



**EXHIBIT D – Service Level Agreements**

**1. Service Level Agreement Matrix**

Category/Service	Service Level Agreement Metrics				
	Mean Time To Repair	Availability	Packet Delivery or Loss	Jitter	Latency
<b>Internet Services</b>					
Internet Dedicated (North American IP Network Only)	4 hrs to 8 hrs depending on access	99.90%	≥ 99.50%	≤ 1 ms	≤ 45 ms
<b>SOHO Services</b>					
Internet Cable	24 hrs (Excludes Weekends and Holidays)	99.00%	99.00%	≤ 4 ms	≤ 75 ms
Internet DSL – Office & Solo					
Internet Satellite Enterprise & Office	N/A	99.90%	≤ 1 %	N/A	N/A
<b>Managed PBX and VoIP Services</b>					
Hosted IP Centrex	≤ 4 hrs	99.90%	EF- ≥ 99.995%, AF4x - ≥ 99.99% depending on access	≤ 1 ms	≤ 36 ms
IP Flexible T1, IP Integrated Access, IP Trunking					

**2. Service Credits**

<b>Availability</b>	
Service Outage	Service Credit (% of MRC)
0 to 4 Hours	No Credit
>4 Hours to 8 hours	25%
>8 Hours to 12 Hours	50%
>12 Hours to 16 Hours	75%
>16 Hours	100%
<b>Packet Delivery</b>	
Service Packet Delivery %	Service Credit (% of MRC)
99.50%	No Credit



99%-99.4%	25%
98%-98.9%	50%
97%-97.9%	75%
Below 97%	100%
<b>Round Trip Latency</b>	
Latency in Milliseconds	Service Credit (% of MRC)
0-45ms	No Credit
45.1-55ms	25%
55.1-65ms	50%
65.1-85ms	75%
85.1 and higher	100%
<b>Jitter</b>	
Jitter measured in Milliseconds	Service Credit (% of MRC)
0-.40ms	No Credit
.41-2.0ms	25%
2.1-5.0ms	50%
5.1-8.0	75%
8.1 and higher	100%

**Notes**

- 1) Remedy or Credit Processes are outlined in the specific Service level Agreement.

**3. Applicable Service Level Agreements**

**Internet Services**

- Internet Dedicated

**SOHO Services**

- Internet Cable
- Internet DSL – Office & Solo
- Internet Satellite – Enterprise & Office

**Managed PBX and VoIP Services**

- Hosted IP Centrex
- IP Flexible T1 (IPFT1)
- IP Integrated Access (IPIA)
- IP Trunking (IPT)

**4. Chronic Service Level Definition**



Subject to the terms, exclusions and restrictions described herein, if, during any six Calendar Months in any 12 consecutive month period, (i) the aggregate amount of credits received by Customer in accordance with this document for the Effected Service, exceeds 50% of Customer's total monthly charges associated with the Effected Service, after application of any discounts or credits, for that Effected Service or (ii) Customer is entitled to the maximum available credit for an Effected Service. Customer may, upon 30 days' prior written notice to Verizon, terminate the Effected Service without incurring any early termination charges associated with such Effected Service except for charges accrued to the date of termination.

The monitoring, capturing, testing, and troubleshooting facilities necessary to validate any trouble ticket claim will be maintained by the Verizon and data made available to customer/DIR upon request coincident with trouble ticket.

## **Internet Services**

### **Internet Dedicated Service Level Agreement (North American IP Network Only)**

#### **Service Level Standard 1 – Circuit Installation**

**Installation Scope.** Verizon's Circuit Installation Service Level Standard is to have installation of a Verizon-ordered telephone company circuit and activation of a Verizon port completed within forty (40) business days for T1 services, sixty (60) business days for T3 services, and within the scheduled installation date provided in writing by a Verizon Sales Manager for OC-3, OC-12, OC-48, FE Port Only, and Internet Dedicated Ethernet (and GigE) services.

**Installation Process.** The installation date shall be counted from the date Verizon has received all of the following from Customer: signed contract (e.g., Service Agreement or Amendment), completed Customer Information Form, and (if requested by Verizon) completed credit application. The Circuit Installation Service Level Standard is not available for Customer-ordered telephone company circuits, Verizon-ordered telephone company circuits outside the contiguous U.S., or if installation delay is attributable to Customer equipment, Customer's facility, acts or omissions of Customer, its employees or agents, Customer not passing Verizon's credit check, or reasons of Force Majeure (see below if not defined in the applicable service agreement).

**Installation Remedy.** To claim a credit, Customer must request it by calling the Billing Inquiry/Trouble telephone number on its invoice. At the time of the call, Customer must provide the company name, account number, circuit ID, name of the service (Internet Dedicated), contact name and number, email address, Service Level Standard installation date, and the actual installation date in order to process the request. If Verizon determines in its reasonable commercial judgment that it has not met a Circuit Installation Service Level Standard, then at Customer's request, Customer's invoice will be credited an amount equal to 50% of Verizon's billed installation charge, to include any applicable Internet Port/service installation charges and Verizon-ordered and -billed access installation charges for the Internet Dedicated Service for which the Circuit Installation Service Level Standard was not met.

