INVITATION FOR BID

IFB C4DNCS19
Data Networks and Communications Services

CATEGORY 20 – MPLS DATA NETWORK

Granite Telecommunications, LLC.

Statement of Work

TECHNICAL REQUIREMENTS

March 5, 2020

BAFO

Issued by:

STATE OF CALIFORNIA

California Department of Technology Statewide Procurement

PO Box 1810

Rancho Cordova, CA 95741

AMENDMENT LOG

Amendment	Date	Amendment Description
3	04/15/2021	Document Header added Table 20.2.10 - modified; Table 20.3.2.2 - modified; and Added SLA Language for Tables 20.4.8.1.a, 20.4.8.2.a, 20.4.8.3.a, 20.4.8.5.a, 20.4.8.6.a, 20.4.8.7, 20.4.8.9, and 20.4.8.10.a.
6	8/4/2023	Updated Document Header Table 20.2.10 - modified; and added services

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TECHNICAL REQUIREMENTS

Category 20 – MPLS DATA NETWORK

20.1 OVERVIEW

This Category 20 IFB C4DNCS19 (IFB) provides the State's solicitation for best value solutions for MPLS Data Network Services. This IFB also describes the CALNET 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 Part 1, Bid Evaluation. The CALNET Data Network and Communication Services (DNCS) 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).

20.1.1 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? Choose an item.**"**

Or,

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

Bidder understands this requirement and shall meet or exceed it? Choose an item.

Bidder's 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					**Yes**

20.1.2 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.

20.1.3 Pacific Time Zone

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

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

20.2 MULTI-PROTOCOL LABEL SWITCHING (MPLS) SERVICES

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

20.2.1 MPLS Service Functionality

1. Contractors shall provide a private MPLS WAN VPN service for the networking of all voice, video and data applications.

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

2. The MPLS WAN VPN service shall support voice, video and data applications over a single access connection with individual Class of Service (CoS) to allow each set of applications to be transported within its service specifications.

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

3. The MPLS WAN VPN service shall support the ability to assign specific application priority over other applications.

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

4. The MPLS WAN VPN service shall provide any-to-any connectivity.

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

5. The MPLS WAN VPN service shall not use the public Internet for transport. Remote access to this solution may use the public Internet.

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

6. The MPLS WAN VPN service shall be a fully Managed Service that includes the Customer edge layer 3 routing device.

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

20.2.2 MPLS WAN VPN Configurations

The Bidder's MPLS WAN VPN service shall support the following configurations:

1. Port only configuration;

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

2. Bundled port and access configuration; and,

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

3. Bundled port, access and Customer edge layer 3 routing device configuration.

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

20.2.3 MPLS Industry Security Standards

1. Upon request by the CALNET CMO, Contractor will provide for viewing at Contractor's facility the security controls in force for the MPLS WAN infrastructure as well as independent audit results of those controls for authorized State personnel (under NDA). This will include the full scope of controls NIST SP 800-53, ISO/IEC 27001, or equivalent. Where NDAs are not sufficient to allow access to Contractor's facility, the Contractor shall provide independent audit results to the State Information Security Officer.

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

2. If Contractor determines that a breach of data has occurred within the Contractor's MPLS WAN that may involve CALNET Customer data, the nature and scope of the breach (as it affects Customer data) must be

reported to both the Customer and the CALNET CMO within 24 hours of that determination.

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

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

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

4. Contractor shall apply available patches and/or updates which remediate published vulnerabilities in accordance CVSS v3.0 Base Score.

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

5. Contractor shall provide to the CALNET CMO a report upon request detailing all (if any) actual violations of security protections, policies, practices, and/or procedures involving Contractor managed Customer edge devices and what remediation was implemented.

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

20.2.3.1 MPLS Physical Security

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

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

20.2.3.2 Protection against Unauthorized Access

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

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

20.2.3.3 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 this requirement and shall meet or exceed it? Yes

20.2.4 MPLS WAN VPN Standards

Bidders shall confirm that the Contractor's CALNET MPLS WAN VPN services meet all International Engineering Task Force (IETF) Standards and Request for Comments (RFC's).

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

20.2.5 MPLS Performance Metrics

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

1. Service availability shall be 99.9% measured port to port.

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

2. MPLS shall have a packet loss of <0.2% measured port to port.

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

3. MPLS shall have jitter <10ms measured port to port.

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

20.2.6 MPLS Geographic Service Areas

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.

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.

Table 20.2.6 – Bidder's MPLS Service Locations

Line Item	Service Location – City or ZIP Code
1	Statewide
2	
3	

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

20.2.7 MPLS Network Designs and Diagrams

Bidders shall provide network designs and diagrams for the network and MPLS services.

Bidders shall provide one electronic copy with their proposal. Electronic drawings shall be in .dwg, .dfx, .vsd, .pdf or any mutually agreed format. Drawings must identify how the Contractor's network(s) deployed for each service type will address the following:

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

The Contractor shall provide soft and hard copy revisions upon CALNET CMO request.

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

1. Geographic location of equipment;
2. Type and capacity of equipment at each location including any backup systems;
3. Service type;
4. Unique identifier for each element;
5. Circuit type; and,
6. General circuit route

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

20.2.8 MPLS Technical Requirements

Bidder shall confirm that its MPLS solution to be deployed for CALNET DNCS will include the technical features and functionality described below.

1. Contractor shall be able to scale the number of VPNs supported by the network.

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

2. Contractor shall support multiple VPNs per access.

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

3. Contractor shall support multiple VPNs across the MPLS network.

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

4. Contractor shall provide the rapid service restoration practices for all MPLS deployments in accordance with the SLAs in the Technical Service Level Agreements Section.

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

5. Contractor shall provide redundant network circuits in the backbone network.

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

6. Contractor shall provide network diversity to eliminate single points of failure in the backbone network.

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

7. Contractor shall provide a remote access service that allows an out of band access to any Customer site contained within the same VPN. The solution may utilize the public Internet.

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

8. The remote access service shall be secured.

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

9. The MPLS WAN VPN service shall support controlled and monitored connections between the MPLS network and the public Internet via a hardened trusted managed firewall.

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

10. The MPLS WAN VPN service shall be resilient.

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

11. Contractor shall provide support for multiple Layer 2 access protocols.

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

12. Contractor shall provide segregation of Customer traffic in a VPN environment.

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

13. The MPLS WAN VPN service shall support IPv4/v6 capability.

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

14. The Contractor shall provide MPLS port diversity capability within the same MPLS PoP.

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

15. The Contractor shall provide MPLS PoP diversity capability.

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

16. The Contractor shall provide out-of-band backup capability to support routing of traffic outside of the MPLS network in case of MPLS network failure.

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

17. The MPLS WAN VPN service shall support IP Multicasting.

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

18. The MPLS WAN VPN service shall provide Multiple CoS to support the prioritization of Customer applications and traffic flows.

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

19. The MPLS WAN VPN service shall support the division of an MPLS port into multiple logical channels such that each logical channel can be used to support a VPN.

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

20. The MPLS WAN VPN service shall support multiple Layer 2 protocols.

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

21. The MPLS WAN VPN service shall support wireless Customer access capability to the MPLS network.

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

22. The Contractor shall provide out-of-band emergency access capability for emergency access to the managed Layer 3 routing device. The solution shall include any data communications equipment as required.

