Service Level Agreements Category 29 – Converged VoIP

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 29.4.7.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.

Table 29.4.7.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. |



| Line Item | Stop Clock Condition (SCC) | SCC Definition |
|--------------|--------------------------------|---|
| 3 | END-USER NOT AVAILABLE | Time after a service has been restored but End-User is not available to verify that the Service is working. If the service is later determined by the End-User to not have been restored, the Stop Clock shall apply only for the time period between Contractor's reasonable attempt to notify the End-User that Contractor believes the service has been restored and the time the End-User notifies the Contractor that the Service has not been restored. |
| 4 | WIRING | Restoration cannot be achieved because the problem has been isolated to wiring that is not maintained by Contractor or any of its Subcontractors or Affiliates. If it is later determined the wiring is not the cause of failure, the SCC shall not apply. |
| 5 | POWER | Trouble caused by a power problem outside of the responsibility of the Contractor. |
| 6 | 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: |



| Line Item | Stop Clock Condition (SCC) | SCC Definition |
|--------------|-------------------------------|---|
| | | Access necessary to correct the problem is not available because access has not been arranged by site contact or End-User representative; |
| | | Site contact refuses access to technician who displays proper identification; |
| | | 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, |
| | | 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. |



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



Technical Service Level Agreements (SLAs)

The Contractor shall provide and manage the following Technical SLAs.

29.4.8.1 Availability (M-S)

SLA Name: Availability

Definition:

The percentage of time a Converged VoIP 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:

Converged VoIP Voice Mail

Objective:

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

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|------------------------------|--------------|-----------------|----------------|--|
| Converged VoIP | ≥ 98.9% | ≥ 99.2% | ≥ 99.5% | Р |
| Converged VoIP Voice Mail | ≥ 98.9% | ≥ 99.2% | ≥ 99.5% | Р |



- 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 and two Business Days of the ADUC, when usage applies.
 - The second consecutive month to fail to meet the committed SLA objective shall result in a 30% credit or refund of TMRC and two Business Days of the ADUC, when usage applies.
 - Each additional consecutive month to fail to meet the committed SLA objective shall result in a 50% credit or refund of the TMRC and two Business Days of the ADUC, when usage applies.



29.4.8.2 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 50 or more End-User VoIP service package or VoIP voice mail service (seat).

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:

Converged VoIP VoIP Voice Mail

Objectives:

The objective restoral time will be:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|-----------------|--------------|-----------------|----------------|--|
| Converged VoIP | ≤ 3 hours | ≤ 2 hours | ≤ 1 hour | Р |
| VoIP Voice Mail | ≤3 hours | ≤2 hours | ≤1 hour | Р |



- 1. Per Occurrence:
 - 100% credit or refund of the TMRC and ten Business Days ADUC for each End-User service not meeting the committed objective for each CAT 1 fault.
- 2. Monthly Aggregated Measurements:
 - N/A



29.4.8.3 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:

Converged VoIP Voice Mail

Objectives:

The objective restoral time will be:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|---------------------------|--------------|-----------------|-----------------|--|
| Converged VoIP | ≤1 Hour | ≤ 30 Minutes | ≤ 15 Minutes | Р |
| Converged VoIP Voice Mail | ≤1 Hour | ≤ 30 Minutes | ≤ 15 Minutes | Р |



- 1. Per Occurrence:
 - 100% credit or refund of the TMRC and ten Business Days ADUC for each End-User service not meeting the committed objective for each CAT 2 fault.
- 2. Monthly Aggregated Measurements:
 - N/A



29.4.8.4 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:

Converged VoIP Voice Mail

Objectives:

The objective restoral time will be:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B or P) |
|----------------|-----------------|-----------------|-----------------|---|
| Converged VoIP | ≤ 30 Minutes | N/A | ≤ 15 Minutes | Р |



| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B or P) |
|---------------------------|-----------------|-----------------|-----------------|---|
| Converged VoIP Voice Mail | ≤ 30 Minutes | N/A | ≤ 15 Minutes | Р |

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



29.4.8.5 Delay – Round Trip Transmission for Converged VoIP Services (M-S)

SLA Name: Delay – Round Trip Transmission for Converged VoIP Services

Definition:

Average one-way transfer delay measured from Customer Equipment (CE) to the remote CE.

Measurement Process:

End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the VoIP delay is not meeting the committed level. The problem requires timely verification, consistent with industry Standards, by the Contractor. Tickets opened as VoIP Delay One-Way Transmission SLA shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

Service(s):

Converged VolP

Objective(s):

Based on a 1,000 byte ping:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B or P) |
|----------------|--------------|-----------------|----------------|---|
| Converged VoIP | ≤ 170ms | ≤ 130ms | ≤ 90ms | Р |

- 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% credit or refund of TMRC.
- Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50% credit or refund of the TMRC.