#### **Service Level Standard 2 - Availability**

**Service Availability Scope.** Verizon's Service Availability Service Level Standard provides that the Verizon Network (as defined in the applicable service agreement) will be available 100% of the time.

**Service Availability Process.** At Customer's request, Verizon will calculate Customer's "Network Unavailability" during a calendar month. "Network Unavailability" consists of the



number of minutes that the Verizon Network or a Verizon-ordered access circuit in the contiguous U.S. was not available to Customer, and includes unavailability associated with any maintenance at the Verizon data center where Customer's circuit is connected or Customer's server is located other than Scheduled Maintenance (defined below). Outages will be counted as Network Unavailability only if Customer opens a trouble ticket with Verizon Customer support within four (4) hours from learning of the outage. Network Unavailability will not include Scheduled Maintenance, or any unavailability resulting from (a) any Customer-ordered telephone company circuits or equipment, (b) Customer's applications or equipment, (c) acts or omissions of Customer or user of the Internet Dedicated Service authorized by Customer or (d) Force Majeure (see below if not defined in the applicable service agreement). If Verizon fails to meet this Service Level Standard during any given calendar month in accordance with the above, Customer's account will be credited at Customer's request.

**Service Availability Remedy.** To receive credit for a failure to meet a Service Level Standard, Customer must request such credit within 30 days from the date that the Internet Dedicated Service was unavailable. Customer's account shall be credited for that month account shall be credited for that month based on the percentages set forth in the Service Credit table.

### **Service Level Standard 3 – Latency**

**Latency Scope.** Verizon's U.S. Latency Service Level Standard provides for average round-trip transmissions of 45 milliseconds or less between Verizon-designated inter-regional transit backbone routers ("Hub Routers") in the contiguous U.S. Verizon's Transatlantic Latency Service Level Standard provides for average round-trip transmissions of 90 milliseconds or less between a Verizon Hub Router in the New York metropolitan area and a Verizon Hub Router in the London metropolitan area. Latency is calculated by averaging sample measurements taken during a calendar month between Hub Routers. Network performance statistics relating to the U.S. Latency Guarantee and the Transatlantic Latency Guarantee are posted at the following location: <http://www.verizonbusiness.com/about/network/latency>.

**Latency Remedy.** If Verizon fails to meet the Latency Service Level Standard in a calendar month, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table. Credits will not be issued if failure to meet either the U. S. Latency Service Level Standard or the Transatlantic Latency Service Level Standard is attributable to reasons of Force Majeure (see below if not defined in the applicable service agreement).

### **Service Level Standard 4 - Network Packet Delivery**

**Network Packet Delivery Scope.** Verizon offers both a North American and Transatlantic Network Packet Delivery Service Level Standard. Verizon's North American Network Packet Delivery Service Level Standard provides for a monthly packet delivery of 99.5% or greater between Verizon-designated Hub Routers in North America. The Transatlantic Network Packet Delivery Service Level Standard provides for a monthly packet delivery of 99.5% or greater between a Verizon-designated Hub Router in the New York City metropolitan area and a Verizon-designated Hub Router in the London U.K. metropolitan area.

**Network Packet Delivery Process.** Packet delivery is calculated based on the average of regular periodic measurements taken during a calendar month between Hub Routers. Network Performance statistics relating to the Network Packet Delivery Service Level Standard will be posted at the following location: <http://www.verizonbusiness.com/about/network/latency>. No credits will be issued if failure to meet a Network Packet Delivery Service Level Standard is attributable to reasons of Force Majeure (see below if not defined in the applicable service agreement).



**Network Packet Delivery Remedy.** If Verizon fails to meet any Network Packet Delivery Service Level Standard in a calendar month, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

#### **Service Level Standard 5 - Denial of Service Level Standard**

**Denial of Service Scope.** Verizon will respond to Denial of Service attacks reported by Customer within 15 minutes of Customer opening a complete trouble ticket with the Verizon Business Customer Center. Verizon defines a Denial of Service attack as more than 95% bandwidth utilization. This Service Level Standard is only available in the United States.

**Denial of Service Process.** To open a trouble ticket for Denial of Service, Customer must call Verizon at 1-800-900-0241 and state: "I am under a Denial of Service Attack." A complete trouble ticket consists of Customer's Name, Account Number, Caller Name, Caller Phone Number, Caller Email Address and Possible Destination IP address/Type of Attack. Verizon will use trouble tickets and other appropriate Verizon records to determine, in its sole judgment, whether a Service Level Standard has been met. Customer must notify Verizon no later than 30 days after the Denial of Service attack(s) occurred.

**Denial of Service Remedy.** If Verizon fails to meet the Denial of Service Service Level Standard, Customer's account will be credited, at Customer's request, the pro-rated charges for one day of the Verizon monthly recurring charges for the affected Internet Dedicated Service. Customer may obtain no more than one credit per day, regardless of the number of times a Denial of Service Service Level Standard has not been met during the day.