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

23. Bidder shall confirm that its MPLS solution to be deployed for CALNET DNCS will provide fully managed Layer 3 routing device service bundles that include the following:

24. Layer 3 Routing Device Maintenance. Proactively detect, isolate and resolve hardware, software and firmware faults associated with the

managed Layer 3 routing device and modem used for access to the managed Layer 3 routing device. The Contractor shall also respond to Customer reported faults. Layer 3 routing device maintenance shall be provided 24x7. If dispatch is required, a Field Service Repair Technician shall arrive within four hours of isolating the fault to the managed Layer 3 routing device. Customer shall be notified of Layer 3 routing device faults and be provided trouble status at one hour intervals.

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

25. Layer 3 Routing Device Monitoring. Proactively detect, isolate and resolve logical faults associated with the managed Layer 3 routing device. Layer 3 routing device monitoring shall be provided 24x7.

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

26. Layer 3 Routing Device Configuration Management. This includes passwords, access lists and configuration changes due to moves, adds, changes and deletes.

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

27. The Contractor shall provide full read only access to the managed Layer 3 routing device.

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

28. Network Monitoring. Proactively detect, isolate and resolve network faults. Network monitoring shall be provided 24x7. Customer shall be notified of network faults and be provided trouble status at one hour intervals.

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

20.2.8.1 Network Operations Center

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

The Contractor shall be responsible for the following:

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

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

2. Monitoring of Contractor's network performance in near real-time to identify capacity blockages and implement controls to optimize network health and performance immediately.

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

20.2.8.2 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 this requirement and shall meet or exceed it? Yes

20.2.9 MPLS Transport Speeds

Bidder's CALNET MPLS solution shall include transport options to one endpoint for each of the speeds detailed in Tables 20.2.9.1 through 20.2.9.5. The Bidder shall identify the delivery method in the Bidder's Product Description (e.g., Ethernet, T1, etc.) Pricing for each of these speeds shall be provided by the Bidder in the response to the Category Cost Worksheets. Alternative delivery methods that differ from those the Bidder has identified in Tables 20.2.9.1.a, 20.2.9.2.a, and 20.2.9.3.a may be proposed in the corresponding unsolicited tables.

20.2.9.1 MPLS Port Transport Speeds

Table 20.2.9.1.a – MPLS Port Transport Speeds

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	MPLS Port Service at 1 Mbps	MPLS Port service at minimum line rate of 1 Mbps		MPLS_GRT_1	**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.
2	MPLS Port service at 3 Mbps	MPLS Port service at minimum line rate of 3 Mbps		MPLS_GRT_2	**Yes**
3	MPLS Port service at 4 Mbps	MPLS Port service at minimum line rate of 4 Mbps		MPLS_GRT_3	**Yes**
4	MPLS Port service at 5 Mbps	MPLS Port service at minimum line rate of 5 Mbps		MPLS_GRT_4	**Yes**
5	MPLS Port service at 7 Mbps	MPLS Port service at minimum line rate of 7 Mbps		MPLS_GRT_5	**Yes**
6	MPLS Port service at 9 Mbps	MPLS Port service at minimum line rate of 9 Mbps		MPLS_GRT_6	**Yes**
7	MPLS Port service at 10 Mbps	MPLS Port service at minimum line rate of 10 Mbps		MPLS_GRT_7	**Yes**
8	MPLS Port service at 12 Mbps	MPLS Port service at minimum line rate of 12 Mbps		MPLS_GRT_8	**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.
9	MPLS Port service at 15 Mbps	MPLS Port service at minimum line rate of 15 Mbps		MPLS_GRT_9	**Yes**
10	MPLS Port service at 20 Mbps	MPLS Port service at minimum line rate of 20 Mbps		MPLS_GRT_10	**Yes**
11	MPLS Port service at 30 Mbps	MPLS Port service at minimum line rate of 30 Mbps		MPLS_GRT_11	**Yes**
12	MPLS Port service at 40 Mbps	MPLS Port service at minimum line rate of 40 Mbps		MPLS_GRT_12	**Yes**
13	MPLS Port service at 50 Mbps	MPLS Port service at minimum line rate of 50 Mbps		MPLS_GRT_13	**Yes**
14	MPLS Port service at 60 Mbps	MPLS Port service at minimum line rate of 60 Mbps		MPLS_GRT_14	**Yes**
15	MPLS Port service at 70 Mbps	MPLS Port service at minimum line rate of 70 Mbps		MPLS_GRT_15	**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.
16	MPLS Port service at 80 Mbps	MPLS Port service at minimum line rate of 80 Mbps		MPLS_GRT_16	**Yes**
17	MPLS Port service at 90 Mbps	MPLS Port service at minimum line rate of 90 Mbps		MPLS_GRT_17	**Yes**
18	MPLS Port service at 100 Mbps	MPLS Port service at minimum line rate of 100 Mbps		MPLS_GRT_18	**Yes**
19	MPLS Port service at 150 Mbps	MPLS Port service at minimum line rate of 150 Mbps		MPLS_GRT_19	**Yes**
20	MPLS Port service at 200 Mbps	MPLS Port service at minimum line rate of 200 Mbps		MPLS_GRT_20	**Yes**
21	MPLS Port service at 250 Mbps	MPLS Port service at minimum line rate of 250 Mbps		MPLS_GRT_21	**Yes**
22	MPLS Port service at 300 Mbps	MPLS Port service at minimum line rate of 300 Mbps		MPLS_GRT_22	**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.
23	MPLS Port service at 400 Mbps	MPLS Port service at minimum line rate of 400 Mbps		MPLS_GRT_23	**Yes**
24	MPLS Port service at 500 Mbps	MPLS Port service at minimum line rate of 500 Mbps		MPLS_GRT_24	**Yes**
25	MPLS Port service at 600 Mbps	MPLS Port service at minimum line rate of 600 Mbps		MPLS_GRT_25	**Yes**
26	MPLS Port service at 700 Mbps	MPLS Port service at minimum line rate of 700 Mbps		MPLS_GRT_26	**Yes**
27	MPLS Port service at 1 Gbps	MPLS Port service at minimum line rate of 1 Gbps		MPLS_GRT_27	**Yes**
28	MPLS Port service at 2 Gbps	MPLS Port service at minimum line rate of 2 Gbps		MPLS_GRT_28	**Yes**
29	MPLS Port service at 3 Gbps	MPLS Port service at minimum line rate of 3 Gbps		MPLS_GRT_29	**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.
30	MPLS Port service at 4 Gbps	MPLS Port service at minimum line rate of 4 Gbps		MPLS_GRT_30	**Yes**
31	MPLS Port service at 5 Gbps	MPLS Port service at minimum line rate of 5 Gbps		MPLS_GRT_31	**Yes**
32	MPLS Port service at 6 Gbps	MPLS Port service at minimum line rate of 6 Gbps		MPLS_GRT_32	**Yes**
33	MPLS Port service at 7 Gbps	MPLS Port service at minimum line rate of 7 Gbps		MPLS_GRT_33	**Yes**
34	MPLS Port service at 8 Gbps	MPLS Port service at minimum line rate of 8 Gbps		MPLS_GRT_34	**Yes**
35	MPLS Port service at 9 Gbps	MPLS Port service at minimum line rate of 9 Gbps		MPLS_GRT_35	**Yes**
36	MPLS Port service at 10 Gbps	MPLS Port service at minimum line rate of 10 Gbps		MPLS_GRT_36	**Yes**

The Contractor may offer additional unsolicited MPLS Port Transport Speeds in Table 20.2.9.1.b.

