Yes	Yes	
31	Beaumont	Yes	Yes	
32	Bell	Yes	Yes	
33	Bell Gardens	Yes	Yes	
34	Bellflower	Yes	Yes	
35	Belmont	Yes	Yes	
36	Belvedere	Yes	Yes	
37	Benicia	Yes	Yes	
38	Berkeley	Yes	Yes	
39	Beverly Hills	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
40	Big Bear Lake	Yes	Yes	
41	Biggs	Yes	Yes	
42	Bishop	Yes	Yes	
43	Blue Lake	Yes	Yes	
44	Blythe	Yes	Yes	
45	Bradbury	Yes	Yes	
46	Brawley	Yes	Yes	
47	Brea	Yes	Yes	
48	Brentwood	Yes	Yes	
49	Brisbane	Yes	Yes	
50	Buellton	Yes	Yes	
51	Buena Park	Yes	Yes	
52	Burbank	Yes	Yes	
53	Burlingame	Yes	Yes	
54	Calabasas	Yes	Yes	
55	Calexico	Yes	Yes	
56	California City	Yes	Yes	
57	Calimesa	Yes	Yes	
58	Calipatria	Yes	Yes	
59	Calistoga	Yes	Yes	
60	Camarillo	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
61	Campbell	Yes	Yes	
62	Canyon Lake	Yes	Yes	
63	Capitola	Yes	Yes	
64	Carlsbad	Yes	Yes	
65	Carmel-By-The-Sea	Yes	Yes	
66	Carpentaria	Yes	Yes	
67	Carson	Yes	Yes	
68	Cathedral City	Yes	Yes	
69	Ceres	Yes	Yes	
70	Cerritos	Yes	Yes	
71	Chico	Yes	Yes	
72	Chino	Yes	Yes	
73	Chino Hills	Yes	Yes	
74	Chowchilla	Yes	Yes	
75	Chula Vista	Yes	Yes	
76	Citrus Heights	Yes	Yes	
77	Claremont	Yes	Yes	
78	Clayton	Yes	Yes	
79	Clearlake	Yes	Yes	
80	Cloverdale	Yes	Yes	
81	Coachella	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
82	Coalinga	Yes	Yes	
83	Colfax	Yes	Yes	
84	Colma	Yes	Yes	
85	Colton	Yes	Yes	
86	Colusa	Yes	Yes	
87	Commerce	Yes	Yes	
88	Compton	Yes	Yes	
89	Concord	Yes	Yes	
90	Corcoran	Yes	Yes	
91	Corning	Yes	Yes	
92	Corona	Yes	Yes	
93	Coronado	Yes	Yes	
94	Corte Madera	Yes	Yes	
95	Costa Mesa	Yes	Yes	
96	Cotati	Yes	Yes	
97	Covina	Yes	Yes	
98	Crescent City	Yes	Yes	
99	Cudahy	Yes	Yes	
100	Culver City	Yes	Yes	
101	Cupertino	Yes	Yes	
102	Cypress	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
103	Daly City	Yes	Yes	
104	Dana Point	Yes	Yes	
105	Danville	Yes	Yes	
106	Davis	Yes	Yes	
107	Del Mar	Yes	Yes	
108	Del Rey Oaks	Yes	Yes	
109	Delano	Yes	Yes	
110	Desert Hot Springs	Yes	Yes	
111	Diamond Bar	Yes	Yes	
112	Dinuba	Yes	Yes	
113	Dixon	Yes	Yes	
114	Dorris	Yes	Yes	
115	Dos Palos	Yes	Yes	
116	Downey	Yes	Yes	
117	Duarte	Yes	Yes	
118	Dublin	Yes	Yes	
119	Dunsmuir	Yes	Yes	
120	East Palo Alto	Yes	Yes	
121	El Cajon	Yes	Yes	
122	El Centro	Yes	Yes	
123	El Cerrito	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
124	El Monte	Yes	Yes	
125	El Paso De Robles	Yes	Yes	
126	El Segundo	Yes	Yes	
127	Elk Grove	Yes	Yes	
128	Emeryville	Yes	Yes	
129	Encinitas	Yes	Yes	
130	Escalon	Yes	Yes	
131	Escondido	Yes	Yes	
132	Etna	Yes	Yes	
133	Eureka	Yes	Yes	
134	Exeter	Yes	Yes	
135	Fairfax	Yes	Yes	
136	Fairfield	Yes	Yes	
137	Farmersville	Yes	Yes	
138	Ferndale	Yes	Yes	
139	Fillmore	Yes	Yes	
140	Firebaugh	Yes	Yes	
141	Folsom	Yes	Yes	
142	Fontana	Yes	Yes	
143	Fort Bragg	Yes	Yes	
144	Fort Jones	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
145	Fortuna	Yes	Yes	
146	Foster City	Yes	Yes	
147	Fountain Valley	Yes	Yes	
148	Fowler	Yes	Yes	
149	Fremont	Yes	Yes	
150	Fresno	Yes	Yes	
151	Fullerton	Yes	Yes	
152	Galt	Yes	Yes	
153	Garden Grove	Yes	Yes	
154	Gardena	Yes	Yes	
155	Gilroy	Yes	Yes	
156	Glendale	Yes	Yes	
157	Glendora	Yes	Yes	
158	Goleta	Yes	Yes	
159	Gonzales	Yes	Yes	
160	Grand Terrace	Yes	Yes	
161	Grass Valley	Yes	Yes	
162	Greenfield	Yes	Yes	
163	Gridley	Yes	Yes	
164	Grover Beach	Yes	Yes	
165	Guadalupe	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
166	Gustine	Yes	Yes	
167	Half Moon Bay	Yes	Yes	
168	Hanford	Yes	Yes	
169	Hawaiian Gardens	Yes	Yes	
170	Hawthorne	Yes	Yes	
171	Hayward	Yes	Yes	
172	Healdsburg	Yes	Yes	
173	Hemet	Yes	Yes	
174	Hercules	Yes	Yes	
175	Hermosa Beach	Yes	Yes	
176	Hesperia	Yes	Yes	
177	Hidden Hills	Yes	Yes	
178	Highland	Yes	Yes	
179	Hillsborough	Yes	Yes	
180	Hollister	Yes	Yes	
181	Holtville	Yes	Yes	
182	Hughson	Yes	Yes	
183	Humboldt	Yes	Yes	
184	Huntington Beach	Yes	Yes	
185	Huntington Park	Yes	Yes	
186	Huron	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
187	Imperial	Yes	Yes	
188	Imperial Beach	Yes	Yes	
189	Indian Wells	Yes	Yes	
190	Indio	Yes	Yes	
191	Industry	Yes	Yes	
192	Inglewood	Yes	Yes	
193	Inyo	Yes	Yes	
194	lone	Yes	Yes	
195	Irvine	Yes	Yes	
196	Irwindale	Yes	Yes	
197	Isleton	Yes	Yes	
198	Jackson	Yes	Yes	
199	Kerman	Yes	Yes	
200	Kern	Yes	Yes	
201	King City	Yes	Yes	
202	Kings	Yes	Yes	
203	Kingsburg	Yes	Yes	
204	La Canada Flintridge	Yes	Yes	
205	La Habra	Yes	Yes	
206	La Habra Heights	Yes	Yes	
207	La Mesa	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
208	La Mirada	Yes	Yes	
209	La Palma	Yes	Yes	
210	La Puente	Yes	Yes	
211	La Quinta	Yes	Yes	
212	La Verne	Yes	Yes	
213	Lafayette	Yes	Yes	
214	Laguna Beach	Yes	Yes	
215	Laguna Hills	Yes	Yes	
216	Laguna Niguel	Yes	Yes	
217	Laguna Woods	Yes	Yes	
218	Lake	Yes	Yes	
219	Lake Elsinore	Yes	Yes	
220	Lake Forest	Yes	Yes	
221	Lakeport	Yes	Yes	
222	Lakewood	Yes	Yes	
223	Lancaster	Yes	Yes	
224	Larkspur	Yes	Yes	
225	Lassen	Yes	Yes	
226	Lathrop	Yes	Yes	
227	Lawndale	Yes	Yes	
228	Lemon Grove	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
229	Lemoore	Yes	Yes	
230	Lincoln	Yes	Yes	
231	Lindsay	Yes	Yes	
232	Live Oak	Yes	Yes	
233	Livermore	Yes	Yes	
234	Livingston	Yes	Yes	
235	Lodi	Yes	Yes	
236	Loma Linda	Yes	Yes	
237	Lomita	Yes	Yes	
238	Lompoc	Yes	Yes	
239	Long Beach	Yes	Yes	
240	Loomis	Yes	Yes	
241	Los Alamitos	Yes	Yes	
242	Los Altos	Yes	Yes	
243	Los Altos Hills	Yes	Yes	
244	Los Angeles	Yes	Yes	
245	Los Banos	Yes	Yes	
246	Los Gatos	Yes	Yes	
247	Loyalton	Yes	Yes	
248	Lynwood	Yes	Yes	
249	Madera	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
250	Malibu	Yes	Yes	
251	Mammoth Lakes	Yes	Yes	
252	Manhattan Beach	Yes	Yes	
253	Manteca	Yes	Yes	
254	Maricopa	Yes	Yes	
255	Marina	Yes	Yes	
256	Martinez	Yes	Yes	
257	Marysville	Yes	Yes	
258	Maywood	Yes	Yes	
259	McFarland	Yes	Yes	
260	Mendota	Yes	Yes	
261	Menlo Park	Yes	Yes	
262	Merced	Yes	Yes	
263	Mill Valley	Yes	Yes	
264	Millbrae	Yes	Yes	
265	Milpitas	Yes	Yes	
266	Mission Viejo	Yes	Yes	
267	Modesto	Yes	Yes	
268	Monrovia	Yes	Yes	
269	Montague	Yes	Yes	
270	Montclair	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
271	Monte Sereno	Yes	Yes	
272	Montebello	Yes	Yes	
273	Monterey	Yes	Yes	
274	Monterey Park	Yes	Yes	
275	Moorpark	Yes	Yes	
276	Moraga	Yes	Yes	
277	Moreno Valley	Yes	Yes	
278	Morgan Hill	Yes	Yes	
279	Morro Bay	Yes	Yes	
280	Mount Shasta	Yes	Yes	
281	Mountain View	Yes	Yes	
282	Murrieta	Yes	Yes	
283	Napa	Yes	Yes	
284	National City	Yes	Yes	
285	Needles	Yes	Yes	
286	Nevada City	Yes	Yes	
287	Newark	Yes	Yes	
288	Newman	Yes	Yes	
289	Newport Beach	Yes	Yes	
290	Norco	Yes	Yes	
291	Norwalk	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
292	Novato	Yes	Yes	
293	Oakdale	Yes	Yes	
294	Oakland	Yes	Yes	
295	Oakley	Yes	Yes	
296	Oceanside	Yes	Yes	
297	Ojai	Yes	Yes	
298	Ontario	Yes	Yes	
299	Orange	Yes	Yes	
300	Orange Cove	Yes	Yes	
301	Orinda	Yes	Yes	
302	Orland	Yes	Yes	
303	Oroville	Yes	Yes	
304	Oxnard	Yes	Yes	
305	Pacific Grove	Yes	Yes	
306	Pacifica	Yes	Yes	
307	Palm Desert	Yes	Yes	
308	Palm Springs	Yes	Yes	
309	Palmdale	Yes	Yes	
310	Palo Alto	Yes	Yes	
311	Palos Verdes Estates	Yes	Yes	
312	Paradise	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
313	Paramount	Yes	Yes	
314	Parlier	Yes	Yes	
315	Pasadena	Yes	Yes	
316	Patterson	Yes	Yes	
317	Perris	Yes	Yes	
318	Petaluma	Yes	Yes	
319	Pico Rivera	Yes	Yes	
320	Piedmont	Yes	Yes	
321	Pinole	Yes	Yes	
322	Pismo Beach	Yes	Yes	
323	Pittsburg	Yes	Yes	
324	Placentia	Yes	Yes	
325	Placerville	Yes	Yes	
326	Pleasant Hill	Yes	Yes	
327	Pleasanton	Yes	Yes	
328	Plymouth	Yes	Yes	
329	Point Arena	Yes	Yes	
330	Pomona	Yes	Yes	
331	Port Hueneme	Yes	Yes	
332	Porterville	Yes	Yes	
333	Portola	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
334	Portola Valley	Yes	Yes	
335	Poway	Yes	Yes	
336	Rancho Cordova	Yes	Yes	
337	Rancho Cucamonga	Yes	Yes	
338	Rancho Mirage	Yes	Yes	
339	Rancho Palos Verdes	Yes	Yes	
340	Rancho Santa Margarita	Yes	Yes	
341	Red Bluff	Yes	Yes	
342	Redding	Yes	Yes	
343	Redlands	Yes	Yes	
344	Redondo Beach	Yes	Yes	
345	Redwood City	Yes	Yes	
346	Reedley	Yes	Yes	
347	Rialto	Yes	Yes	
348	Richmond	Yes	Yes	
349	Ridgecrest	Yes	Yes	
350	Rio Dell	Yes	Yes	
351	Rio Vista	Yes	Yes	
352	Ripon	Yes	Yes	
353	Riverbank	Yes	Yes	
354	Riverside	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
355	Rocklin	Yes	Yes	
356	Rohnert Park	Yes	Yes	
357	Rolling Hills	Yes	Yes	
358	Rolling Hills Estates	Yes	Yes	
359	Rosemead	Yes	Yes	
360	Roseville	Yes	Yes	
361	Ross	Yes	Yes	
362	Sacramento	Yes	Yes	
363	Salinas	Yes	Yes	
364	San Anselmo	Yes	Yes	
365	San Bernardino	Yes	Yes	
366	San Bruno	Yes	Yes	
367	San Buenaventura	Yes	Yes	
368	San Carlos	Yes	Yes	
369	San Clemente	Yes	Yes	
370	San Diego	Yes	Yes	
371	San Dimas	Yes	Yes	
372	San Fernando	Yes	Yes	
373	San Francisco	Yes	Yes	
374	San Gabriel	Yes	Yes	
375	San Jacinto	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
376	San Joaquin	Yes	Yes	
377	San Jose	Yes	Yes	
378	San Juan Bautista	Yes	Yes	
379	San Juan Capistrano	Yes	Yes	
380	San Leandro	Yes	Yes	
381	San Luis Obispo	Yes	Yes	
382	San Marcos	Yes	Yes	
383	San Marino	Yes	Yes	
384	San Mateo	Yes	Yes	
385	San Pablo	Yes	Yes	
386	San Rafael	Yes	Yes	
387	San Ramon	Yes	Yes	
388	Sand City	Yes	Yes	
389	Sanger	Yes	Yes	
390	Santa Ana	Yes	Yes	
391	Santa Barbara	Yes	Yes	
392	Santa Clara	Yes	Yes	
393	Santa Clarita	Yes	Yes	
394	Santa Cruz	Yes	Yes	
395	Santa Fe Springs	Yes	Yes	
396	Santa Maria	Yes	Yes	 