#### **Service Level Standard 6 - Reporting Service Level Standard**

Verizon provides two types of reporting Service Level Standards – a Network Outage Notification Service Level Standard and a Scheduled Maintenance Notification Service Level Standard. Verizon's Network Outage Service Level Standard provides Customer notification within 15 minutes after it is determined that Internet Dedicated Service is unavailable. Verizon's standard procedure is to ping Customer's router every five minutes. If the router does not respond after two consecutive five-minute ping cycles, Verizon will deem the Internet Dedicated Service unavailable and the Customer's point of contact will be notified by e-mail, phone or pager, as elected by Verizon.

**Scheduled Maintenance.** Scheduled Maintenance means any maintenance at the Verizon hub to which Customer's circuit is connected (a) of which Customer is notified seven calendar days in advance, and (b) that is performed at the Verizon hub to which Customer's circuit is connected. Notice of Scheduled Maintenance will be provided to Customer's designated point of contact by email or pager, as elected by Verizon. Upon receiving such notice, Customer may request to have such maintenance postponed to a later date if agreed to by Verizon.

**Force Majeure.** Any delay in or failure of performance by Verizon will not be considered a breach of this Service Level Standard if and to the extent caused by events beyond its reasonable control, including, but not limited to, acts of God, embargoes, governmental restrictions, strikes, lockouts, work stoppages or other labor difficulties, riots, insurrection, wars, or other military action, acts of terrorism, civil disorders, rebellion, fires, floods, vandalism, or sabotage ("Force Majeure"). Verizon's obligations hereunder will be suspended to the extent caused by Force Majeure so long as the Force Majeure continues.

#### **Service Level Standard 7 - Network Jitter Service Level Standard (currently applicable only in U.S.)**



**U.S Network Jitter Scope.** Also known as delay variation, Jitter is defined as the variation or difference in the end-to-end delay between received packets of an IP or packet stream. Jitter is usually caused by imperfections in hardware or software optimization and varying traffic conditions and loading. Excessive delay variation in packet streams usually results in additional packet loss, which affects quality. Verizon's North American Network jitter performance will not exceed 1 milliseconds between Verizon-designated inter-regional transit backbone network routers Hub Routers in the contiguous U.S.

**Network Jitter Process.** Jitter shall be measured by averaging sample measurements taken during a calendar month between Hub Routers. Each month's Network performance statistics relating to the Network Jitter Service Level Standards shall be posted at <http://www.verizonbusiness.com/about/network/latency>. No credits will be made if failure to meet a Network Jitter Service Level Standard is attributable to reasons of Force Majeure (as defined in the applicable service agreement).

**Network Jitter Service Level Standard Remedy.** If Verizon fails to meet Jitter Service Level Standard in a calendar month; Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

**Service Level Standard 8 - Mean Opinion Score ("MOS") Service Level Standard (currently applicable only on the U.S. Mainland)**

**MOS Scope.** Mean Opinion Score is a measure (score) of the audio fidelity, or clarity, of a voice call. It is a statistical measurement that predicts how the average user would perceive the clarity of each call. The Verizon Internet Dedicated MOS Service Level Standard provides that Verizon's U.S. Mainland Network MOS performance not be less than 4.0 between Verizon-designated inter-regional transit backbone network routers ("Hub Routers") in the contiguous United States. MOS is calculated using the standards based E-model (ITU-T G.107).

**MOS Process.** Credits will not be issued if failure to meet the MOS Service Level Standard is attributable to reasons of Force Majeure (as defined in Service Level Standard.6 above, if not defined in the applicable service agreement.) MOS Service Level Standards shall be posted at <http://www.verizonbusiness.com/about/network/latency>.

**MOS Remedy.** To receive a credit, Customer must submit a request within 30 business days after Service Level Standard results for the preceding month have been posted and which indicate that the MOS Service Level Standard has not been met. Customer's account will be credited a pro-rated amount of the monthly recurring charges equivalent to one day's Internet Dedicated Service plus one day of the access line charges for the Internet Dedicated Service.

**Service Level Standard 9 – Time to Repair ("TTR") Service Level Standard**

**TTR Service Level Standard Scope.** Calculation of Customer's TTR Service Level will be based on the time taken to restore service to a circuit following an event that results in the outage of a circuit. The TTR Service Level Standard for Internet Dedicated Services is 4 hours. The exception to this is when Internet Dedicated Ethernet uses an Ethernet Access – Standard Service Network Configuration. In this case the TTR is 8 hours. The TTR time starts when a trouble ticket is opened by Verizon or the Customer after the outage of a circuit other than for outages associated with the exceptions stated below, and concludes with the restoration of the affected circuit. TTR Service Level Standard applies to the Local Access line and the WAN infrastructure port.

**TTR Service Level Standard Process.** Outages will be counted only if Customer opens a trouble ticket with Verizon Customer support within (30) days of the outage. Calculation of the



TTR Service Level Standard does not count as a covered outage any outage resulting from (a) scheduled Maintenance; (b) any Customer-ordered telephone company circuits or equipment; (c) Customer's applications or equipment; (d) acts or omissions of Customer, non-Verizon affiliated third parties or user of the circuit authorized by Customer; or (e) Force Majeure (as defined below if not defined in the applicable service agreement). If Verizon does not meet the TTR Service Level Standard during any calendar month Customer's account will be credited at Customer's request.