Table 20.2.9.1.b – Unsolicited MPLS Port Transport Speeds

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			
2			
3			

20.2.9.2 MPLS Port and Access Bundled Transport Speeds

Table 20.2.9.2.a – MPLS Port and Access Bundled Transport Speeds

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	MPLS Port and Access service at 1 Mbps	MPLS Port and Access service at minimum line rate of 1 Mbps		MPLS_GRT_P&A_1	**Yes**
2	MPLS Port and Access service at 3 Mbps	MPLS Port and Access service at minimum line rate of 3 Mbps		MPLS_GRT_P&A_2	**Yes**
3	MPLS Port and Access service at 4 Mbps	MPLS Port and Access service at minimum line rate of 4 Mbps		MPLS_GRT_P&A_3	**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
4	MPLS Port and Access service at 5 Mbps	MPLS Port and Access service at minimum line rate of 5 Mbps		MPLS_GRT_P&A_4	**Yes**
5	MPLS Port and Access service at 7 Mbps	MPLS Port and Access service at minimum line rate of 7 Mbps		MPLS_GRT_P&A_5	**Yes**
6	MPLS Port and Access service at 9 Mbps	MPLS Port and Access service at minimum line rate of 9 Mbps		MPLS_GRT_P&A_6	**Yes**
7	MPLS Port and Access service at 10 Mbps	MPLS Port and Access service at minimum line rate of 10 Mbps		MPLS_GRT_P&A_7	**Yes**
8	MPLS Port and Access service at 12 Mbps	MPLS Port and Access service at minimum line rate of 12 Mbps		MPLS_GRT_P&A__8	**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
9	MPLS Port and Access service at 15 Mbps	MPLS Port and Access service at minimum line rate of 15 Mbps		MPLS_GRT_P&A_9	**Yes**
10	MPLS Port and Access service at 20 Mbps	MPLS Port and Access service at minimum line rate of 20 Mbps		MPLS_GRT_P&A_10	**Yes**
11	MPLS Port and Access service at 30 Mbps	MPLS Port and Access service at minimum line rate of 30 Mbps		MPLS_GRT_P&A_11	**Yes**
12	MPLS Port and Access service at 40 Mbps	MPLS Port and Access service at minimum line rate of 40 Mbps		MPLS_GRT_P&A_12	**Yes**
13	MPLS Port and Access service at 50 Mbps	MPLS Port and Access service at minimum line rate of 50 Mbps		MPLS_GRT_P&A_13	**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
14	MPLS Port and Access service at 60 Mbps	MPLS Port and Access service at minimum line rate of 60 Mbps		MPLS_GRT_P&A_14	**Yes**
15	MPLS Port and Access service at 70 Mbps	MPLS Port and Access service at minimum line rate of 70 Mbps		MPLS_GRT_P&A_15	**Yes**
16	MPLS Port and Access service at 80 Mbps	MPLS Port and Access service at minimum line rate of 80 Mbps		MPLS_GRT_P&A_16	**Yes**
17	MPLS Port and Access service at 90 Mbps	MPLS Port and Access service at minimum line rate of 90 Mbps		MPLS_GRT_P&A_17	**Yes**
18	MPLS Port and Access service at 100 Mbps	MPLS Port and Access service at minimum line rate of 100 Mbps		MPLS_GRT_P&A_18	**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
19	MPLS Port and Access service at 150 Mbps	MPLS Port and Access service at minimum line rate of 150 Mbps		MPLS_GRT_P&A_19	**Yes**
20	MPLS Port and Access service at 200 Mbps	MPLS Port and Access service at minimum line rate of 200 Mbps		MPLS_GRT_P&A_20	**Yes**
21	MPLS Port and Access service at 250 Mbps	MPLS Port and Access service at minimum line rate of 250 Mbps		MPLS_GRT_P&A_21	**Yes**
22	MPLS Port and Access service at 300 Mbps	MPLS Port and Access service at minimum line rate of 300 Mbps		MPLS_GRT_P&A_22	**Yes**
23	MPLS Port and Access service at 400 Mbps	MPLS Port and Access service at minimum line rate of 400 Mbps		MPLS_GRT_P&A_23	**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
24	MPLS Port and Access service at 500 Mbps	MPLS Port and Access service at minimum line rate of 500 Mbps		MPLS_GRT_P&A_24	**Yes**
25	MPLS Port and Access service at 600 Mbps	MPLS Port and Access service at minimum line rate of 600 Mbps		MPLS_GRT_P&A_25	**Yes**
26	MPLS Port and Access service at 700 Mbps	MPLS Port and Access service at minimum line rate of 700 Mbps		MPLS_GRT_P&A_26	**Yes**
27	MPLS Port and Access service at 1 Gbps	MPLS Port and Access service at minimum line rate of 1 Gbps		MPLS_GRT_P&A_27	**Yes**
28	MPLS Port and Access service at 2 Gbps	MPLS Port and Access service at minimum line rate of 2 Gbps		MPLS_GRT_P&A_28	**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
29	MPLS Port and Access service at 3 Gbps	MPLS Port and Access service at minimum line rate of 3 Gbps		MPLS_GRT_P&A_29	**Yes**
30	MPLS Port and Access service at 4 Gbps	MPLS Port and Access service at minimum line rate of 4 Gbps		MPLS_GRT_P&A_30	**Yes**
31	MPLS Port and Access service at 5 Gbps	MPLS Port and Access service at minimum line rate of 5 Gbps		MPLS_GRT_P&A_31	**Yes**
32	MPLS Port and Access service at 6 Gbps	MPLS Port and Access service at minimum line rate of 6 Gbps		MPLS_GRT_P&A_32	**Yes**
33	MPLS Port and Access service at 7 Gbps	MPLS Port and Access service at minimum line rate of 7 Gbps		MPLS_GRT_P&A_33	**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
34	MPLS Port and Access service at 8 Gbps	MPLS Port and Access service at minimum line rate of 8 Gbps		MPLS_GRT_P&A_34	**Yes**
35	MPLS Port and Access service at 9 Gbps	MPLS Port and Access service at minimum line rate of 9 Gbps		MPLS_GRT_P&A_35	**Yes**
36	MPLS Port and Access service at 10 Gbps	MPLS Port and Access service at minimum line rate of 10 Gbps		MPLS_GRT_P&A_36	**Yes**

The Contractor may offer additional unsolicited MPLS Port and Access Transport Speeds in Table 20.2.9.2.b.

