Comcast Business Communications, LLC a Delaware limited liability company, on behalf of itself and its applicable operating affiliates and subsidiaries (including Comcast Phone of California, LLC and Comcast Cable Communications Management, LLC); together offering services throughout this Network Service Proposal, identified as "Comcast".

SERVICE LEVEL AGREEMENTS CATEGORY 5 – MANAGED INTERNET SERVICES

5.5.7 TROUBLE TICKET STOP CLOCK CONDITIONS

The following conditions shall be allowed to stop the trouble ticket Outage Duration for CALNET 3 Contractor trouble tickets. The Contractor shall document the trouble ticket Outage Duration using the Stop Clock Condition (SCC) listed in Table 5.5.7 and include start and stop time stamps in the Contractor's Trouble Ticket Reporting Tool (IFB STPD 12-001-B Refresh Business Requirements Section B.9.4) for each application of a SCC.

Note: The Glossary (SOW Appendix A) defines term "End-User" as the "individual within an Entity that is utilizing the feature or service provided under the Contract."

Stop Clock Conditions are limited to the conditions listed in Table 5.5.7.

#	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.

Table 5.5.7 – Stop Clock Conditions (SCC)

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#	Stop Clock Condition (SCC)	SCC Definition	
4	WIRING	Restoration cannot be achieved because the problem has been isolated to wiring that is not maintained by Contractor or any of its Subcontractors or Affiliates. If it is later determined the wiring is not the cause of failure, the SCC shall not apply.	
5	POWER	Trouble caused by a power problem outside of the responsibility of the Contractor.	
6	FACILITIES	Lack of building entrance Facilities or conduit structure that are the End-User's responsibility to provide.	
	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:	
		 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;	
7		c. Customer provides incorrect site contact information which prevents access, provided that Contractor takes reasonable steps to notify End-User of the improper contact information and takes steps to obtain the correct information; or,	
		d. Site has limited hours of business that directly impacts the Contractor's ability to resolve the problem.	
		If it is determined later that the cause of the problem was not at the site in question, then the Access SCC shall not apply.	
8	STAFF	Any problem or delay to the extent caused by End-User's staff that prevents or delays Contractor's resolution of the problem. In such event, Contractor shall make a timely request to End-User staff to correct the problem or delay and document in trouble ticket.	
9	APPLICATION	End-User software applications that interfere with repair of the trouble.	
10	СРЕ	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.	

#	Stop Clock Condition (SCC)	SCC Definition
11	NO RESPONSE	Failure of the trouble ticket originator or responsible End- User to return a call from Contractor's technician for on- line close-out of trouble tickets after the Service has been restored as long as Contractor can provide documentation in the trouble ticket substantiating the communication from Contractor's technician.
12	MAINTENANCE	An outage directly related to any properly performed scheduled maintenance or upgrade scheduled for CALNET 3 service. Any such stop clock condition shall not extend beyond the scheduled period of the maintenance or upgrade. SLAs shall apply for any maintenance caused outage beyond the scheduled maintenance period. Outages occurring during a scheduled maintenance or upgrade period and not caused by the scheduled maintenance shall not be subject to the Maintenance SCC.
13	THIRD PARTY	Any problem or delay caused by a third party not under the control of Contractor, not preventable by Contractor, including, at a minimum, cable cuts not caused by the Contractor. Contractor's Subcontractors and Affiliates shall be deemed to be under the control of Contractor with respect to the equipment, services, or Facilities to be provided under this Contract.
14	FORCE MAJEURE	Force Majeure events, as defined in the PMAC General Provisions - Telecommunications, Section 28 (Force Majeure).

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5.5.8 TECHNICAL SERVICE LEVEL AGREEMENTS

The Contractor shall provide and manage the following Technical SLAs.

5.5.8.1 Availability (M-S)

SLA Name: Availability

Definition: The percentage of time a CALNET 3 service is fully functional and available for use each calendar month.

Measurement Process: The monthly Availability Percentage shall be based on the accumulative total of all Unavailable Time derived from all trouble tickets closed, for the affected service (Per Circuit ID), per calendar month. The monthly Availability Percentage equals the Scheduled Uptime per month less Unavailable Time per month divided by Scheduled Uptime per month multiplied by 100. Scheduled Uptime is 24 x number of days in the month. All Unavailable Time applied to other SLAs, which results in a remedy, will be excluded from the monthly accumulated total.