**TTR Service Level Standard Remedy.** To receive a credit, Customer must submit its request within 30 days after the month in which the TTR Service Level Standard was not met. Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table. The TTR Service Level Standard Remedy is not available to Customer if Customer has requested a credit under the Service Availability Standard.

### SOHO Services

- Internet Cable
- Internet DSL
- Internet Satellite – Enterprise
- Internet Satellite - Office

### Internet DSL and Cable Service Level Agreement

#### General Terms

1. For purposes of this SLA, "Internet DSL and Internet Cable Service" may be referred to herein as the "Service."
2. Except as otherwise provided below, SLA claims must be made via Trouble Ticket within 30 days of the date the Service is not available or the date that Verizon did not meet the SLA standard, as applicable.
3. Credits will not be issued if Verizon did not meet an SLA standard due to a force majeure event, as provided in Verizon's Service Publication and Price Guide for Non-Telecommunications Products and Services.
4. These General Terms apply to all of the SLAs provided in this document.

#### Service Level – Installation

**Standard.** Installation will be completed within thirty (30) business days.

**Measurement.** Installation Service Level shall be measured commencing on the date Verizon has received all of the following from Customer: signed contract (e.g., Service Agreement or Amendment), completed Customer Information Form, and (if requested by Verizon) completed credit application. Subject to the General Terms above, the Installation Service Level is not available for Verizon-ordered circuits outside the contiguous U.S. and Hawaii or if installation delay is attributable to Customer equipment; any Customer-ordered telephone or cable company circuits; Customer's facility; acts or omissions of Customer, its employees or agents; Customer's credit check; or reasons of Force Majeure.



**Process.** To claim a credit, Customer must call the Billing Inquiry/Trouble telephone number on its invoice. On this call, Customer must provide the company name, account number, circuit ID, name of the service (Internet DSL or Internet Cable), contact name and number, email address, Service Level installation date, and the actual installation date.

**Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the Installation Service Level, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

### **Service Level — Availability**

**Standard.** The Service Availability Service Level is 99% availability measured over a single calendar month.

**Measurement.** The Service is considered not available starting when a trouble ticket stating that the Service is not available is opened with the Verizon Business Customer Support Department (subject to Verizon verification that in fact the Service is not available). When Customer Support receives a call, Support will use a ping/trace route tool to verify that the Service is not available. This ping/trace information will be recorded in the ticket. Outage time that occurs before the ticket is opened or when the ticket is referred back to Customer for action is not counted. The Service is considered available when the trouble ticket is closed. This Availability SLA does not apply to any circuits that are not part of the Service provided by Verizon.

**Process.** To receive a credit, Customer must:

1. Open a trouble ticket with Verizon Customer Support while the Service is not available.
2. Track each period during which Service is not available to know when Service has not been available more than 1% in a single month.
3. Visit <http://www.verizonbusiness.com/terms/us/products/dsl/creditrequests/availability/> and complete the request form with all required information.

**Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the Availability Service Level, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

### **Service Level – Latency**

**Standard.** Verizon's U.S. Latency Service Level is a monthly average round-trip transmission time of 75 milliseconds or less between Verizon-designated routers on customer sites and Verizon-designated routers in the Verizon IP network in the U.S. Mainland.

**Measurement.** Latency is calculated by averaging sample measurements taken during a calendar month between routers on customer sites and in the Verizon IP Network. Latency statistics are posted at the following location: <http://www.verizonbusiness.com/about/network/latency/>.

**Process.** If the Service fails to meet the Latency Service Level in a calendar month, Customer may request a credit by opening a Trouble Ticket with Verizon Customer Support.

**Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the Latency Service Level, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

### **Service Level – Packet Delivery**



**Standard.** The U.S. Packet Delivery Service Level is a monthly packet delivery of 99% between Verizon-designated routers on customer sites and Verizon-designated routers in the Verizon IP network in the U.S. Mainland.

**Measurement.** Packet delivery is calculated based on the average of regular periodic measurements taken during a calendar month between routers on customer sites and in the Verizon IP Network. Performance statistics relating to the Packet Delivery Service Level will be posted at the following location: <http://www.verizonbusiness.com/about/network/latency/>.

**Process/Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the Packet Delivery Service Level standard, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

#### **Service Level – Jitter**

**Standard.** The U.S. Jitter performance Service Level will not exceed four (4) milliseconds between Verizon-designated routers on Customer's sites and Verizon-designated routers in the Verizon IP network in the U.S.

**Measurement.** Also known as delay variation, Jitter is defined as the variation or difference in the end-to-end delay between received packets of an IP or packet stream. Excessive delay variation in packet streams usually results in additional packet loss, which affects quality. Jitter is measured by averaging sample measurements taken during a calendar month between routers on Customer's sites and in the Verizon IP Network. Jitter Service Level Standards shall be posted at <http://www.verizonbusiness.com/about/network/latency/>.