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
397	Santa Monica	Yes	Yes	
398	Santa Paula	Yes	Yes	
399	Santa Rosa	Yes	Yes	
400	Santee	Yes	Yes	
401	Saratoga	Yes	Yes	
402	Sausalito	Yes	Yes	
403	Scotts Valley	Yes	Yes	
404	Seal Beach	Yes	Yes	
405	Seaside	Yes	Yes	
406	Sebastopol	Yes	Yes	
407	Selma	Yes	Yes	
408	Shafter	Yes	Yes	
409	Shasta Lake	Yes	Yes	
410	Sierra Madre	Yes	Yes	
411	Signal Hill	Yes	Yes	
412	Simi Valley	Yes	Yes	
413	Solana Beach	Yes	Yes	
414	Soledad	Yes	Yes	
415	Solvang	Yes	Yes	
416	Sonoma	Yes	Yes	
417	Sonora	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
418	South El Monte	Yes	Yes	
419	South Gate	Yes	Yes	
420	South Lake Tahoe	Yes	Yes	
421	South Pasadena	Yes	Yes	
422	South San Francisco	Yes	Yes	
423	St Helena	Yes	Yes	
424	Stanton	Yes	Yes	
425	Stockton	Yes	Yes	
426	Suisun City	Yes	Yes	
427	Sunnyvale	Yes	Yes	
428	Susanville	Yes	Yes	
429	Sutter Creek	Yes	Yes	
430	Taft	Yes	Yes	
431	Tehachapi	Yes	Yes	
432	Tehama	Yes	Yes	
433	Temecula	Yes	Yes	
434	Temple City	Yes	Yes	
435	Thousand Oaks	Yes	Yes	
436	Tiburon	Yes	Yes	
437	Torrance	Yes	Yes	
438	Tracy	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
439	Trinidad	Yes	Yes	
440	Truckee	Yes	Yes	
441	Tulare	Yes	Yes	
442	Tulelake	Yes	Yes	
443	Turlock	Yes	Yes	
444	Tustin	Yes	Yes	
445	Twentynine Palms	Yes	Yes	
446	Ukiah	Yes	Yes	
447	Union City	Yes	Yes	
448	Upland	Yes	Yes	
449	Vacaville	Yes	Yes	
450	Vallejo	Yes	Yes	
451	Vernon	Yes	Yes	
452	Victorville	Yes	Yes	
453	Villa Park	Yes	Yes	
454	Visalia	Yes	Yes	
455	Vista	Yes	Yes	
456	Walnut	Yes	Yes	
457	Walnut Creek	Yes	Yes	
458	Wasco	Yes	Yes	
459	Waterford	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
460	Watsonville	Yes	Yes	
461	Weed	Yes	Yes	
462	West Covina	Yes	Yes	
463	West Hollywood	Yes	Yes	
464	West Los Angeles	Yes	Yes	
465	West Sacramento	Yes	Yes	
466	Westlake Village	Yes	Yes	
467	Westminster	Yes	Yes	
468	Westmorland	Yes	Yes	
469	Wheatland	Yes	Yes	
470	Whittier	Yes	Yes	
471	Williams	Yes	Yes	
472	Willits	Yes	Yes	
473	Willows	Yes	Yes	
474	Windsor	Yes	Yes	
475	Winters	Yes	Yes	
476	Woodlake	Yes	Yes	
477	Woodland	Yes	Yes	
478	Woodside	Yes	Yes	
479	Yorba Linda	Yes	Yes	
480	Yountville	Yes	Yes	