Services:

Managed Internet Service Comcast Business DDoS Mitigation Service Managed Router Service

Objective(s):

The objective shall be based on the network side interface type:

Network Side Interface	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
T1/FT1	≥99.2%	≥99.5%	≥ 99.8%	Р
T3/FT3	≥99.7%	≥99.8%	≥99.9%	Р
OCX/OCXc	≥99.7%	≥99.8%	≥99.9%	Р
Ethernet 1 Mbps up to 1 GbE (Gigabit Ethernet)	≥ 99.2%	≥ 99.5%	≥ 99.8%	Р
Ethernet 10 GbE	≥99.2%	≥ 99.5%	≥99.8%	Р

Objective(s), continued:

With the exception of XDSL, Bidder shall identify any additional Contractor identified network side interfaces not listed in the Table 1 above for InFRa and InFRaM services. Bidder shall provide an objective commitment percentage for each additional network side interface which must be above 99.2%:

	Additional Network Side Interface	Bidder's Objective Commitment (%)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Per Occurrence: N/A

Rights and Remedies	Monthly Aggregated Measurements: First month the service fails to meet the committed SLA objective shall result in a 15 percent rebate of the TMRC and two (2) Business Days of the ADUC, when usage applies. The second consecutive month the service fails to meet the committed SLA objective shall result in a 30 percent rebate of TMRC and two (2) Business Days of the ADUC, when usage applies. Each additional consecutive month the service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC and two (2) Business Days of
	objective shall result in a 50 percent rebate of the TMRC and two (2) Business Days of the ADUC, when usage applies.

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

SLA Name: Catastrophic Outage 1 (CAT 1)

Definition: The total loss of service at a single site resulting in the loss of service to five (5) or more circuits or any single service at 500Mbps or greater.

Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by a Customer, or the Contractor, whichever occurs first. The Contractor shall open a trouble ticket for each service (Circuit ID) affected by a common cause. Each End-User service is deemed out of service from the first notification until the Contractor determines the End-User service (Circuit ID) is restored minus SCC. Any service reported by Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):

Managed Internet Service

Managed Router Service	
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Comcast Business DDoS Mitigation Service

Objective (s):

The objective restoral time shall be:

		Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
	Managed Internet Service	\leq 3 hours	\leq 2 hours	≤ 1 hour	S
	Managed Router Service	\leq 3 hours	\leq 2 hours	≤ 1 hour	S
	Comcast Business DDoS Mitigation Service	\leq 3 hours	\leq 2 hours	≤ 1 hour	S
Rights and RemediesPer Occurrence: 100 percent of the TMRC and ten (10) days of ADUC User service not meeting the committed objective for each CAT 1 fault					
Kellieules	Lemedies User service not meeting the committed objective for each CAT 1 fault. Monthly Aggregated Measurements: N/A				

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

SLA Name: Catastrophic Outage 2 (CAT 2)

Definition: A total failure of a service type in a central office (or equivalent facility), other than access, that results in a CALNET 3 service failure. Or, a backbone failure or failure of any part of the equipment associated with the backbone that causes a CALNET 3 service failure.

Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by a common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or Customer reported trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):

Managed Internet Service	Managed Router Service
Comcast Business DDoS Mitigation Service	

Objective (s):

The objective restoral time shall be:

		Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
	Managed Internet Service	≤ 1 hour	\leq 30 minutes	\leq 15 minutes	S
	Managed Router Service	≤ 1 hour	\leq 30 minutes	\leq 15 minutes	S
	Comcast Business DDoS Mitigation Service	≤ 1 hour	\leq 30 minutes	\leq 15 minutes	s
Rights and Remedies	1				
	Monthly Aggregated Measurements: N/A				

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

SLA Name: Catastrophic Outage 3 (CAT 3)

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

Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by a common cause. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Service(s):							
Managed Inter	net Service		Managed F	Router Servic	ce		
Comcast Busir	ness DDoS Mitigation Servic	e					
Objectives: The objective	Objectives: The objective restoral time shall be:						
			Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)	
	Managed Internet Service	≤ 1	30 minutes	N/A	\leq 15 minutes	Р	
	Managed Router Service	≤ 1	30 minutes	N/A	\leq 15 minutes	Р	
	Comcast Business DDoS Mitigation Service	<	30 minutes	N/A	\leq 15 minutes	Р	
Rights and	Per Occurrence : 100 percent of the TMRC and ten (10) days ADUC for each End-User service not meeting the committed objective for each CAT 3 fault.						
Remedies Monthly Aggregated Measurements: N/A							

5.5.8.5 Excessive Outage (M-S)

SLA Name: Excessive Outage

Definition: A service failure that remains unresolved for more than the committed objective level.