**Process/Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the Jitter Service Level, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

#### **Service Level – Time to Repair ("TTR")**

**Standard.** The TTR Service Level is 24 hours (excluding weekend and holidays).

**Measurement.** Calculation of Customer's TTR Service Level will be based on the time taken to restore service to a circuit following an event that results in the outage of a circuit. The time starts when a trouble ticket is opened by Verizon or the Customer for a Verizon-verified outage, other than for outages associated with the exceptions stated below, and concludes with the restoration of the affected circuit. Outage time will not be counted as such in the measurement of TTR to the extent such outage time results from or is related to (a) scheduled Maintenance; (b) the time period during which a circuit has been turned back to Customer for testing or action; (c) any Customer-ordered telephone or cable company circuits; (d) Customer's applications or equipment; (e) acts or omissions of Customer, non-Verizon-affiliated third parties or user of the circuit authorized by Customer; or (f) a force majeure event.

**Remedy.** If Verizon determines in its reasonable commercial judgment that it has not met the TTR Service Level one or more times during a month, then at Customer's request, Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table. TTR Service Level Remedy is not available to Customer if Customer has requested a credit under the Service Availability Service Level in the same month.

#### **Internet Satellite - Enterprise Service Level Agreement**



**Network Availability and Packet Loss**

**1. Network Availability**

- **Scope:** The Network Availability SLA is 99.9%.
- **Calculation:** "Network Availability" refers to the absence of Service outages associated with the connection of Customer to the Verizon Business network. Network availability is measured from the managed terrestrial network (the egress point shown in the diagram below) to the satellite gateway and associated satellite space segment.

- **Network** **Availability** **Formula:**

(Total minutes of Service network uptime) / (total minutes in the Service month)

Network Availability is measured from the egress interface up to, but not including, the egress interface at the Verizon Business network.

- 2. **Packet Loss.** The traffic shaping control for the Service is packet drops. In-Profile Traffic (as defined below) will be treated with priority and transmitted at the maximum burst rate defined by the Service Tier. Out-of-Profile Traffic is defined as capacity consumption over and above the monthly traffic volume threshold, as defined for a Service Tier, or traffic that does not meet the asymmetry parameters shown below. Out-of-Profile Traffic that cannot be forwarded will appear as congestion to host machines interacting across the Service network, resulting in increased packet loss. Out-of-Profile Traffic will be transferred across the network on a capacity available basis with no priority. The Packet Loss SLA of less than 1% per month is only available for In-Profile traffic.

- **In-Profile Traffic Definitions.** In-Profile traffic is traffic that meets (a) the instantaneous pro rata consumption that would aggregate to the monthly volume threshold for each Service Tier as shown below if used at that rate for an entire month (the "Monthly Volume Threshold") and (2) the asymmetry parameters described below.

**i. Monthly Volume Threshold**

<b>Service Tier (Burst Rate)</b>	<b>Monthly Volume Threshold</b>
Primary 128 x 128 Kbps	1500Mbps / month
Primary 256 x 128 Kbps	2250Mbps / month
Primary 384 x 128 Kbps	3000Mbps / month
Primary 512 x 128 Kbps	5100Mbps / month
Primary 1024 x 256 Kbps	7200Mbps / month
Primary 1.544 x 256 Kbps	10000Mbps / month
Primary 1.544 x 512 Kbps	15000Mbps / month



Primary 2.048 x 256 Kbps	12000Mbps / month
Primary 2.048 x 512 Kbps	18000Mbps / month

- ii. **In-Profile asymmetry:** Traffic that is greater than or equal to 75% of the pro rata consumption of the Monthly Volume Threshold for traffic entering the CPE from the satellite link and less than or equal to 25% of the pro rata consumption of the Monthly Volume Threshold for traffic leaving the CPE via the satellite link.
- 3. **Outages:** Outages related to In-Profile Traffic packet loss must be reported to Verizon Business at 800-900-0241 option 3, option 2 within 24 hours of the packet loss event and confirmed by Verizon Business Customer Support.

4. **Service Level Agreement**

Verizon Business’s performance with respect to each SLA shall be determined on the basis of data collected by Verizon Business and reported by Verizon Business on the Information One Website. In addition to exclusions described herein, in calculating SLA compliance, Verizon Business will exclude: (a) failures resulting from outages or disruptions caused by Customer; (b) Service or data failures due to reasons of Force Majeure; (c) outages associated with scheduled maintenance events; and (d) outages or disruptions caused by Customer’s failure to maintain site specifications as set forth below.

Customer is responsible for the necessary site preparation, maintenance, interconnection where applicable, and specification adherence as reasonably determined by Verizon Business and set forth in guidelines that Verizon Business may issue from time to time.

No SLAs will be available if the CPE: (a) has been subjected to physical or electrical stress, misuse, neglect, accident or abuse, or damaged by any other external causes; (b) has been repaired or altered by anyone other than Verizon Business or Verizon Business’s authorized subcontractors or affiliates, without Verizon Business’s express and prior written approval; or (c) is used in violation of applicable law or in violation of instructions furnished by Verizon Business.