Line Item	Service Location – City or ZIP Code	InFRa	InFRaM	
481	Yreka	Yes	Yes	
482	Yuba City	Yes	Yes	
483	Yucaipa	Yes	Yes	
484	Yucca Valley	Yes	Yes	

# 24.2.7 Additional Unsolicited Internet Services

All Bidder equipment, tasks and services required for provisioning of the services shall be identified in Table 24.2.7.

Table 24.2.7 – Additional Unsolicited Internet Services

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
1	Adaptive Network Security Basic Service Level @ 15 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0001
2	Adaptive Network Security Basic Service Level @ 50 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0002

			Bidder's Product	Bidder's
Line Item	Feature Name	Feature Description	Description, Restrictions and Limitations	Product Identifier
3	Adaptive Network Security Basic Service Level @ 100 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0003
4	Adaptive Network Security Basic Service Level @ 150 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0004
5	Adaptive Network Security Basic Service Level @ 200 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0005
6	Adaptive Network Security Basic Service Level @ 300 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0006
7	Adaptive Network Security Basic Service Level @ 500 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0007
8	Adaptive Network Security Basic Service Level @ 1000 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0008

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
9	Adaptive Network Security Basic Service Level @ 2000 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0009
10	Adaptive Network Security Basic Service Level @ 3000 Mbps	Cloud Based Next- Generation Network Security Firewall	Firewall (100 Rule Set), Encrypted Tunnels, Intrusion Detection/Intrusion Protection, Log Retention and Reporting	ANSB-0010
11	Adaptive Network Security Premium Service Level @ 15 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0001
12	Adaptive Network Security Premium Service Level @ 50 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0002
13	Adaptive Network Security Premium Service Level @ 100 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0003
14	Adaptive Network Security Premium Service Level @ 150 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0004

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
15	Adaptive Network Security Premium Service Level @ 200 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0005
16	Adaptive Network Security Premium Service Level @ 300 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0006
17	Adaptive Network Security Premium Service Level @ 500 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0007
18	Adaptive Network Security Premium Service Level @ 1000 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0008
19	Adaptive Network Security Premium Service Level @ 2000 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0009
20	Adaptive Network Security Premium Service Level @ 3000 Mbps	Cloud Based Next- Generation Network Security Firewall	Basic Service Features with added Log Streaming, Application Awareness, Data Loss Protection Features	ANSP-0010

Line			Bidder's Product Description, Restrictions	Bidder's Product
Item	Feature Name	Feature Description	and Limitations	Identifier
21	Web Content Filtering @ 15 Mbps	Filtering Web content and preventing users from visiting undesirable	Optional Security Feature	
		URLs using IP reputations or advanced detection methods		WCF-0001
22	Web Content Filtering @ 50 Mbps	Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced	Optional Security Feature	
		detection methods		WCF-0002
23	Web Content Filtering @ 100 Mbps	Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods	Optional Security Feature	WCF-0003
24	Web Content Filtering @ 150 Mbps	Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods	Optional Security Feature	WCF-0004