29.4.8.6 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:

Converged VoIP Voice Mail

Objectives:

The Unavailable Time objective shall not exceed:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|---------------------------|--------------|-----------------|----------------|--|
| Converged VoIP | 16 Hours | 12 Hours | 8 Hours | Р |
| Converged VoIP Voice Mail | 16 Hours | 12 Hours | 8 Hours | Р |

Rights and Remedies:

- 1. Per Occurrence:
 - 100% credit or refund of the TMRC and ten Business Days ADUC 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



29.4.8.7 Excessive Usage of Site Survivability Network Failure Service (M-S)

SLA Name: Excessive Usage of Site Survivability Network Failure Service

Definition:

The usage of Site Survivability Network Failure Service shall not exceed the objective commitment identified below in a month, per site.

Measurement Process:

The monthly usage duration shall be based on the accumulated total of all service activation events during a given month. A service usage event shall begin from alarm or activation of service and ending when a Site Survivability Network Failure Service resumes to a standby state and no traffic traverses the PSTN on the back-up circuit.

Service(s):

Converged VoIP Site Survivability Network Failure

Objective(s):

The Unavailable Time objective shall not exceed:

| Service | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|-------------------------------|--------------|-----------------|----------------|--|
| Converged VoIP Site | 240 | 120 | 72 | Р |
| Survivability Network Failure | Hours | Hours | Hours | |

- 1. Per Occurrence:
 - First month the service fails to meet the committed SLA objective shall result in a 15% credit or refund of the TMRC and two Business Days of the ADUC of all usage charges as a result of the activation of the Site Survivability Network Failure Service.



- The second consecutive month the service fails to meet the committed SLA objective shall result in a 30% credit or refund of TMRC and five Business Days of ADUC of all usage charges as a result of the activation of Site Survivability Network Failure Service.
- Each additional consecutive month the service fails to meet the Committed SLA objective shall result in a 50% credit or refund of the TMRC, and ten Business Days of the ADUC of all usage charges as a result of the activation of Site Survivability Network Failure Service.
- 2. Monthly Aggregated Measurements:
 - N/A



29.4.8.8 Jitter (M-S)

SLA Name: Jitter

Definition:

Variations in transfer delay measured from the Customer Edge (CE) to the remote CE.

Measurement Process:

End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Jitter exceeds the committed level. The problem requires timely verification, consistent with industry Standards, by the Contractor. Tickets identified as a jitter issue shall not count in availability or Time-to-Repair measurements unless and until the End-User reports service as unusable for its intended uses. This measurement applies to local loop transport (1) under the control of the Contractor or (2) not under the control of Contractor that do not exceed 70% peak utilization for three consecutive Business Days.

Service(s):

Converged VoIP

Objective(s):

Based on a 1,000 byte ping:

| Service | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B or P) |
|----------------|--------------|-----------------|----------------|---|
| Service | (5) | (3) | (1) | (6 01 1) |
| Converged VoIP | ≤ 30ms | N/A | ≤ 15ms | В |

- 1. Per Occurrence:
 - First month the service fails to meet the committed SLA objective shall result in a 25% credit or refund of TMRC and two Business Days of the ADUC per occurrence for the reported service.



- Second month service fails to meet the committed SLA objectives shall result in a 35% credit or refund of TMRC and two Business Days of ADUC.
- Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50% credit or refund of the TMRC and two Business Days of the ADUC.
- 2. Monthly Aggregated Measurements:
 - N/A



29.4.8.9 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.



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



29.4.8.10 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/seat 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 |
|--|----------------------------|-----------------------------|
| Converged VoIP | 45 | Coordinated/Managed Project |
| Converged VoIP Voice Mail | 30 | Coordinated/Managed Project |

Objectives:

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

Objective 2: Monthly Average percent by service type:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B or P) |
|---------------------------|--------------|-----------------|----------------|---|
| Converged VoIP | ≥ 90% | N/A | ≥ 95% | Р |
| Converged VoIP Voice Mail | ≥ 90% | N/A | ≥ 95% | Р |

- 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.



29.4.8.11 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:

Converged VoIP Voice Mail

Objectives:

The Unavailable Time objective shall not exceed:

| Access Type | Basic (B) | Standard (S) | Premier (P) | Bidder's Objective Commitment (B, S or P) |
|---------------------------|--------------|-----------------|----------------|--|
| Converged VoIP | 6 Hours | 5 Hours | 4 Hours | S |
| Converged VoIP Voice Mail | 6 Hours | 5 Hours | 4 Hours | S |

- 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