To claim a credit, Customer must submit a complete Company claim on the Verizon Business Information One Website within 24 hours of the end of each month where an SLA was not met. Customer’s account shall be credited for that month based on the percentages set forth in the Service Credit table.

**Internet Satellite - Office Service Level Agreement**

**Network Availability and Packet Loss.**

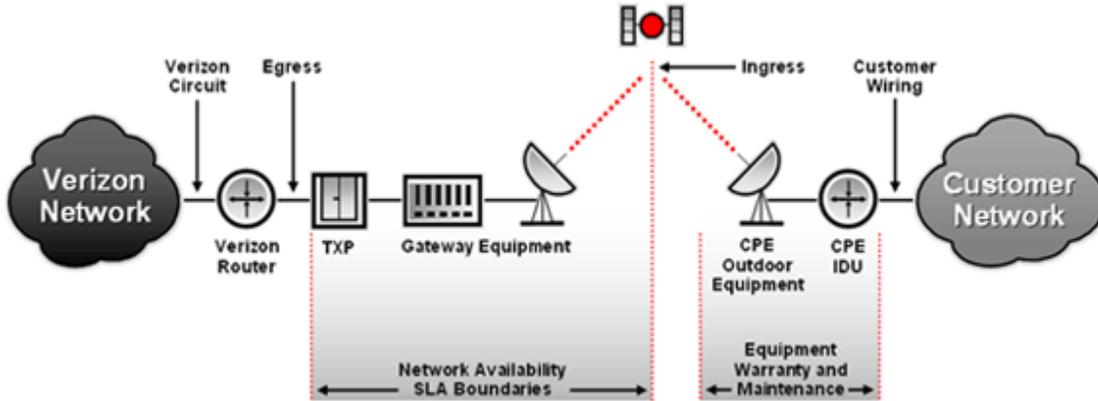
1. **Network Availability**

- **Scope:** The Network Availability SLA is 99.9%.
- **Calculation:** "Network Availability" refers to the absence of Service outages associated with the connection of Customer to the Verizon Business network. Network availability is measured from the managed terrestrial network to the satellite gateway and associated satellite space segment.

▪ **Network Availability** **Formula:**

(Total minutes of Service network uptime) / (total minutes in the Service month)

Network Availability is measured from the ingress interface up to, but not including, the egress interface at the Verizon Business network. Refer to the diagram below.



2. **Packet Loss** The traffic shaping control for the Service is packet drops. In-Profile Traffic (as defined below) will be treated with priority and transmitted at the maximum burst rate defined by the Service Tier. Out-of-Profile Traffic is defined as capacity consumption over and above the monthly traffic volume threshold, as defined for a Service Tier, or traffic that does not meet the asymmetry parameters shown below. Out-of-Profile Traffic that cannot be forwarded will appear as congestion to host machines interacting across the Service network, resulting in increased packet loss. Out-of-Profile Traffic will be transferred across the network on a capacity available basis with no priority. The Packet Loss SLA of less than 1% per month is only available for In-Profile traffic.

- **In-Profile Traffic Definitions** In-Profile traffic is traffic that meets (a) the instantaneous pro rata consumption that would aggregate to the monthly volume threshold for each Service Tier as shown below if used at that rate for an entire month (the “Monthly Volume Threshold”) and (2) the asymmetry parameters described below.

• **Monthly Volume Threshold**

Service Tier (Burst Rate)	Monthly Volume Threshold
384 x 128 Kbps	1 Gigabyte / month
768 x 256 Kbps	2 Gigabytes / month
1.544 x 256 Kbps	3 Gigabytes / month
2.048 x 512 Kbps	4 Gigabytes / month

- **In-Profile asymmetry:** Traffic that is greater than or equal to 75% of the pro rata consumption of the Monthly Volume Threshold for traffic entering the CPE from the



satellite link and less than or equal to 25% of the pro rata consumption of the Monthly Volume Threshold for traffic leaving the CPE via the satellite link.

**Note:** Outages related to In-Profile Traffic packet loss must be reported to Verizon Business at 800-900-0241 option 3, option 2 within 24 hours of the packet loss event and confirmed by Verizon Business Customer Support.

**3. Service Level Agreement Remedy.**

Verizon Business's performance with respect to each SLA shall be determined on the basis of data collected by Verizon Business and reported by Verizon Business on the Information One Website. In addition to exclusions described herein, in calculating SLA compliance, Verizon Business will exclude: (a) failures resulting from outages or disruptions caused by Customer; (b) Service or data failures due to reasons of Force Majeure; (c) outages associated with scheduled maintenance events; and (d) outages or disruptions caused by Customer's failure to maintain site specifications as set forth below.

Customer is responsible for the necessary site preparation, maintenance, interconnection where applicable, and specification adherence as reasonably determined by Verizon Business and set forth in guidelines that Verizon Business may issue from time to time.

No SLAs will be available if the CPE: (a) has been subjected to physical or electrical stress, misuse, neglect, accident or abuse, or damaged by any other external causes; (b) has been repaired or altered by anyone other than Verizon Business or Verizon Business's authorized subcontractors or affiliates, without Verizon Business's express and prior written approval; or (c) is used in violation of applicable law or in violation of instructions furnished by Verizon Business.