Line   Hem   Feature Name   Feature Description   Description, Restrictions and Limitations   Identifier				Bidder's Product	Bidder's
Web Content Filtering @ 200 Mbps   Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods   WCF-0005    Web Content Filtering @ 300 Mbps   Filtering undesirable URLs using IP reputations or advanced detection methods   WCF-0005    Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods   WCF-0006    Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods   WCF-0006    Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods   WCF-0007    Web Content Filtering web content and filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods   WCF-0007    Web Content Filtering web content and   Coptional Security Feature   WCF-0007    Web Content Filtering web content and   Coptional Security Feature   Coptiona				•	
Filtering @ 200 Mbps   preventing users from visiting undesirable   URLs using IP reputations or advanced detection methods   WCF-0005    Web Content Filtering web content and preventing users from visiting undesirable   URLs using IP reputations or advanced detection methods   WCF-0006    Web Content Filtering web content and preventing users from visiting undesirable   URLs using IP reputations or advanced detection methods   WCF-0006    Web Content Filtering web content and preventing users from visiting undesirable   URLs using IP reputations or advanced detection methods   WCF-0006    Web Content Filtering web content and preventing users from visiting undesirable   URLs using IP reputations or advanced detection methods   WCF-0007    Web Content Filtering web content and   Optional Security Feature   WCF-0007	Item		•		Identifier
@ 200 Mbps				Optional Security Feature	
from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content Filtering Web content and		•			
25 undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  27 Web Content Filtering web URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content Filtering Web content and provided detection methods  Web Content Filtering Web Content Filtering Web Content and Content C		@ 200 Mbps	'		
URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content Filtering Web content and Optional Security Feature	25		_		
reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content and Preputations or advanced detection methods  Web Content Filtering Web content and Optional Security Feature Content and Piltering Web content and Optional Security Feature Content and Content Content and Content Con	25				
advanced detection methods  Web Content Filtering @ 300 Mbps  26  Web Content privations or advanced detection methods  Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  27  Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering web content and  Web Content Filtering web content and  Optional Security Feature  WCF-0007			_		
Web Content Filtering Web content of the content			T		
Filtering					WCF-0005
@ 300 Mbps		Web Content	Filtering Web	Optional Security Feature	
from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering © 500 Mbps  Preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  WCF-0006  Optional Security Feature  Optional Security Feature  WCF-0006  WCF-0007  Filtering Web Content Filtering Web content and Optional Security Feature		Filtering	content and		
undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering © 500 Mbps  Preputations or content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  WCF-0006  WCF-0006  WCF-0007  Web Content Filtering  VCF-0007  Web Content Filtering  Filtering Web content and  Optional Security Feature Content and		@ 300 Mbps	_		
URLs using IP reputations or advanced detection methods  Web Content Filtering © 500 Mbps  Preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  WCF-0006  WCF-0006  WCF-0006  WCF-0006  WCF-0006  WCF-0007  Web Content Filtering Web content on optional Security Feature Content on optional Security F			_		
reputations or advanced detection methods  Web Content Filtering web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content Filtering web content and	26				
advanced detection methods  Web Content Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content Filtering Web content and			_		
detection methods  Web Content Filtering © 500 Mbps  Preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  WCF-0006  Optional Security Feature  WCF-0006  Optional Security Feature  WCF-0007  Web Content Filtering  Optional Security Feature  WCF-0007					
Web Content Filtering © 500 Mbps  Preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering  Filtering  Filtering  Filtering  Optional Security Feature  WCF-0007					WCE 0007
Filtering content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web content and		Web Content		Ontional Security Feature	VVCF-0006
@ 500 Mbps preventing users from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering Web Content and Content and Content and Content Content and Content Conte					
from visiting undesirable URLs using IP reputations or advanced detection methods  Web Content Filtering  Filtering  Web Content content and					
27			_		
URLs using IP reputations or advanced detection methods  Web Content Filtering  URLs using IP reputations or advanced Optional Security Feature content and	27		_		
reputations or advanced detection methods  Web Content Filtering Web Content and  WCF-0007			URLs using IP		
detection methods   WCF-0007     Web Content   Filtering Web   Optional Security Feature   Content and			_		
Web Content Filtering Web Optional Security Feature Filtering Content and			advanced		
Filtering content and			detection methods		WCF-0007
			_	Optional Security Feature	
		_			
@ 1000 Mbps preventing users		@ 1000 Mbps			
from visiting	00		_		
28 undesirable	28				
URLs using IP			_		
reputations or advanced					
detection methods WCF-0008					WCF_NNA

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
29	Web Content Filtering @ 2000 Mbps	Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods	Optional Security Feature	WCF-0009
30	Web Content Filtering @ 3000 Mbps	Filtering Web content and preventing users from visiting undesirable URLs using IP reputations or advanced detection methods	Optional Security Feature	WCF-0010
31	Adaptive Network Security (ANS) Remote Access Client 5-10 concurrent users	Mobile User Remote Access Client. 5-10 concurrent users	Optional Security Feature	ANSR-0001
32	Adaptive Network Security (ANS) Remote Access Client 25-100 concurrent users	Mobile User Remote Access Client. 25- 100 concurrent users	Optional Security Feature	ANSR-0002
33	Adaptive Network Security (ANS) Remote Access Client 125-500 concurrent users	Mobile User Remote Access Client. 125- 500 concurrent users	Optional Security Feature	ANSR-0003

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
34	Adaptive Network Security (ANS) Remote Access Client 600-2500 concurrent users	Mobile User Remote Access Client. 600- 2500 concurrent users	Optional Security Feature	ANSR-0004
35	Adaptive Network Security (ANS) Remote Access Client 3000- 10000 concurrent users	Mobile User Remote Access Client. 3000- 10000 concurrent users	Optional Security Feature	ANSR-0005
36	Adaptive Network Security (ANS) Remote Access Client 15000 - 50000 concurrent users	Mobile User Remote Access Client. 15000-50000 concurrent users	Optional Security Feature	ANSR-0006
37	Adaptive Network Security (ANS) Remote Access Client 60000 - 100000 concurrent users	Mobile User Remote Access Client. 60000-100000 concurrent users	Optional Security Feature	ANSR-0007
38	LTE Backup 1G Data Plan	Cellular back -up available w/ ANS site	Supported Cellular Providers: AT&T, Verizon	LTE-0001
39	LTE Backup 5G Data Plan	Cellular back -up available w/ ANS site	Supported Cellular Providers: AT&T, Verizon	LTE-0002
40	LTE Backup 10G Data PLan	Cellular back -up available w/ ANS site	Supported Cellular Providers: AT&T, Verizon	LTE-0003

## 24.3 NETWORK DISASTER/OPERATIONAL RECOVERY

## 24.3.1 Telecommunications Service Priority (TSP) Program

When applicable, 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

### 24.4 DISTRIBUTED DENIAL OF SERVICE MITIGATION SERVICES

The Contractor shall provide a network based Distributed Denial of Service (DDoS) detection and mitigation service, in support of Contractor's Internet services. All hardware/software necessary to provide service shall reside in the Contractors network and shall be maintained, monitored and supported by the Contractor. Mitigation shall occur in the Contractor IP Network before traffic reaches Customer edge router. Contractor shall establish User and Entity Behavior Analytical (UEBA) traffic patterns to minimize false positives during the detection/mitigation process and perform periodic "tuning" of normal traffic patterns established. The Contractor shall analyze, identify, report and alert on anomalies in Customer traffic under DDoS attacks. Upon detection of a DDoS attack, Contractor shall reroute traffic to a network based mitigation center where DDoS attack packets are identified and dropped. Valid packets shall be routed to the Customer edge router. Upon Contractor determination that the DDoS attack has subsided, Contractor shall restore the normal routing of Customer traffic.

The Bidder's DDoS solution shall mitigate volumetric, protocol or resource, and application layer (Layers 3, 4 & 7) attacks.

Bidder's DDoS offering shall defend against the following threats/attacks at a minimum:

1. Network flood attacks (SYN, SYN-ACK, TCP, UDP, IP, ICMP, etc.);

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

2. Address, port scanning and sniffing attacks;

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

3. DNS attacks:

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

4. Web application attacks (HTTP flood attacks, etc.); and,

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

5. Protocol abuse attacks.

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

#### 24.4.1 DDoS Initiation

The Contractor shall support the initiation of DDoS mitigation described below:

- 1. Customer identifies the DDoS attack and initiates the mitigation; or,
- 2. Contractor identifies the DDoS attack and Customer authorizes the mitigation.

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

#### 24.4.2 DDoS Activities

The Contractor shall perform the following activities at a minimum:

- 1. Monitoring of Customer traffic patterns;
- 2. Establish network traffic baselines;
- 3. Detection of Customer traffic anomalies;
- 4. Scrubbing of Customer traffic by dropping DDoS attack packets;
- 5. Perform detection and anomaly analysis;
- 6. Develop and provide access to a strategy for identifying and mitigating real time attacks;
- 7. Issuance of email alert and a verbal person-to-person telephone call to authorized users within 15 minutes when an anomaly or attack is detected;
- 8. Issuance of email alert and a verbal person-to-person telephone call to authorized users within 15 minutes of when mitigation services commence; and,
- 9. Analyze attack patterns throughout Contractor IP backbone and alerting authorized users of IP threats, provide authorized users the information via secure portal for addressing/mitigating IP threats.