Measurement Process: This SLA is based on trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time.

Service(s):

Managed Internet Service	Managed Router Service
Comcast Business DDoS Mitigation Service	

Objective (s):

The Unavailable Time objective shall not exceed:

	Time objective shall not ez	leeeu.				-
		Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)	
	Managed Internet Service	16 hours	12 hours	8 hours	S	
	Managed Router Service	16 hours	12 hours	8 hours	S	
	Comcast Business DDoS Mitigation Service	16 hours	12 hours	8 hours	S	
Rights and Remedies	Per Occurrence : 100 percent of the TMRC and ten (10) days ADUC for each service (Circuit ID) out of service for a period greater than the committed objective level. Upon request from the Customer or the CALNET 3 CMO, the Contractor shall provide a briefing on the excessive outage restoration.					
	Monthly Aggregated Measurements: N/A					

SLA Name: M	SLA Name: Managed Service Proactive Notification					
ticket and notify occur through r An Outage is do unavailable for	y Customer of an Outage for a manage neans agreed to by Contractor and CA efined as an unscheduled period in whi	s credits if the Contractor fails to open a trouble ed router service. Notification to the Customer shall LNET 3 CMO. ich the managed router service is interrupted and conds or more than 60 cumulative seconds within a				
alarm resulting whichever occu Customer from proactive outag	from the outage-causing event or the ours first. The Contractor has fifteen (15 the start point of the first network alar	all be determined by the first Contractor network opening of a trouble ticket by the Customer,) minutes (Notification Period) to notify the m. The Contractor is in compliance with the ened the trouble ticket prior to the network alarm or ification Period.				
Service(s):						
Managed Internet Services with Managed Router Managed Router Service						
Objective (s):	15 minutes					
Rights and Remedies	Per Occurrence : Customer will receive a credit equal to ten percent of the TMRC for Managed Internet Service (Circuit ID) that was impacted during an outage if the Customer was not proactively notified within the notification period					
Monthly Aggregated Measurements: N/A						

5.5.8.6 Managed Service Proactive Notification (M-S)

5.5.8.7 Notification

SLA Name: Notification

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

Measurement Process: The Contractor shall adhere to the Network Outage Response requirements (IFB STPD 12-001-B Refresh Business Requirements Section B.3.3) and notify the CALNET 3 CMO and designated stakeholders for all CAT 2 and CAT 3 Outages or for network outages resulting in a significant loss of service. Notification objectives will be based on the start time of the outage failure determined by the opening of a trouble ticket or network alarm, whichever occurs first. For events based on information such as terrorist activity or natural disaster, the Contractor shall notify CALNET 3 CMO and designated stakeholder when information is available.

Service(s): All Services

Objective (s): Within 60 minutes of the above mentioned failures' start time, the Contractor shall notify CALNET 3 CMO and designated stakeholders using a method defined in IFB STPD 12-001-B Refresh Business Requirements Section B.3.3 (Network Outage Response).

At 60 minute intervals, updates shall be given on the above mentioned failures via the method defined in Section IFB STPD 12-001-B Refresh Business Requirements Section B.3.3 (Network Outage Response). This objective is the same for Basic, Standard and Premier commitments.

Rights and	Per Occurrence: Senior Management Escalation
Remedies	Monthly Aggregated Measurements: N/A

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

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5.5.8.8 Provisioning (M-S)

SLA Name: Provisioning

Definition: Provisioning shall include new services, moves, adds and changes completed by the Contractor on or before the due dates. The Provisioning SLA shall be based on committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor documented on the Contractor's order confirmation notification or Contracted Service Project Work SOW in accordance with IFB STPD 12-001B Refresh Business Requirements Section B.2.5.4 #7 (Provisioning and Implementation). The Contractor shall meet the committed interval dates or due date negotiated with the Customer. If the Customer agrees to a negotiated due date, the negotiated due date supersedes the committed interval. At the Customer's discretion, if the scope of the Service Request(s) meets the Coordinated or Managed Project criteria, negotiated due dates will be established and documented in the Project Schedule per IFB STPD 12-001-B Refresh Business Requirements Section B.6 (Contracted Service Project Work).

Provisioning SLAs have two (2) objectives:

Objective 1: Individual Service Request; and

Objective 2: Successful Install Monthly Percentage by Service Type.