To claim a credit, Customer must submit a complete Company claim on the Verizon Business Information One Website within 24 hours of the end of each month where an SLA was not met. Customer's account shall be credited for that month based on the percentages set forth in the Service Credit table.

**Managed PBX and VoIP Services**

- Hosted IP Centrex
- IP Integrated Access
- IP Flex T1
- IP Trunking

**Voice over IP (“VoIP”) Service Level Agreement**

**Overview**

Verizon offers the following performance Service Level Agreements (SLAs) covering Jitter, Mean Opinion Score (MOS), Network Availability and Time To Repair (TTR) to those Verizon VoIP customers who use Verizon’s Internet Dedicated Service or Private IP Service for transport. No SLA credits will be given if an SLA standard is not met due to reasons of force majeure (as defined in the Guide or applicable Service Agreement).



### **VoIP Jitter Service Level Agreement**

Also known as delay variation, jitter is defined as the variation or difference in the end-to-end delay between received packets of an IP or packet stream. Jitter is usually caused by imperfections in hardware or software optimization or varying traffic conditions and loading. Excessive delay variation in packet streams usually results in additional packet loss which detrimentally affects voice quality.

The VoIP Jitter SLA provides that Verizon's contiguous U.S. Internet Network (as defined in the Guide) monthly jitter performance will not exceed 1.0 millisecond.

Performance is measured by periodically collecting data across the contiguous U.S. Internet Network, from which a monthly average is derived.

[Click here to view Jitter performance statistics](#)

### **Credit Process**

To receive a credit, Customer must submit its request within 30 business days after the month in which the SLA was not met. Customer must access the online [Verizon Business Verizon Business VoIP Jitter Credit Request Form](#), and provide all required information (e.g., account number). The Verizon Customer Support department will use Verizon's public backbone statistics Web site to verify that the Jitter SLA was not met.

If Verizon Customer Support confirms Customer's request (i.e., that the Jitter SLA was not met), then Customer account shall be credited for that month based on the percentages set forth in the Service Credit table. For VoIP Service provided on an A La Carte pricing basis, the MRC used to calculate the credit is the applicable site fee or the simultaneous calling charge plus the applicable MRC for the related Internet Dedicated Service or Private IP Service. For VoIP Service provided on a Bundled pricing basis, the MRC used to calculate the credit is the applicable base charge plus the simultaneous calling charge. No credits will be given with respect to Service not affected by the unmet SLA.

### **VoIP MOS Service Level Agreement**

Mean Opinion Score is a measure (score) of the audio fidelity, or clarity, of a voice call. It is a statistical measurement that predicts how the average user would perceive the clarity of each call.

The VoIP MOS SLA provides that Verizon U.S. Internet Network MOS performance will not drop below 4.0 where MOS is calculated using the standards based E-model (ITU-T G.107).

Performance is measured by periodically collecting data across the contiguous U.S. Internet Network from which a monthly average is derived.

[Click here to view MOS performance statistics.](#)

### **Credit Process**

To receive a credit, Customer must submit its request within 30 business days after the month in which the SLA was not met. Customer must access the online [Verizon Business VoIP MOS Credit Request Form](#), and provide all required information (e.g., account number). The Verizon Customer Support department will use Verizon's public backbone statistics Web site to verify that the MOS SLA standard was not met. If Verizon Customer Support confirms Customer's request (i.e., that the MOS SLA was not met), then Customer shall receive a credit to its account equal to one day's share of the Verizon VoIP Service monthly recurring charge ("MRC") specified below for each unit of the Service for which the SLA was not met. For VoIP



Service provided on an A la Carte pricing basis, the MRC used to calculate the credit is either the applicable site fee or simultaneous calling charge plus the applicable MRC for the related Internet Dedicated Service or Private IP Service. For VoIP Service provided on a Bundled pricing basis, the MRC used to calculate the credit is the applicable base charge plus the simultaneous calling charge. No credits will be given with respect to units of the Service that are not affected by the unmet SLA.

### **Network Availability Service Level Agreement**

The VoIP Network Availability SLA provides that Verizon's contiguous U.S. Internet Network (for purposes of this Network Availability SLA, the "Network") will be available at least 99.9 percent of the time as measured on a monthly basis by trouble ticket time. The Network is considered not available for the number of minutes that a trouble ticket shows the Network was not available to Customer. The unavailable time starts when the Customer opens a trouble ticket with Verizon Customer Support at 877-777-7176 and releases the service for immediate testing. The unavailable time stops when the applicable Network or access circuit trouble has been resolved and the Service is again available to Customer.