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

# 24.4.2.1 U.S. Based DDoS Mitigation Services Waiver

The provisions detailed in eVAQ General Provisions Section 92, U.S. Based Services, will not apply to the Contractor's DDoS mitigation efforts under the following conditions:

- 1. Attacks where malicious traffic originates outside of the U.S. and is mitigated outside of the U.S.;
- 2. Contractor personnel located outside the U.S. may access public information (including Public IP address information) only to the extent necessary to mitigate a DDoS attack; and,
- 3. CPNI shall not be provided to individuals outside of the U.S.

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

24.4.3 DDoS Detection and Mitigation Web Portal and Reporting Contractor shall provide a secure web based portal for authorized users.

Contractor's portal shall provide authorized users the following at a minimum:

1. A view of their traffic patterns;

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

2. A view of the real time attack and mitigation strategy;

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

3. IP threat alerts:

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

4. Information for addressing and mitigating IP threats; and,

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

Contractor's portal shall provide authorized users access to the following reports:

1. Traffic anomaly detection;

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

2. TCP and UDP protocol summary; and,

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

3. Top IP "talkers" summary.

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

# 24.4.4 DDoS Detection and Mitigation Features

The Contractor shall offer the DDoS Detection and Mitigation Service detailed in Table 24.4.4.a.

Table 24.4.4.a – DDoS Detection and Mitigation Service

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
1	DDoS Mitigation 1.544–10 Mbps	DDoS Mitigation Services for 1.544– 10 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0001	Yes
2	DDoS Mitigation 15 Mbps	DDoS Mitigation Services for 15 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDO\$- 0002	Yes
3	DDoS Mitigation 25 Mbps	DDoS Mitigation Services for 25 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0003	Yes
4	DDoS Mitigation 50 Mbps	DDoS Mitigation Services for 50 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0004	Yes
5	DDoS Mitigation 100 Mbps	DDoS Mitigation Services for 100 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0005	Yes
6	DDoS Mitigation 250 Mbps	DDoS Mitigation Services for 250 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0006	Yes
7	DDoS Mitigation 500 Mbps	DDoS Mitigation Services for 500 Mbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0007	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
8	DDoS Mitigation 1 Gbps	DDoS Mitigation Services for 1 Gbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0008	Yes
9	DDoS Mitigation 5 Gbps	DDoS Mitigation Services for 5 Gbps of traffic flow.	DDoS Mitigation with FBM (PE based configuration)	DDOS- 0009	Yes

The Contractor may offer Unsolicited DDoS Detection and Mitigation features in Table 24.4.4.b.

Table 24.4.4.b – Unsolicited DDoS Detection and Mitigation Service and Features

Network	1 2 4		Identifier
Protection Service - Committed Information Rate (CIR)	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	
= 15 Mbps			NPS-0001
Network Protection Service - Committed Information Rate (CIR)	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	
Ro = No Pr Se C	ate (CIR) 15 Mbps etwork totection ervice - ommitted formation	ate (CIR) 15 Mbps etwork totection ervice - ommitted formation	ate (CIR) 15 Mbps  etwork totection ervice - on Attack Mitigation formation  attack (CIR) Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
3	Network Protection Service - Committed Information Rate (CIR) = 200 Mbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0003
4	Network Protection Service - Committed Information Rate (CIR) = 500 Mbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0004
5	Network Protection Service - Committed Information Rate (CIR) = 1 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0005
6	Network Protection Service - Committed Information Rate (CIR) = 2 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0006
7	Network Protection Service - Committed Information Rate (CIR) = 4 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0007

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
8	Network Protection Service - Committed Information Rate (CIR) = 10 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0008
9	Network Protection Service - Committed Information Rate (CIR) = 20 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0009
10	Network Protection Service - Committed Information Rate (CIR) = 30 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0010
11	Network Protection Service - Committed Information Rate (CIR) = 40 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0011
12	Network Protection Service - Committed Information Rate (CIR) = 100 Gbps	Layers 3-4 Volumetric, Always- on Attack Mitigation	Customer Specifies Access Control Lists (ACLs) Filters, Rate Limiters, Null Routes, Subnets on CenturyLink Provider Edge Routers	NPS-0012

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
13	Always-On DDoS Mitigation 1.544–10 Mbps of traffic flow.	DDoS Mitigation Services for 1.544–10 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0001
14	Always-On DDoS Mitigation 15 Mbps of traffic flow.	DDoS Mitigation Services for 15 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0002
15	Always-On DDoS Mitigation 25 Mbps of traffic flow.	DDoS Mitigation Services for 25 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U- 0003
16	Always-On DDoS Mitigation 50 Mbps of traffic flow.	DDoS Mitigation Services for 50 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0004
17	Always-On DDoS Mitigation 100 Mbps of traffic flow.	DDoS Mitigation Services for 100 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0005
18	Always-On DDoS Mitigation 250 Mbps of traffic flow.	DDoS Mitigation Services for 250 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0006

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
19	Always-On DDoS Mitigation 500 Mbps of traffic	DDoS Mitigation Services for 500 Mbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U-
20	flow. Always-On DDoS Mitigation 1 Gbps of traffic flow.	DDoS Mitigation Services for 1 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	0007 DDOSU- 0008
21	Always-On DDoS Mitigation 2 Gbps of traffic flow.	DDoS Mitigation Services for 2 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U- 0009
22	Always-On DDoS Mitigation 3 Gbps of traffic flow.	DDoS Mitigation Services for 3 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U- 0010
23	Always-On DDoS Mitigation 4 Gbps of traffic flow.	DDoS Mitigation Services for 4 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0011
24	Always-On DDoS Mitigation 5 Gbps of traffic flow.	DDoS Mitigation Services for 5 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0012
25	Always-On DDoS Mitigation 10 Gbps of traffic flow.	DDoS Mitigation Services for 10 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U- 0013

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier
26	Always-On DDoS Mitigation 20 Gbps of traffic flow.	DDoS Mitigation Services for 20 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0014
27	Always-On DDoS Mitigation 30 Gbps of traffic flow.	DDoS Mitigation Services for 30 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0015
28	Always-On DDoS Mitigation 40 Gbps of traffic flow.	DDoS Mitigation Services for 540 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDO\$U- 0016
29	Always-On DDoS Mitigation 100 Gbps of traffic flow.	DDoS Mitigation Services for 100 Gbps of traffic flow.	Always On DDoS Mitigation with FBM (PE based configuration)	DDOSU- 0017

#### 24.5 OTHER SERVICES

# 24.5.1 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.

When coordinated scheduling for projects between the State and the Contractor occurs, the State and the Contractor may mutually agree that

hours worked between 5:00PM and 7:59AM, Monday through Friday and all day Saturday and any hours worked on Sunday or State of California holidays can be classified as Regular Hours in accordance with the State of California Department of Industrial Relations.

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

# 24.5.2 Services Related Infrastructure (SRI)

The Contractor shall offer infrastructure service as defined below.

# 24.5.2.1 Extended Demarcation Wiring Services

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB C4DNC\$19 Category for all of the Customer occupied buildings where services under this Contract are being offered. Extended Demarc wiring includes wire/cable related activities required to extend the demarcation point to the Customer defined termination location or cross-connect point from the Contractor's MPOE.

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

Extended Demarc wiring shall include the necessary wire/cable, connectors, jumpers, panel, and jack. Extended Demarc wiring shall also include associated trouble shooting, testing and labeling. 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; and,
- 4. Installation intervals shall be in accordance with the timeframes identified for the services that this cabling will support, and shall be subject to the SLAs associated with that service.