Note: Provisioning timelines include extended demarcation wiring, when appropriate.

Measurement Process:

<u>Objective 1: Individual Service Request:</u> Install intervals are based on the committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor. This objective requires the Contractor to meet the due date for each individual Service Request.

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

Service (Features must be installed in conjunction with the service except when listed below)	Committed Interval Calendar Days	Coordinated/Managed Project
InFRA	30	Coordinated/Managed Project
InFRaM	45	Coordinated/Managed Project
InSBET	30	Coordinated/Managed Project
InSBEP	30	Coordinated/Managed Project
InSBEPM	45	Coordinated/Managed Project
Managed Router Service	45	Coordinated/Managed Project
Comcast Business DDoS Mitigation Service	NA	Coordinated/Managed Project

Objective (s):

Objective 1: Individual Service Request: Service installed on or before the Committed Interval or negotiated due date.

Objective 2: Successful Install Monthly Percentage per Service:

-		Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (S or P)	
	InFRA	N/A	≥ 90%	≥95%	Р	
	InFRaM	N/A	≥ 90%	≥95%	Р	
	InSBET	N/A	≥ 90%	≥95%	Р	
	InSBEP	N/A	≥ 90%	≥95%	Р	
	InSBEPM	N/A	$\geq 90\%$	$\geq 95\%$	Р	
	Managed Router Service	N/A	$\geq 90\%$	$\geq 95\%$	Р	
	Comcast Business DDoS Mitigation Service	N/A	≥ 90%	≥95%	Р	
Rights and Remedies	Per Occurrence: Objective 1: Individual Service Requests: 50 percent of installation fee credited to Customer for any missed committed objective.					
	Monthly Aggregated Measurements: Objective 2: 100 percent of the installation fee credited to Customer for all Service Requests (per service type) that did not complete on time during the month if the Successful Install Monthly Percentage is below the committed objective.					

|--|

SLA Name: Time to Repair (TTR)

Definition: A service outage that remains unresolved for more than the committed objective level.

Measurement Process: This SLA is based on trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time. This SLA is applied per occurrence.

Service(s):

Managed Internet Service

Managed Router Service

Comcast Business DDoS Mitigation Service

Objective (s):

The Unavailable Time objective shall not exceed:

	Service	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or S)	
	Managed Internet Service	6 hours	4 hours	N/A	В	
	Managed Router Service	6 hours	4 hours	N/A	В	
	Comcast Business DDoS Mitigation Service	6 hours	4 hours	N/A	В	
Rights and Remedies	Per Occurrence : 25 percent of the TMRC and two (2) days ADUC per occurrence for each service (Circuit ID) out of service for a period greater than the committed objectiv level.					
	Monthly Aggregated Measurements: N/A					



5.5.8.10 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.

5.5.8.11 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section **Error! Reference source not found.** for each unsolicited offering determined by the CALNET 3 CMO not to be a feature of a service or a component of an unbundled service identified in the technical requirements. SLA tables shall be amended after Contract award to include all new unsolicited services.

5.5.8.12 Contract Amendment Service Enhancement SLAs

All Contract amendment service enhancements shall be considered a feature of the service, therefore included as such under the SLAs as defined in this Section 5.5.8.12.

5.5.8.12.1 DDoS Time to Initiate Mitigation (M-S)

SLA Name: DDoS Time to Initiate Mitigation

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

Measurement Process:

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

Service(s):

Comcast Business DDoS Mitigation

Objective (s):

Mitigation shall begin within:

	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
Comcast Business DDoS Mitigation: Single Incident (On-Demand)	\leq 45 mins	\leq 30 mins	\leq 15 mins	s
Comcast Business DDoS Mitigation: Unlimited (On-Demand)	\leq 45 mins	\leq 30 mins	\leq 15 mins	s
Comcast Business DDoS Mitigation: Unlimited (Automatic)	\leq 45 mins	\leq 30 mins	\leq 15 mins	Р

Rights and Per Occurrence:

	Basic Time to Initiate Mitigation Minutes	Standard Time to Initiate Mitigation Minutes	Premier Time to Initiate Mitigation Minutes	Percentage of TMRC for all components of DDoS feature per event
	46 - 75	31 - 60	16 - 45	25%
	76 - 135	61 - 120	46 - 105	50%
	136 and over	121 and over	106 and over	100%
-	Monthly Aggregated	Measurements: N/A	Ą	

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