The VoIP Network Availability SLA does not include unavailability resulting from:

- Force majeure (as noted above);
- Verizon Internet Network maintenance;
- Customer-ordered third-party circuits;
- Inappropriate Service configuration change(s) made by or through Customer at the Verizon Enterprise Center web-site;
- Customer Premise Equipment including, but not limited to, Customer-provided PBX, black phones, SIP phones, firewalls, Router/modem and/or Analog/Ethernet Adapter;
- Acts or omissions of Customer, or any use or user of the service that is authorized by or enabled through Customer but outside the scope of Customer's Service;
- "Customer Time," which is the time identified on the trouble ticket (if any) attributable to, or caused by, through no fault of Verizon, the following: (a) incorrect or incomplete contact information provided by Customer which prevents Verizon from completing the trouble diagnosis and service restoration; (b) Verizon being denied access to network components at the Customer location when access is required to complete trouble shooting, repair, diagnosis, or acceptance testing; (c) Customer's failure or refusal to release the circuit for testing; (d) Customer being unavailable when Verizon calls to close a trouble ticket or verify service restoration, (e) any other act or omission on the part of Customer; or (f) down-time caused by the Local Exchange Carrier (LEC) local loop for periods where the LEC's maintenance support is not available.
- Customer must open a trouble ticket with Verizon Customer Support while it is experiencing a service problem. The calculation of unavailable time is based on trouble ticket times. Should Customer have multiple locations detrimentally affected by an outage, one ticket can be submitted; however, the individual locations affected should be identified in the original ticket.

### **Credit Process**

To receive credit, Customer must request it within 30 business days after the month in which the SLA standard was not met. Customer must access the online [Verizon Business VoIP](#)



Network Availability Credit Request Form, and provide all required information (e.g., account number). Customer is responsible for tracking the time (on trouble tickets) that any unit of the Service is unavailable due to Network unavailability. If Verizon Customer Support confirms the validity of Customer's request (i.e., that the Network Availability SLA was not met), then Customer account shall be credited for that month based on the percentages set forth in the Service Credit table. For VoIP Service provided on an A La Carte basis, the MRC used to calculate the credit is either the applicable site fee or simultaneous calling charge plus the applicable MRC for the related Internet Dedicated Service or Private IP Service under the related Service Agreement. For VoIP Service provided on a Bundled basis, the MRC used to calculate the credit is the applicable base charge plus the simultaneous calling charge. No credits will be given with respect to units of Service not affected by the unmet SLA.

### **Time To Repair (TTR)**

The VoIP Time to Repair (TTR) SLA provides that Priority One (PTY 1) tickets will be resolved in four hours or less. PTY 1 tickets are categorized as a "hard outage" where there is complete loss of VoIP Service or severe service degradation that results in Customer's inability to receive any inbound calls and/or complete any outbound calls from a given location using Verizon VoIP and Customer is prepared to release its Service for immediate testing. "Time to Repair" is defined as time taken to restore end-to-end Service during a Hard Outage based on trouble ticket time. Unavailable time starts when Customer opens a trouble ticket with Verizon Customer Support at 877-777-7176 and releases the Service for immediate testing. Unavailable time stops when the service is again available to the Customer.

Priority 1 (PTY 1) outages resulting from any of the following are not subject to the TTR SLA:

- Force majeure (as noted above);
- Verizon Internet Network maintenance;
- Customer-ordered third-party circuits;
- Inappropriate Service configuration change(s) made by or through Customer at the Verizon Enterprise Center web-site;
- Customer Premise Equipment including, but not limited to, Customer-provided PBX, black phones, SIP phones, firewalls, Router/modem and/or Analog/Ethernet Adapter;
- Acts or omissions of Customer or its users, or any use or user of the Service that is authorized by or enabled through Customer but outside the scope of Customer's service;

In addition, the TTR SLA does not cover "Customer Time," which is the time identified on the trouble ticket (if any) attributable to, or caused by, through no fault of Verizon, the following: (a) incorrect or incomplete contact information provided by Customer which prevents Verizon from completing the trouble diagnosis and service restoration; (b) Verizon being denied access to network components at the Customer location when access is required to complete trouble shooting, repair, diagnosis, or acceptance testing; (c) Customer's failure or refusal to release the circuit for testing; (d) Customer being unavailable when Verizon calls to close a trouble ticket or verify service restoration, (e) any other act or omission on the part of Customer; or (f) down time caused by the Local Exchange Carrier (LEC) local loop for periods where the LEC's maintenance support is not available.

### **Credit Process**

To receive a credit, Customer must submit their request within 30 business days after the month in which the SLA standard was not met. Customer must access the online Verizon Business VoIP TTR Credit Request Form, and provide all required information (e.g., account number). Customer is responsible for tracking the time (on trouble tickets) that any unit of the



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SERVICE LEVEL AGREEMENTS**

Service is unavailable. If Verizon Customer Support confirms Customer's request (i.e., that the TTR threshold was missed), then Customer account shall be credited for that month based on the percentages set forth in the Service Credit table. For VoIP Service provided on an A La Carte basis, the MRC used to calculate the credit is either the applicable site fee or simultaneous calling charge plus the applicable MRC for the related Internet Dedicated Service or Private IP Service under the related Service Agreement. For VoIP Service provided on a Bundled basis, the MRC used to calculate the credit is the applicable base charge plus the simultaneous calling charge. No credits will be given with respect to units of the Service that are not affected by the missed TTR threshold. Customer may receive multiple TTR SLA credits in a given month.