Table 20.2.9.2.b – Unsolicited MPLS Port and Access Bundled Transport Speeds

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			
2			
3			

20.2.9.3 MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

Table 20.2.9.3.a – MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

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	MPLS port, access and Layer 3 routing device bundled service at 1 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 1 Mbps		MPLS_GRT_Bundle_1	**Yes**
2	MPLS port, access and Layer 3 routing device bundled service at 3 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 3 Mbps		MPLS_GRT_Bundle_2	**Yes**
3	MPLS port, access and Layer 3 routing device bundled service at 4 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 4 Mbps		MPLS_GRT_Bundle_3	**Yes**
4	MPLS port, access and Layer 3 routing device bundled service at 5 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 5 Mbps		MPLS_GRT_Bundle_4	**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	MPLS port, access and Layer 3 routing device bundled service at 7 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 7 Mbps		MPLS_GRT_Bundle_5	**Yes**
6	MPLS port, access and Layer 3 routing device bundled service at 9 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 9 Mbps		MPLS_GRT_Bundle_6	**Yes**
7	MPLS port, access and Layer 3 routing device bundled service at 10 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 10 Mbps		MPLS_GRT_Bundle_7	**Yes**
8	MPLS port, access and Layer 3 routing device bundled service at 12 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 12 Mbps		MPLS_GRT_Bundle_8	**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
9	MPLS port, access and Layer 3 routing device bundled service at 15 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 15 Mbps		MPLS_GRT_Bundle_9	**Yes**
10	MPLS port, access and Layer 3 routing device bundled service at 20 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 20 Mbps		MPLS_GRT_Bundle_10	**Yes**
11	MPLS port, access and Layer 3 routing device bundled service at 30 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 30 Mbps		MPLS_GRT_Bundle_11	**Yes**
12	MPLS port, access and Layer 3 routing device bundled service at 40 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 40 Mbps		MPLS_GRT_Bundle_12	**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
13	MPLS port, access and Layer 3 routing device bundled service at 50 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 50 Mbps		MPLS_GRT_Bundle_13	**Yes**
14	MPLS port, access and Layer 3 routing device bundled service at 60 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 60 Mbps		MPLS_GRT_Bundle_14	**Yes**
15	MPLS port, access and Layer 3 routing device bundled service at 70 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 70 Mbps		MPLS_GRT_Bundle_15	**Yes**
16	MPLS port, access and Layer 3 routing device bundled service at 80 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 80 Mbps		MPLS_GRT_Bundle_16	**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
17	MPLS port, access and Layer 3 routing device bundled service at 90 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 90 Mbps		MPLS_GRT_Bundle_17	**Yes**
18	MPLS port, access and Layer 3 routing device bundled service at 100 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 100 Mbps		MPLS_GRT_Bundle_18	**Yes**
19	MPLS port, access and Layer 3 routing device bundled service at 150 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 150 Mbps		MPLS_GRT_Bundle_19	**Yes**
20	MPLS port, access and Layer 3 routing device bundled service at 200 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 200 Mbps		MPLS_GRT_Bundle_20	**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
21	MPLS port, access and Layer 3 routing device bundled service at 250 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 250 Mbps		MPLS_GRT_Bundle_21	**Yes**
22	MPLS port, access and Layer 3 routing device bundled service at 300 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 300 Mbps		MPLS_GRT_Bundle_22	**Yes**
23	MPLS port, access and Layer 3 routing device bundled service at 400 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 400 Mbps		MPLS_GRT_Bundle_23	**Yes**
24	MPLS port, access and Layer 3 routing device bundled service at 500 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 500 Mbps		MPLS_GRT_Bundle_24	**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
25	MPLS port, access and Layer 3 routing device bundled service at 600 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 600 Mbps		MPLS_GRT_Bundle_25	**Yes**
26	MPLS port, access and Layer 3 routing device bundled service at 700 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 700 Mbps		MPLS_GRT_Bundle_26	**Yes**
27	MPLS port, access and Layer 3 routing device bundled service at 1 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 1 Gbps		MPLS_GRT_Bundle_27	**Yes**
28	MPLS port, access and Layer 3 routing device bundled service at 2 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 2 Gbps		MPLS_GRT_Bundle_28	**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
29	MPLS port, access and Layer 3 routing device bundled service at 3 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 3 Gbps		MPLS_GRT_Bundle_29	**Yes**
30	MPLS port, access and Layer 3 routing device bundled service at 4 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 4 Gbps		MPLS_GRT_Bundle_30	**Yes**
31	MPLS port, access and Layer 3 routing device bundled service at 5 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 5 Gbps		MPLS_GRT_Bundle_31	**Yes**
32	MPLS port, access and Layer 3 routing device bundled service at 6 Gbps	MPLS port, access and Layer 3 routing device bundled service at a minimum line rate of 6 Gbps		MPLS_GRT_Bundle_32	**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
33	MPLS port, access and Layer 3 routing device bundled service at 7 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 7 Gbps		MPLS_GRT_Bundle_33	**Yes**
34	MPLS port, access and Layer 3 routing device bundled service at 8 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 8 Gbps		MPLS_GRT_Bundle_34	**Yes**
35	MPLS port, access and Layer 3 routing device bundled service at 9 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 9 Gbps		MPLS_GRT_Bundle_35	**Yes**
36	MPLS port, access and Layer 3 routing device bundled service at 10 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 10 Gbps		MPLS_GRT_Bundle_36	**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
37	Out-of-band access to the managed layer 3 routing device	Out-of-band emergency access capability for emergency access to the managed layer 3 routing device.		MPLS_GRT_Bundle_37	**Yes**

The Contractor may offer additional unsolicited MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds in Table 20.2.9.3.b.

Table 20.2.9.3.b – Unsolicited MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			
2			
3			

20.2.9.4 MPLS Backup 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 this requirement and shall meet or exceed it? Yes

20.2.10 Additional Unsolicited MPLS Services and Features

The Bidder may offer additional unsolicited MPLS Services and Features in Table 20.2.10.

Table 20.2.10 – Unsolicited MPLS Services and Features

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1	1 GB -- Pooled Plan - Data, Hotspot, and Tablet	LTE_GRT_1	The 1GB pooled plan includes 1GB of data per month, which may be shared by all users on the account. Granite's Data, Hotspot, and Tablet Plan is only available for use with CALNET Cellular Providers. Granite's price includes its dedicated Premier support team that helps our customers manage their data usage through Cross Carrier Pooling, Proactive alerts and the ability to customize billing and provide customized reports. This is only to be used to access the Granite MPLS network. In order to access the Granite MPLS network, Granite Guardian for Managed VPN service also needs to be purchased (LTE_GRT_281 & 282).
2	5 GB -- Pooled Plan - Data, Hotspot, and Tablet	LTE_GRT_2	The 5GB pooled plan includes 5GB of data per month, which may be shared by all users on the account. Granite's Data, Hotspot, and Tablet Plan is only available for use with CALNET Cellular Providers. Granite's price includes its dedicated Premier support team that helps our customers manage their data usage through Cross Carrier Pooling, Proactive alerts and the ability to customize billing and