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

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 without significant effort or damage to the Customer site;
- 2. The wire/cable pathway is in an asbestos 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. Upon written release provided by either the Customer or by the CALNET Program.

The 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 Demarc extension as described herein. The Bidder shall provide one price for each media identified.

Wiring will be installed according to industry Standards and cabling recommendations published in the State Telecommunications Management Manual (STMM), Facilities Management Chapter, and Uniform Building Cabling/Wiring current at the time of this IFB and as periodically updated by the CALNET Program. Additionally, all wiring installation and maintenance activities will be in accordance with all applicable EIA/TIA, BICSI, and ITU-T recommended standards current at the time of installation or maintenance.

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

Bidder shall provide the Extended Demarcation Wiring Services described in Table 24.5.2.1

Table 24.5.2.1 – Extended Demarcation Wiring Services

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
1	Extended Demarcation -Copper – 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. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Extended Demarcation – Copper Four-Pair – Regular Hours	DMARC- 0001	Yes
2	Extended Demarcation -Copper – 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. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Extended Demarcation – Copper Four-Pair - Overtime Hours Mon-Fri 5:00 pm to 7:59 am and all day Saturday	DMARC- 0002	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
3	Extended Demarcation -Copper – 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. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.	Extended Demarcation – Copper Four-Pair - any hours worked on Sunday or State of California holidays	DMARC- 0003	Yes

			Bidder's Product Description,	Bidder's	Bidder Meets or
Line	Feature	Feature	Restrictions and	Product	Exceeds?
Item	Name	Description	Limitations	Identifier	Yes or No
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. Includes 300 feet or less of Category 5 25-pair CMP cable, one patch panel and mounting hardware. Ten Category 5e, three meter jumpers; one 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.	Extended Demarcation – Copper 25 Pair – Regular Hours.	DMARC- 0004	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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. Includes 300 feet or less of Category 5 25-pair CMP cable, one patch panel and mounting hardware. Ten Category 5e, three meter jumpers; one 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.	Extended Demarcation – Copper 25 Pair - Overtime Hours Mon-Fri 5:00 pm to 7:59 am and all day Saturday	DMARC- 0005	Yes

Line	Feature	Feature	Bidder's Product  Description,  Restrictions and	Bidder's Product	Bidder Meets or Exceeds?
Item	Name	Description	Limitations	Identifier	Yes or No
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. Includes 300 feet or less of Category 5 25-pair CMP cable, one patch panel and mounting hardware. Ten Category 5e, three meter jumpers; one 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.	Extended Demarcation – Copper 25 Pair - any hours worked on Sunday or State of California holidays	DMARC- 0006	Yes

Line	Feature	Feature	Bidder's Product  Description,  Restrictions and	Bidder's Product	Bidder Meets or Exceeds?
Item	Name	Description	Limitations	Identifier	Yes or No
7	Extended Demarcation - Optical Fiber Link – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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 SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Extended Demarcation – Optical Fiber Link– Regular Hours	DMARC- 0007	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
8	Extended Demarcation - Optical Fiber Link – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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 SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Extended Demarcation – Optical Fiber Link- Overtime Hours Mon-Fri 5:00 pm to 7:59 am and all day Saturday	DMARC- 0008	Yes

			Bidder's Product Description,	Bidder's	Bidder Meets or
Line	Feature	Feature	Restrictions and	Product	Exceeds?
Item	Name	Description	Limitations	Identifier	Yes or No
9	Extended Demarcation - Optical Fiber Link – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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 SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Extended Demarcation – Optical Fiber Link- any hours worked on Sunday or State of California holidays	DMARC- 0009	Yes

## 24.5.2.2 Unsolicited Services Related Infrastructure

Bidder may offer additional unsolicited Services Related Infrastructure in Table 24.5.2.2.

Table 24.5.2.2 – Unsolicited Services Related Infrastructure

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations

# 24.5.3 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 24.5.3 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.

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

In Cost Worksheet 24.5.3, 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 hours per dispatch/occurrence.

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

The Contractor shall offer emergency restoration services as detailed in Table 24.5.3.

# Table 24.5.3 – Services Related Hourly Support

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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 DNCS service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Field Services Repair Technician Hours 8:00AM to 4:59PM, Monday through Friday.	TECH-0001	Yes
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 DNCS service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Field Service Repair Technician Overtime Hours Mon-Fri 5:00 pm to 7:59 am and all day Saturday	TECH-0002	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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 DNCS service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Field Services Technician any hours worked on Sunday or State of California holidays	TECH-0003	Yes

# 24.6 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 Program 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.

# 24.6.1 Service Level Agreement Format

The Contractor shall adhere to the following format and include the content as described below for each Technical SLA added by the Contractor throughout the Term of the Contract:

- 1. SLA Name Each SLA Name must be unique;
- 2. Definition Describes what performance metric will be measured;
- 3. Measurements Process Provides instructions how the Contractor will continuously monitor and measure SLA performance to ensure compliance. The Contractor shall provide details describing how and what will be measured. Details should include source of data

- and define the points of measurement within the system, application, or network;
- 4. Service(s) All applicable services will be listed in each SLA;
- 5. Objective(s) Defines the SLA performance goal/parameters; and,
- 6. Rights and Remedies
- 7. Per Occurrence: Rights and remedies are paid on a per event basis during the bill cycle; and,
- 8. Monthly Aggregated Measurements: Rights and remedies are paid once during the bill cycle based on an aggregate of events over a defined period of time.

The Contractor shall proactively apply a credit or refund when 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

# 24.6.2 Technical Requirements versus SLA Objectives

Sections 24.2 (Flat Rate Internet Services), 24.3 (Network Disaster/Operational Recovery), 24.4 (DDoS Mitigation Services), and 24.5 (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

24.6.3 Methods of Outage Reporting: Customer or Contractor

There are two methods in which CALNET 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

(SOW Business Requirements Section G.10.4, Trouble Ticket Reporting Tool (TTRT)).

The second method of outage reporting occurs when the Contractor opens a trouble ticket as a result of network/system alarm or other method of service failure identification. In each instance the Contractor shall open a trouble ticket using the Trouble Ticket Reporting Tool (SOW Business Requirements Section G.10.4) and monitor and report to Customer until service is restored.

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

# 24.6.4 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 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

# 24.6.5 Contractor SLA Management Plan

Within 90 calendar days of Contract award, the Contractor shall provide CALNET 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 (SOW Business Requirements Section G.10.5). The Contractor shall include a sample report in accordance with SOW Business Requirements Section G.10.5, SLA Reports for the following: SLA Service Performance Report (SOW Business Requirements Section G10.5.1), SLA Provisioning Report (SOW Business Requirements Section G.10.5.2), SLA Catastrophic

Outage Reports (SOW Business Requirements Section G.10.5.3), and Trouble Ticket and Provisioning/SLA Credit Report (SOW Business Requirements Section G.10.5.4). The Contractor shall commit to a monthly due date. The reports shall be provided to the CALNET Program via the Private Oversight Website (SOW Business Requirements Section G.10.2);

- 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 Program; 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 Program.

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

# 24.6.6 Technical SLA General Requirements

The Contractor shall adhere to the following general requirements which apply to all CALNET Technical SLAs (Section 24.6.8):

- With the exception of the Provisioning SLA (Section 24.6.8.9), the total SLA rights and remedies for any given month shall not exceed the sum of 100% 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 or more of the performance objectives, only the SLA with the largest monthly Rights and Remedies will be credited to the Customer, per event;
- 3. The Contractor shall apply CALNET 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; and,
- 5. TMRC rights and remedies shall include the service, option(s), and feature(s) charges.

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

6. The Contractor shall proactively and continuously monitor and measure all Technical SLA objectives.

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

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.