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			provide customized reports. This is only to be used to access the Granite MPLS network. In order to access the Granite MPLS network, Granite Guardian for Managed VPN service also needs to be purchased (LTE_GRT_281 & 282).
3	NetCloud License Load	LTE_GRT_213	Factory Load NetCloud License file
4	Cat 4 LTE modem (for AER series, ARC CBA850, and COR series products with dock)	LTE_GRT_216	Cat 4 LTE modem (for AER series, ARC CBA850, and COR series products with dock)
5	LTE Advanced (Cat 6) modem (for AER1600/1650, 2100, AER3100/3150, CBA850, and COR series products with dock)	LTE_GRT_217	LTE Advanced (Cat 6) modem (for AER1600/1650, 2100, AER3100/3150, CBA850, and COR series products with dock)
6	LTE Advanced (600 Mbps) modem for AT&T/FirstNet	LTE_GRT_218	LTE Advanced (600 Mbps) modem for AT&T/FirstNet
7	LTE Advanced Pro (1200Mbps) modem upgrade for Branch. Includes AER2200 & AER1600 doors and 4 black antennas	LTE_GRT_219	LTE Advanced Pro (1200Mbps) modem upgrade for Branch. Includes AER2200 & AER1600 doors and 4 black antennas

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
8	LTE Advanced Pro (1200Mbps) modem upgrade for LTE Branch Adapter. Includes CBA850 door and 4 white antennas	LTE_GRT_220	LTE Advanced Pro (1200Mbps) modem upgrade for LTE Branch Adapter. Includes CBA850 door and 4 white antennas
9	LTE Advanced Pro (1200Mbps) modem upgrade for Mobile. Includes IBR1700 & COR Dock doors, no antennas	LTE_GRT_221	LTE Advanced Pro (1200Mbps) modem upgrade for Mobile. Includes IBR1700 & COR Dock doors, no antennas
10	LTE Advanced Pro (1200Mbps) modem upgrade for Branch. Includes AER2200 & AER1600 doors and 4 black antennas	LTE_GRT_222	LTE Advanced Pro (1200Mbps) modem upgrade for Branch. Includes AER2200 & AER1600 doors and 4 black antennas
11	LTE Advanced Pro (1200Mbps) modem upgrade for LTE Branch Adapter. Includes CBA850 door and 4 white antennas	LTE_GRT_223	LTE Advanced Pro (1200Mbps) modem upgrade for LTE Branch Adapter. Includes CBA850 door and 4 white antennas
12	LTE Advanced Pro (1200Mbps) modem upgrade for Mobile. Includes IBR1700 & COR Dock doors, no antennas	LTE_GRT_224	LTE Advanced Pro (1200Mbps) modem upgrade for Mobile. Includes IBR1700 & COR Dock doors, no antennas
13	SIM, Verizon 2FF can be activated on Verizon Retail or VPP account	LTE_GRT_225	SIM, Verizon 2FF can be activated on Verizon Retail or VPP account

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
14	SIM, AT&T 2FF AT&T Retail or AT&T APEX (Partner Exchange) rate plans. Not compatible with AT&T IoT/Jasper or FirstNet platform based accounts	LTE_GRT_226	SIM, AT&T 2FF AT&T Retail or AT&T APEX (Partner Exchange) rate plans. Not compatible with AT&T IoT/Jasper or FirstNet platform based accounts
15	SIM, T-Mobile 2FF Retail Triple Punch SIM SKU ZZZ260R060	LTE_GRT_227	SIM, T-Mobile 2FF Retail Triple Punch SIM SKU ZZZ260R060
16	SIM, Sprint SIMGLW106Q 2FF Retail for LP6	LTE_GRT_228	SIM, Sprint SIMGLW106Q 2FF Retail for LP6
17	LTE MIMO 2x2 antenna, indoor/outdoor	LTE_GRT_229	LTE MIMO 2x2 antenna, indoor/outdoor
18	10.5dBi 700 MHz - 2700 MHz wide band directional antenna (Yagi/Log- Periodic) for outside mounting	LTE_GRT_230	10.5dBi 700 MHz - 2700 MHz wide band directional antenna (Yagi/Log- Periodic) for outside mounting
19	Omni directional antenna, indoor/outdoor	LTE_GRT_231	Omni directional antenna, indoor/outdoor
20	12" mag-mount antenna with SMA male connector, 12.5 foot cable	LTE_GRT_232	12" mag-mount antenna with SMA male connector, 12.5 foot cable
21	4" Mini mag-mount antennas with SMA male connector, 12.5 foot cable	LTE_GRT_233	4" Mini mag-mount antennas with SMA male connector, 12.5 foot cable
22	GPS-GLONASS screw mount antenna with 3M cable	LTE_GRT_234	GPS-GLONASS screw mount antenna with 3M cable
23	GPS-GLONASS mag-mount antenna with 3M cable	LTE_GRT_235	GPS-GLONASS mag-mount antenna with 3M cable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
24	3-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) screw mount antenna with 3M cables	LTE_GRT_236	3-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) screw mount antenna with 3M cables
25	3-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) adhesive mount antenna with 2M cables	LTE_GRT_237	3-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) adhesive mount antenna with 2M cables
26	5-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) & two WiFi 2.4/5GHz WiFi screw mount antenna with 3M cables	LTE_GRT_238	5-in-1 GPS-GLONASS & two cellular (3G/4G/LTE) & two WiFi 2.4/5GHz WiFi screw mount antenna with 3M cables
27	Low profile 5-in-1 MIMO LTE, MIMO WiFi (2.4/5Ghz), & GPS screw mount antenna with 5M cables	LTE_GRT_239	Low profile 5-in-1 MIMO LTE, MIMO WiFi (2.4/5Ghz), & GPS screw mount antenna with 5M cables
28	White, 700MHz-2.7 GHz 3G/4G/LTE 2dBi/3dBi antenna with SMA connector (1x)	LTE_GRT_240	White, 700MHz-2.7 GHz 3G/4G/LTE 2dBi/3dBi antenna with SMA connector (1x)
29	Black, 700MHz-2.7 GHz LTE/4G/3G 2dBi/3dBi 5" antenna with SMA connector (1x)	LTE_GRT_241	Black, 700MHz-2.7 GHz LTE/4G/3G 2dBi/3dBi 5" antenna with SMA connector (1x)
30	Mini black, 600MHz-2.7 GHz LTE/4G/3G 4.5" 2/3 dBi antenna with SMA connector (1x)	LTE_GRT_242	Mini black, 600MHz-2.7 GHz LTE/4G/3G 4.5" 2/3 dBi antenna with SMA connector (1x)
31	Black, Universal 600MHz-6GHz 3G/4G/LTE 2dBi/3dBi 6" antenna with SMA connector (1x)	LTE_GRT_243	Black, Universal 600MHz-6GHz 3G/4G/LTE 2dBi/3dBi 6" antenna with SMA connector (1x)

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
32	White, Universal 600MHz-6GHz 3G/4G/LTE 2dBi/3dBi 6" antenna with SMA connector (1x)	LTE_GRT_244	White, Universal 600MHz-6GHz 3G/4G/LTE 2dBi/3dBi 6" antenna with SMA connector (1x)
33	White, 600MHz-2.7 GHz LTE/4G/3G 4.5" 2/3 dBi antenna with SMA connector (1x) CBA550 replacement	LTE_GRT_245	White, 600MHz-2.7 GHz LTE/4G/3G 4.5" 2/3 dBi antenna with SMA connector (1x) CBA550 replacement
34	Dual-band 2.4/5.0 GHz external WiFi antenna for AER3100, AER2100, IBR900, IBR1100 (single antenna)	LTE_GRT_246	Dual-band 2.4/5.0 GHz external WiFi antenna for AER3100, AER2100, IBR900, IBR1100 (single antenna)
35	Car charger for 12V product for CBA750B, CBA850, MBR1400 and MBR1200B	LTE_GRT_247	Car charger for 12V product for CBA750B, CBA850, MBR1400 and MBR1200B
36	Vehicle power adapter for COR	LTE_GRT_248	Vehicle power adapter for COR
37	Standard replacement 3A power supply for AER1600/AER1650/CBA850	LTE_GRT_249	Standard replacement 3A power supply for AER1600/AER1650/CBA850
38	COR IBR1100/IBR1150 and IBR900/IBR950 extended temperature (-30C to 70C) power supply (line cord not included)	LTE_GRT_250	COR IBR1100/IBR1150 and IBR900/IBR950 extended temperature (-30C to 70C) power supply (line cord not included)
39	AER2200, AER31x0 54V 2.22A (60W PoE budget) power supply (C14 line cord not included)	LTE_GRT_251	AER2200, AER31x0 54V 2.22A (60W PoE budget) power supply (C14 line cord not included)

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
40	AER2200 high power supply for up to 4 ports of PoE+ .at (30W) power (120W PoE budget) (C14 line cord not included)	LTE_GRT_252	AER2200 high power supply for up to 4 ports of PoE+ .at (30W) power (120W PoE budget) (C14 line cord not included)
41	COR IBR1700, IBR900/IBR950, IBR600B/IBR650B, IBR600C/IBR650C power supply for North America (-20C to 60C)	LTE_GRT_253	COR IBR1700, IBR900/IBR950, IBR600B/IBR650B, IBR600C/IBR650C power supply for North America (-20C to 60C)
42	COR IBR1700, IBR900/IBR950 power supply includes US, EU, UK, AU Adapter (-20C to 60C)	LTE_GRT_254	COR IBR1700, IBR900/IBR950 power supply includes US, EU, UK, AU Adapter (-20C to 60C)
43	PoE Injector (powers AP22, CBA850) includes US line cord (C6)	LTE_GRT_255	PoE Injector (powers AP22, CBA850) includes US line cord (C6)
44	US line cord for COR extended temperature power supplies (C8)	LTE_GRT_256	US line cord for COR extended temperature power supplies (C8)
45	US line cord for AER3100/AER3150, AER2200 high power 60W & 120W PoE budget, power supplies (C14)	LTE_GRT_257	US line cord for AER3100/AER3150, AER2200 high power 60W & 120W PoE budget, power supplies (C14)
46	3 meter power and GPIO cable (direct wire) for IBR1700, IBR11x0, IBR9x0, IBR6x0, IBR6x0B, IBR6x0C	LTE_GRT_258	3 meter power and GPIO cable (direct wire) for IBR1700, IBR11x0, IBR9x0, IBR6x0, IBR6x0B, IBR6x0C

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
47	9 wire GPIO cable for IBR6x0B, IBR6x0C and IBR9x0. Adds 4 GPIO, 2nd ignition sense, redundant power	LTE_GRT_259	9 wire GPIO cable for IBR6x0B, IBR6x0C and IBR9x0. Adds 4 GPIO, 2nd ignition sense, redundant power
48	AER rack mount flexible cellular antenna lead for 2nd modem or active GPS (1x)	LTE_GRT_260	AER rack mount flexible cellular antenna lead for 2nd modem or active GPS (1x)
49	Serial DB9 to GPIO cable, 3 meters	LTE_GRT_261	Serial DB9 to GPIO cable, 3 meters
50	RJ45 rollover serial console cable 7ft	LTE_GRT_262	RJ45 rollover serial console cable 7ft
51	RJ45 rollover serial console cable 14ft	LTE_GRT_263	RJ45 rollover serial console cable 14ft
52	Demo 2x10 GPIO cable for COR Extensibility Dock	LTE_GRT_264	Demo 2x10 GPIO cable for COR Extensibility Dock
53	COR extensiblity port to serial cable	LTE_GRT_265	COR extensiblity port to serial cable
54	OBD-II adapter kit for IBR1700 (includes one OBD-II adapter and one 15 foot Male/Male Null Modem DB9 serial cable)	LTE_GRT_266	OBD-II adapter kit for IBR1700 (includes one OBD-II adapter and one 15 foot Male/Male Null Modem DB9 serial cable)
55	NEMA 4X enclosure, 12x10x6in, for ARC and COR	LTE_GRT_267	NEMA 4X enclosure, 12x10x6in, for ARC and COR
56	Steel backplane, 12x10in, for ARC and COR NEMA enclosure	LTE_GRT_268	Steel backplane, 12x10in, for ARC and COR NEMA enclosure
57	Strain relief connector with nut, for enclosure, 0.375-0.5in	LTE_GRT_269	Strain relief connector with nut, for enclosure, 0.375-0.5in

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
58	DIN rail mounting bracket for IBR1100/IBR1150/IBR200	LTE_GRT_270	DIN rail mounting bracket for IBR1100/IBR1150/IBR200
59	CBA850 wall / ceiling bracket	LTE_GRT_271	CBA850 wall / ceiling bracket
60	Barrel to 4-pin power adapter (for COR products)	LTE_GRT_272	Barrel to 4-pin power adapter (for COR products)
61	Rollover adapter for RJ45 Ethernet Cable M/F	LTE_GRT_273	Rollover adapter for RJ45 Ethernet Cable M/F
62	Mag mount kit for IBR11x0, IBR9x0, IBR6x0B, IBR350, IBR1100 Dual-Modem Dock, COR Extensibility Dock (includes 4 ring magnets, 4 M4 screws and 4 nuts)	LTE_GRT_274	Mag mount kit for IBR11x0, IBR9x0, IBR6x0B, IBR350, IBR1100 Dual-Modem Dock, COR Extensibility Dock (includes 4 ring magnets, 4 M4 screws and 4 nuts)
63	Dual-modem dock for IBR1100/IBR1150 series routers	LTE_GRT_275	Dual-modem dock for IBR1100/IBR1150 series routers
64	COR extensibility dock for IBR600B/IBR650B, IBR600C/IBR650C and IBR900/IBR950 series routers	LTE_GRT_276	COR extensibility dock for IBR600B/IBR650B, IBR600C/IBR650C and IBR900/IBR950 series routers
65	Rack-mount kit for AER2200 (includes 2 wing brackets and 8 M4 screws)	LTE_GRT_277	Rack-mount kit for AER2200 (includes 2 wing brackets and 8 M4 screws)
66	Rack-mount kit for IBR1700 (includes 2 wing brackets and 4 M4 screws)	LTE_GRT_278	Rack-mount kit for IBR1700 (includes 2 wing brackets and 4 M4 screws)

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
67	Rack-mount kit for CR4250 (includes 2 wing brackets and 8 M3x5 screws)	LTE_GRT_279	Rack-mount kit for CR4250 (includes 2 wing brackets and 8 M3x5 screws)
68	Rugged, enterprise-class, router with embedded LTE Advanced (Cat 6) modem and WiFi for use with CALNET Cellular Providers	LTE_GRT_280	Rugged, enterprise-class, router with embedded LTE Advanced (Cat 6) modem and WiFi for use with CALNET Cellular Providers
69	Granite Guardian - Managed - Cloud Network Firewall (Custom)	LTE_GRT_281	Cloud unified threat management service, automatic ticketing, vendor and configuration management.
70	Granite Guardian - Managed - Cloud Network Firewall (VPN Add On)	LTE_GRT_282	VPN Add On for Granite Guardian - Managed - Cloud Network Firewall (Custom)

20.3 OTHER SERVICES

20.3.1 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 this Requirement and shall meet or exceed it? Yes

20.3.2 Services Related Infrastructure (SRI)

The Contractor shall offer infrastructure service as defined below.