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

- 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 Program for possible inclusion via amendments;
- 9. The Contractor shall apply CALNET DNCS 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 DNCS Customer;

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

- 10. The election by CALNET Program of any SLA remedy covered by this Contract shall not exclude or limit CALNET Program 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;

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

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 and/or the CALNET CMO Escalation Process 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 24x7 for CALNET services;

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

- 15. SLAs apply 24x7 unless SLA specifies an exception;
- 16. Contractor invoices shall clearly cross reference the SLA credit to the service Circuit ID in accordance with SOW Business Requirements Section G.6;

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

- 17. The Contractor shall provide a CALNET DNCS SLA Manager responsible for CALNET DNCS SLA compliance. The SLA Manager shall attend regular meetings and be available upon request to address CALNET Program SLA oversight, report issues, and problem resolution concerns. The CALNET DNCS SLA Manager shall also coordinate SLA support for Customer SLA inquiries and issue resolution:
- 18. The Contractor shall provide Customer and CALNET Program 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 DNCS Customer.

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

# 24.6.7 Trouble Ticket Stop Clock Conditions

Only the following conditions shall be allowed to stop the duration of the Service Level Agreements. The Contractor shall document durations using the Stop Clock Condition (SCC) listed in Table 24.6.7.a, which must include start and stop time stamps in the Contractor's Trouble Ticket Reporting Tool (SOW Business Requirements Section G.10.4) or Customer provisioning Service Request for each application of an SCC.

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

The Contractor shall not consider "cleared while testing" or "no trouble found" as a SCC.

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

Contractor observation timeframes, not requested by End-User, after incident resolution shall not be included in Outage Duration reporting.

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

Note: The Glossary (SOW Appendix A) defines term "End-User" as the "individual within an Entity that is receiving services and/or features provided under the Contract."

Table 24.6.7 – Stop Clock Conditions

Line		
Item	Stop Clock Condition (SCC)	SCC Definition
]	END-USER REQUEST	Periods when a restoration or testing effort is
'	END GOER REGOLOT	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.
3	END-USER NOT AVAILABLE	Time after a service has been restored but End-User
	END GOER NOT THE REEL	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.

Line		
Item	Stop Clock Condition (SCC)	SCC Definition
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	CUSTOMER PROVISIONING DELAY	Delays to Provisioning caused by lack of Customer's building entrance Facilities, conduit structures that are the Customer's responsibilities or Extended demarcation wiring. If the Service Providing Contractor has been contracted by the Customer for extended demarcation, this SCC shall not apply to missed dates/times. The Customer Provisioning Delay SCC is restricted to Provisioning SLAs only.
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:  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.

Line		
Item	Stop Clock Condition (SCC)	SCC Definition
		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.
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 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 DNCS 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.

Line Item	Stop Clock Condition (SCC)	SCC Definition
13	THIRD PARTY	Any problem or delay caused by a third party not under the control of Contractor, not preventable by Contractor, including, at a minimum, cable cuts not caused by the Contractor. Contractor's 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 eVAQ General Provisions - Telecommunications, Section 28 (Force Majeure).
15	Customer Environmental	An outage directly caused by customer premise environmental conditions, which are outside the control and responsibility of the Contractor. This includes a non-secured location, excessive heat or lack of cooling. If determined later that the environmental conditions were not the cause of the service outage, or a result of the Contractor modifying Contractor provided equipment without Customer's approval, the Customer Environmental SCC will not apply.

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

The Contractor shall provide and manage the following Technical SLAs.

24.6.8 Technical Service Level Agreements (SLA)

24.6.8.1 Availability (M-S)

**SLA Name:** Availability

#### **Definition:**

The percentage of time a CALNET DNCS 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 individual affected service (per Circuit ID or Service 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 based on 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:

Flat Rate Internet Service

## **Objectives:**

The objective will be based on the access type identified in the table below:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
InFRa	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
InFRaM	≥ 99.2%	≥ 99.5%	≥ 99.9%	Р

## **Rights and Remedies:**

- 1. Per Occurrence:
  - End-User Escalation Process
  - CALNET CMO Escalation Process
- 2. Monthly Aggregated Measurements:
  - First month service fails to meet the committed SLA objective shall result in a 15% credit or refund of the TMRC.
  - The second consecutive month to fail to meet the committed SLA objective shall result in a 30% credit or refund of TMRC.
  - Each additional consecutive month to fail to meet the committed SLA objective shall result in a 50% credit or refund of the TMRC.

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

# 24.6.8.2 Catastrophic Outage 1 (CAT 1) (M-S)

**SLA Name:** Catastrophic Outage 1 (CAT 1)

#### **Definition:**

The total loss of service at a single site resulting in the loss of service to five or more circuits or any single service at 500Mbps or greater.

#### **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 or Service ID) affected by the 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 or Service ID) is restored minus SCC. Any service reported by a Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

### Services:

Flat Rate Internet Service

#### **Objectives:**

The objective restoral time will be:

	Basic	Standard	Premier	Bidder's Objective Commitment
Service Type	(B)	<b>(</b> S)	(P)	(B, S or P)
Internet Flat Rate				c
Service	≤ 3 hours	≤ 2 hours	≤ 1 hour	3

# **Rights and Remedies:**

- 1. Per Occurrence:
  - 100% credit or refund of the TMRC for each End-User service not meeting the committed objective for each CAT 1 fault.
- 2. Monthly Aggregated Measurements:

#### N/A

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

24.6.8.3 Catastrophic Outage 2 (CAT 2) (M-S)

**SLA Name:** Catastrophic Outage 2 (CAT 2)

#### **Definition:**

A total failure of a service type in a central office (or equivalent facility), other than access, that results in a CALNET DNCS service failure. Or, a backbone failure or failure of any part of the equipment associated with the backbone that causes a CALNET DNCS service failure.

#### **Measurement Process:**

The Outage Duration begins when a network alarm is received by the Contractor from the outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID or Service ID) basis from information recorded from the network equipment/system or a Customer reported trouble ticket. Each End-User service (Circuit ID or Service 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.

#### Services:

Flat Rate Internet Service

#### **Objectives:**

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
Internet Flat Rate				c
Service	≤ 1 Hour	≤ 30 Minutes	≤ 15 Minutes	3

## **Rights and Remedies:**

- 1. Per Occurrence:
  - 100% credit or refund of the TMRC for each End-User service not meeting the committed objective per occurrence objective for a single CAT 2 fault.
- 2. Monthly Aggregated Measurements:
  - N/A

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

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

**SLA Name:** Catastrophic Outage 3 (CAT 3)

#### **Definition:**

The total loss of Internet Service on a system wide basis.

#### **Measurement Process:**

The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or the Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall open a trouble ticket and compile a list for each End-User service (Circuit ID or Service ID) affected by the common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID or Service ID) basis from information recorded from the network equipment/system or trouble ticket. Each End-User service (Circuit ID or Service 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.

#### Services:

Flat Rate Internet Service

## **Objectives:**

The objective restoral time will be:

	Basic	Standard	Premier	Bidder's Objective Commitment
Access Type	(B)	<b>(</b> S)	(P)	(B or P)
Internet Flat Rate	≤ 30		≤ 15	D
Service	Minutes	N/A	Minutes	I

#### **Rights and Remedies:**

- 1. Per Occurrence:
  - 100% credit or refund of the TMRC for each service (Circuit ID or Service ID) not meeting the committed objective for each Cat 3 fault.
- 2. Monthly Aggregated Measurements:
  - N/A

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

24.6.8.5 DDoS Mitigation (M-S)

**SLA Name**: DDoS Time to Initiate Mitigation

#### **Definition:**

The time to initiate DDoS mitigation upon the identification of an attack.

#### **Measurement Process:**

The amount of time between the detection via Customer or Contractor identification of an anomaly or attack, and the initiation of the mitigation process.