20.3.2.1 Extended Demarcation Wiring Services

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB 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 Minimum Point of Entry (MPOE).

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

Bidder shall provide the Extended Demarcation Wiring Services described in Table 20.3.2.1

Table 20.3.2.1 – 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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_1	**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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_2	**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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_3	**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
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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_4	**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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_5	**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
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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_6	**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
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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_7	**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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_8	**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
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.	To provide this service, Granite assumes customer has adequate pathways. Programming of electronic equipment is not included.	NI_GRT_9	**Yes**

20.3.2.2 Unsolicited Services Related Infrastructure

Bidder may offer additional unsolicited Services Related Infrastructure in Table 20.3.2.2.

Table 20.3.2.2 – Unsolicited Services Related Infrastructure

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			
2			
3			

20.3.3 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 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 this Requirement and shall meet or exceed it? Yes

In Cost Worksheet 20.3.3, 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 this Requirement and shall meet or exceed it? Yes

The Contractor shall offer emergency restoration services as detailed in Table 20.3.3

Table 20.3.3 – 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.	Includes labor only and accounts for time from dispatch to job completion.	NI_GRT_10	**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.	Includes labor only and accounts for time from dispatch to job completion.	NI_GRT_11	**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.	Includes labor only and accounts for time from dispatch to job completion.	NI_GRT_12	**Yes**

20.4 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.

20.4.1 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 a SLA objective is not met. CALNET SLA Rights and Remedies do not require the Customer to submit a request for credit or refund.

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

20.4.2 Technical Requirements versus SLA Objectives

Sections 20.2 (MPLS Services) and 20.3 (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 this Requirement and shall meet or exceed it? Yes

20.4.3 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 this Requirement and shall meet or exceed it? Yes

20.4.4 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 this Requirement and shall meet or exceed it? Yes

20.4.5 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 this Requirement and shall meet or exceed it? Yes

20.4.6 Technical SLA General Requirements

The Contractor shall adhere to the following general requirements which apply to all CALNET Technical SLAs (Section 20.4.8):

1. With the exception of the Provisioning SLA (Section 20.4.8.9), 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 this requirement and shall meet or exceed it? Yes

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

Bidder understands this 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 this 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;
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;
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 this 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 (Billing and Invoicing);

Bidder understands this 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 requirements and shall meet or exceed them? Yes

20.4.7 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 20.4.7.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 this 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 this 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 this 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 20.4.7.a – Stop Clock Conditions

Line Item	Stop Clock Condition (SCC)	SCC Definition
1	END-USER REQUEST	Periods when a restoration or testing effort is delayed at the specific request of the End-User. The SCC shall exist during the period the Contractor was delayed, provided that the End-User's request is documented and time stamped in the Contractor's trouble ticket or Service Request system and shows efforts are made to contact the End-User during the applicable Stop Clock period.
2	OBSERVATION	Time after a service has been restored but End-User request ticket is kept open for observation. If the service is later determined by the End-User to not have been restored, the Stop Clock shall continue until the time the End-User notifies the Contractor that the Service has not been restored.
3	END-USER NOT AVAILABLE	Time after a service has been restored but End-User is not available to verify that the Service is working. If the service is later determined by the End-User to not have been restored, the Stop Clock shall apply only for the time period between Contractor's reasonable attempt to notify the End-User that Contractor believes the service has been restored and the time the End-User notifies the Contractor that the Service has not been restored.
4	WIRING	Restoration cannot be achieved because the problem has been isolated to wiring that is not maintained by Contractor or any of its Subcontractors or Affiliates. If it is later determined the wiring is not the cause of failure, the SCC shall not apply.
5	POWER	Trouble caused by a power problem outside of the responsibility of the Contractor.

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

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

Line Item	Stop Clock Condition (SCC)	SCC Definition
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 requirements and shall meet or exceed them? Yes

The Contractor shall provide and manage the following Technical SLAs.

20.4.8 Technical Service Level Agreements (SLAs)

20.4.8.1 Availability (M-S)

SLA Name: Availability

Definition:

The percentage of time a CALNET MPLS Data Networks 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:

MPLS

Objective A:

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

Service Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
DS1	≥ 99.2%	≥ 99.5%	≥ 99.8%	P
DS3	≥ 99.7%	≥ 99.8%	≥ 99.9%	P
Ethernet	≥ 99.2%	≥ 99.5%	≥ 99.8%	P

Rights and Remedies:

1. Per Occurrence:
   - N/A
2. Monthly Aggregated Measurements:
   - First month to fail 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 this requirement and shall meet or exceed it? Yes

20.4.8.1.a LTE Backup Availability

SLA Name: Backup LTE Connectivity Availability

Definition:

The percentage of time a CALNET MPLS Data Networks 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:

Backup LTE Connectivity

Objective A:

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

Service Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
4G LTE	≥ 99.2%	≥ 99.5%	≥ 99.8%	P

Rights and Remedies:

1. Per Occurrence:
    - N/A
2. Monthly Aggregated Measurements:
    - First month to fail 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 this requirement and shall meet or exceed it? Yes

20.4.8.2 Catastrophic Outage 1 (CAT 1) (M-S)

SLA Name: Catastrophic Outage 1 (CAT 1)

Definition:

The total loss of service at a single address based on a common cause resulting in one or more of the following:

Failure of two or more service types, or
Failure of ten access circuits, or

Failure of a single MPLS port or access circuit with a transport speed greater than or equal to 200 Mbps.

Measurement Process:

The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by a Customer, or the Contractor, whichever occurs first. The Contractor 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:

MPLS

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MPLS	≤ 3 hours	≤ 2 hours	≤ 1 hour	P

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 this requirement and shall meet or exceed it? Yes

20.4.8.2.a LTE Backup Catastrophic Outage 1 (CAT 1)

SLA Name: Backup LTE Connectivity Catastrophic Outage 1 (CAT 1)

Definition:

The total loss of service at a single address based on a common cause resulting in the following:

Failure of two or more service types

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:

Backup LTE Connectivity

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
4G LTE	≤ 6 hours	≤ 4 hours	≤ 2 hours	P

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 this requirement and shall meet or exceed it? Yes

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

SLA Name: Catastrophic Outage 2 (CAT 2)

Definition:

Any service affecting failure in the Contractor's (or Subcontractor's or Affiliate's) network up to and including the Provider Edge (PE) equipment.