## Services:

**DDoS Mitigation** 

#### **Objectives:**

Mitigation shall begin within:

Access Type	Basic (B)	Standard (S)	Premier	Bidder's Objective Commitment (B, S or P)
Access type	\ <i>\</i>	(-)	(1)	(B, 3 Of 1)
	≤ 45	≤ 30	≤ 15	C
DDoS Mitigation	Minutes	Minutes	Minutes	3

# **Rights and Remedies:**

1. Per Occurrence:

Basic Time to Initiate Mitigation Minutes	Standard Time to Initiate Mitigation Minutes	Premier Time to Initiate Mitigation Minutes	Credit or Refund Percentage of TMRC for all components of DDoS feature per event
46 – 75	31 – 45	16 – 30	25%
76 – 135	46 – 75	31 – 45	50%
136 and over	76 and over	46 and over	100%

# 2. Monthly Aggregated Measurements:

N/A

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

24.6.8.6 Excessive Outage (M-S)

**SLA Name:** Excessive Outage

## **Definition:**

Any failure that prevents full functionality of the service 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 not fully functional during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If the Customer reports a partial or complete service that is not fully functional and remains unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time.

#### Services:

Flat Rate Internet Service

#### **Objectives:**

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
Internet Flat Rate Service	16 Hours	12 Hours	8 Hours	S

# **Rights and Remedies:**

- 1. Per Occurrence:
  - 100% credit or refund of the TMRC for each service (Circuit ID or Service ID) out of service for a period greater than the committed objective level.
  - Upon request from the Customer or the CALNET Program, the Contractor shall provide a briefing on the excessive outage restoration.
- 2. Monthly Aggregated Measurements:
  - N/A

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

24.6.8.7 Managed Service Proactive Notification (M-S)

**SLA Name:** Managed Service Proactive Notification

**Definition:** 

The proactive outage notification SLA provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET Program.

An Outage is defined as an unscheduled period in which the managed 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.

#### **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 minutes (Notification Period) to open a trouble ticket and notify the Customer from the start point of the first network alarm. The Contractor is in compliance with the proactive outage notification SLA if the Customer opened the trouble ticket prior to the network alarm or Customer is notified by the Contractor within the Notification Period.

#### Services:

Flat Rate Internet Service with Managed Router or IP Enabled Routing Device

# **Objectives:**

15 Minutes

#### **Rights and Remedies:**

- 1. Per Occurrence:
  - Customer will receive a credit or refund equal to 10% of the TMRC for each Contractor Managed Service (Circuit ID) that was impacted during an outage if the Customer was not proactively notified within the notification period
- 2. Monthly Aggregated Measurements:
  - N/A

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

# 24.6.8.8 Notification

**SLA Name:** Notification

#### **Definition:**

The Contractor notification to the CALNET Program and designated stakeholders in the event of a CAT 2 or CAT 3 failure, terrorist activity, threat of natural disaster, or actual natural disaster which results in a significant loss of telecommunication services to CALNET DNCS End-Users or has the potential to impact services in a general or statewide area. The State understands initial information requiring the nature of the outage may be limited.

#### **Measurement Process:**

The Contractor shall adhere to the Network Outage Response requirements (SOW Business Requirements Section G.3.3, Network Outage Response) and notify the CALNET Program and designated stakeholders for all CAT 2 and CAT 3 Outages or for network outages resulting in a significant loss of service. Notification objectives will be based on the start time of the outage failure determined by the opening of a trouble ticket or network alarm, whichever occurs first. For events based on information such as terrorist activity or threat of natural disaster, the Contractor shall notify the CALNET Program and designated stakeholders when information is available for dissemination to the Customers.

#### Services:

Internet Flat Rate Service

## **Objectives:**

Within 60 minutes of the above mentioned failures' start time, the Contractor shall notify the CALNET Program and designated stakeholders using a method defined in SOW Business Requirements, Network Outage Response.

At 60-minute intervals, updates shall be given on the above-mentioned failures via the method defined in SOW Business Requirements, Network Outage Response.

This objective is the same for Basic, Standard and Premier Commitments.

## **Rights and Remedies:**

- 1. Per Occurrence:
  - Senior Management Escalation
- Monthly Aggregated Measurements:
  - N/A

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

24.6.8.9 Provisioning (M-S)

**SLA Name:** Provisioning

#### **Definition:**

Provisioning shall include new services, moves, adds and changes, completed by the Contractor on or before the due dates. The Provisioning SLA shall be based on committed installation intervals established in this SLA or due dates negotiated between the Customer and the Contractor documented on the Contractor's order confirmation notification or Contracted Project Work SOW in accordance with SOW Business Requirements Section G.2.5.4, 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 Timeline per SOW Business Requirements Section G.8, Contracted Service Project Work.

#### Provisioning SLAs have two objectives:

Objective 1: Individual service installation; and, Objective 2: Successful Install Monthly Percentage by service type. Note: Provisioning timelines include extended demarcation wiring when appropriate.

#### **Measurement Process:**

Objective 1: Individual Service Installations: Install intervals are based on the committed installation intervals established in this SLA or due dates negotiated between the Customer and the Contractor. This objective requires the Contractor to meet the due date for each individual service installation. This includes individual circuit/service level installations for Coordinated and Managed Projects.

Objective 2: Successful Install Monthly Percentage per Service Type: The Contractor shall sum all individual installations per service, as listed below, meeting the objective in the measurement period and divide by the sum of all individual service installations due per service in the measurement period and multiply by 100 to equal the percentage of service installations completed on time. The Contractor must meet or exceed the objective below in order to avoid the rights and remedies.

#### Services:

Features must be installed in conjunction with the service except when listed below:

	Committed	
Service	Interval Days	Coordinated/Managed Project
InFRa	30	Coordinated/Managed Project
InFRaM	30	Coordinated/Managed Project

## **Objectives:**

Objective 1: Individual service installation: Service provisioned on or before the due date per installation Service Request.

Objective 2: Monthly Average percent by service type:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
InFRa	≥ 90%	N/A	≥ 95%	Р
InFRaM	≥ 90%	N/A	≥ 95%	Р

# **Rights and Remedies:**

1. Per Occurrence:

- Objective 1: Individual service installations: 50% of installation fee credited to the Customer for any missed committed objective.
- 2. Monthly Aggregated Measurements:
  - Objective 2: 100% of the installation fee credited to the Customer for all service installations (per service type) that did not complete within the committed objective during the month if the Successful Install Monthly Percentage is below the committed objective.

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

24.6.8.10 Time to Repair (M-S)

**SLA Name:** Time to Repair

#### **Definition:**

Any failure that prevents full functionality of the service that remains unresolved for more than the committed objective level.

#### **Measurement Process:**

This SLA is based on trouble ticket Unavailable Time per service (Circuit ID or Service ID). The circuit or service is not fully functional during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If the Customer reports a service that is not fully functional and remains 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.

#### Services:

Flat Rate Internet Service

#### **Objectives:**

The Unavailable Time objective shall not exceed:

Service Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
Internet Flat Rate Service	6 Hours	5 Hours	4 Hours	S

## **Rights and Remedies:**

- 1. Per Occurrence:
  - 25% credit or refund of the TMRC for each service (Circuit ID or Service ID) out of service for a period greater than the committed objective level.
- 2. Monthly Aggregated Measurements:
  - N/A

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

#### 24.6.8.11 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

# 24.6.8.12 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 24.6.8 for each unsolicited offering determined by the CALNET Program 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

# 24.6.8.13 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 Section 24.6.8.

Level 3 Communications, LLC dba CenturyLink dba LUMEN
State of California C4-DNCS-19-001-41, Am 1
Department of Technology Category 24 - Technical Requirements

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