Measurement Process:

The Outage Duration begins when a network alarm is received by the Contractor from 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:

MPLS

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MPLS	≤ 1 Hour	≤ 30 Minutes	≤ 15 Minutes	P

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 2 fault.
2. Monthly Aggregated Measurements:
    - N/A

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

20.4.8.3.a LTE Backup Catastrophic Outage 2 (CAT 2)

SLA Name: Backup LTE Connectivity Catastrophic Outage 2 (CAT 2)

Definition:

Any service affecting failure in the Contractor's (or Subcontractor's or Affiliate's) network up to and including the Provider Edge (PE) equipment.

Measurement Process:

The Outage Duration begins when a network alarm is received by the Contractor from 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:

Backup LTE Connectivity

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
4G LTE	≤ 6 Hours	≤ 4 Hours	≤ 2 Hours	P

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 2 fault.
2. Monthly Aggregated Measurements:
    - N/A

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

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

SLA Name: Catastrophic Outage 3 (CAT 3)

Definition:

The total loss of more than one CALNET DNCS service type in a central office, or the loss of any service type on a system wide basis.

Measurement Process:

The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer 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:

MPLS

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MPLS	≤ 30 Minutes	N/A	≤ 15 Minutes	P

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 this requirement and shall meet or exceed it? Yes

20.4.8.5 Delay – Round Trip Transmission for MPLS Services (M-S)

SLA Name: Delay – Round Trip Transmission for MPLS Services

Definition:

The average round trip transfer delay measured from the Customer Edge (CE) to the remote CE back to CE (Site A to Site Z to Site A) within the geographic confines of the state of California.

Measurement Process:

The End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the delay is not meeting the committed level. CALNET CMO shall determine the sample interval, provided that a minimum of 100 pings or more shall constitute a test. The Contractor shall provide timely verification, consistent with industry standards. Trouble tickets opened as Delay – Round Trip Transmission for MPLS Services shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

Service(s):

MPLS

Objective(s):

Based on a 1,000 byte ping:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MPLS ≥ 1.536 Mbps to < 10 Mbps	< 400ms	N/A	< 340ms	P
MPLS ≥ 11 Mbps to < 100 Mbps	< 400ms	N/A	< 340ms	P
MPLS ≥ 100 Mbps	< 400ms	N/A	< 340ms	P

Rights and Remedies:

1. Per Occurrence:
   - N/A
2. Monthly Aggregated Measurements:
   - 25% credit or refund of the TMRC per occurrence for the reported service.
   - The second consecutive month service fails to meet the committed SLA objectives shall result in a 35% rebate of TMRC.
   - Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50% rebate of the TMRC.

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

20.4.8.5.a LTE Backup Delay – Round Trip Transmission for MPLS Services

SLA Name: Backup LTE Connectivity Delay – Round Trip Transmission for MPLS Services

Definition:

The average round trip transfer delay measured from the Customer Edge (CE) to the remote CE back to CE (Site A to Site Z to Site A) within the geographic confines of the state of California.

Measurement Process:

The End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the delay is not meeting the committed level. CALNET CMO shall determine the sample interval, provided that a minimum of 100 pings or more shall constitute a test. The Contractor shall provide timely verification, consistent with industry standards. Trouble tickets opened as Delay – Round Trip Transmission for MPLS Services shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

Service(s):

Backup LTE Connectivity

Objective(s):

Based on a 1,000 byte ping:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
4G LTE	< 400ms	N/A	< 340ms	P

Rights and Remedies:

1. Per Occurrence:
   - N/A
2. Monthly Aggregated Measurements:

- 25% credit or refund of the TMRC per occurrence for the reported service.
- The second consecutive month service fails to meet the committed SLA objectives shall result in a 35% rebate of TMRC.
- Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50% rebate of the TMRC.

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

20.4.8.6 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:

MPLS

Objectives:

The Unavailable Time objective shall not exceed:

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

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 this requirement and shall meet or exceed it? Yes

20.4.8.6.a LTE Backup Excessive Outage

SLA Name: Backup LTE Connectivity 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:

Backup LTE Connectivity

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
4G LTE	16 Hours	12 Hours	8 Hours	P

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 this requirement and shall meet or exceed it? Yes

20.4.8.7 Managed Service Proactive Notification (M-S)

SLA Name: Managed Service Proactive Notification

Definition:

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

An Outage is defined as an unscheduled period in which the managed router service is interrupted and unavailable for use by Customer for 60 continuous seconds or more than 60 cumulative seconds within a 15-minute period measured by the Contractor.

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 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:

MPLS Access Transport Speeds
MPLS Port Transport Speeds
MPLS Port, Access and Layer 3 Bundled Transport Speeds

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 this requirement and shall meet or exceed it? Yes

20.4.8.8 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 stakeholder when information is available for dissemination to the Customers.

Services:

All services

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
2. Monthly Aggregated Measurements:
    - N/A

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

20.4.8.9 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:

Service (Features must be installed with service except when listed below.	Committed Interval Days	Coordinated/Managed Project
MPLS Access Transport Speeds	35	Coordinated/Managed Project
MPLS Port Transport Speeds	35	Coordinated/Managed Project
MPLS Port, Access and Layer 3 Bundled Transport Speeds	45	Coordinated/Managed Project
4G LTE Access Router Delivery	35	Coordinated/Managed Project
4G LTE SIM Activation	35	Coordinated/Managed Project
4G LTE Router and SIM Bundled	45	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)
MPLS Access Transport Speeds	≥ 90%	N/A	≥ 95%	P
MPLS Port Transport Speeds	≥ 90%	N/A	≥ 95%	P
MPLS Port, Access and Layer 3 Bundled Transport Speeds	≥ 90%	N/A	≥ 95%	P
4G LTE Access Transport Speeds	≥ 90%	N/A	≥ 95%	P
4G LTE Port Transport Speeds	≥ 90%	N/A	≥ 95%	P
4G LTE Port, Access and Layer 3 Bundled Transport Speeds	≥ 90%	N/A	≥ 95%	P

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 this requirement and shall meet or exceed it? Yes

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

SLA Name: Time To Repair (TTR)

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:

MPLS

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MPLS	6 Hours	5 Hours	4 Hours	P

Rights and Remedies:

1. Per Occurrence:
    - First month the service fails to meet the committed SLA objective shall result in a 25% credit or refund of 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 this requirement and shall meet or exceed it? Yes

20.4.8.10.a LTE Backup Time to Repair (TTR)

SLA Name: Backup LTE Connectivity Time To Repair (TTR)

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:

Backup LTE Connectivity

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
4G LTE	6 Hours	5 Hours	4 Hours	P

Rights and Remedies:

1. Per Occurrence:

- First month the service fails to meet the committed SLA objective shall result in a 25% credit or refund of 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 this requirement and shall meet or exceed it? Yes

20.4.8.11 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 this requirement and shall meet or exceed it? Yes

20.4.8.12 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 20.3.8 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 this requirement and shall meet or exceed it? Yes

20.4.8.13 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 20.4.8.

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