



# Service Level Agreement

This document outlines the Service Level Agreement (“SLA”) for the Ethernet, SOHO, and Dedicated Internet Access fiber based Services (each, a “Service”). All capitalized terms used but not defined herein shall have the meanings given to them in the Agreement.

## I. SLA Targets:

Service	Availability	MTRR	Latency	Packet Loss	Jitter
DIA / Ethernet (Metro and Regional Services)	End to End: 99.97% (On-Net Circuit)	Restore: Priority 1 Outage within 4 hours	50ms (Round Trip)	<0.1%	N/A

## II. Priority Classification:

Spectrum Enterprise will classify Service Disruptions (as defined below) as follows:

Priority	Criteria
Priority 1	a. Total loss of Service (“Priority 1 Outage”) b. Service degradation to the point where Customer is unable to use the Service and is prepared to release it for immediate testing.
Priority 2	Degraded Service where Customer is able to use the Service and is not prepared to release it for immediate testing.
Priority 3	a. A service problem that does not impact the Service. b. A single non-circuit specific quality of Service inquiry.

\* Customer must open a trouble ticket with Spectrum Enterprise to report a Service Disruption and establish the beginning of such Service Disruption.

## III. Network Availability

A “Service Disruption” is defined as a disruption or degradation that interferes with the ability of a Spectrum Enterprise network hub to (i) transmit and receive network traffic on a Customer’s dedicated access port; and (ii) exchange network traffic with another Spectrum Enterprise network hub. Service Disruptions include Priority 1 Outages. Service Disruptions exclude planned outages, routine maintenance, service problems resulting from acts or omissions of Customer, Customer equipment failures, and a Force Majeure Event.

“Network Availability” is calculated as the total number of minutes the circuit is up (other than a Priority 1 outage) in a calendar month for a specific Customer connection, divided by the total number of minutes in a calendar month.

### Commitment:

Spectrum Enterprise’s monthly Network Availability Target is 99.97%.

The following table contains examples of the percentage of Network Availability translated into minutes of up time and downtime for the 99.97% Network Availability target:

Percentage by Days Per Month	Total Minutes / Month	Minutes Up	Minutes Down
99.97% for 31 Days	44,640	44,626	14
99.97% for 30 Days	43,200	43,187	13
99.97% for 29 Days	41,760	41,747	13
99.97% for 28 Days	40,320	40,307	13



**IV. Latency**

Latency is the average roundtrip network delay, measured every 5 minutes, to adequately determine a consistent average monthly performance level for latency at the relevant Spectrum Enterprise Hub/POP. The Roundtrip Delay is expressed in milliseconds (ms). The observation period is one calendar month. For DIA, Spectrum Enterprise measures latency using a standard 64byte ping from Customer premise device to the Spectrum Enterprise Internet access router in a round trip fashion. For Ethernet, Spectrum Enterprise measures latency using a standard 64byte ping from Customer premise device between site A and site Z.

Latency is calculated as follows:

$$\text{Latency} = \frac{\text{Roundtrip Delay for relevant Hub-Hub connections}}{\text{Total \# of relevant Hub-Hub connections}}$$

**V. Packet Loss**

Packet Loss is defined as the average number of packets that are not successfully received. Packet Loss is the average ratio of total packets that are sent compared to those that are received. Ratios are based on packets that are transmitted from a network origination point and received at a network destination point (network edge to network edge).

Packet Loss is calculated as follows:

$$\text{Packet Loss (\%)} = 100 (\%) - \text{Packet Delivery (\%)}$$

**VI. Mean Time to Restore (“MTTR”)**

The Mean Time to Restore (“MTTR”) measurement for a Service is the cumulative length of time it takes to restore service for Priority 1 Outage for a specific connection in a calendar month divided by the corresponding number of trouble tickets for Priority 1 Outages opened during the calendar month for that connection.

MTTR per calendar month is calculated for as follows:

$$\frac{\text{Cumulative length of response time to Priority 1 Outage(s) per connection}}{\text{Total number of Priority 1 Outage trouble tickets per connection}}$$

Chronic Trouble: If two Service Outages have occurred on a particular Service during a 30-day period, and a third Service Outage occurs within 30 days following the second Service Outage, Customer may terminate the applicable service without early termination liability provided that Customer supplies Spectrum Enterprise with a termination notice no later than thirty days following the third Service Outage.



**VII. Network Maintenance**

**Maintenance Notice:**

Customer understands that from time to time, Spectrum Enterprise will perform network maintenance for network improvements and preventive maintenance. Spectrum Enterprise will provide maintenance notification in accordance with the procedures set forth in the Ongoing Change Management Plan.

**VIII. Credits**

**Credits Provided for Spectrum Enterprise Business Class SOHO Internet services:**

**Availability Service Level:** Spectrum Enterprise will guarantee service restoration within six (6) hours for non-Customer related Out of Service events. If Spectrum Enterprise fails to meet the foregoing SLA guarantee, Customer is entitled to receive a credit equal to one day of service of the monthly fees for the affected Service. Customer will not be entitled to more than one such credit per day. In the unlikely circumstance that an Out of Service event is not resolved within 24 hours, the Customer will receive an additional day’s credit for each 24 hour increment for which service was unavailable.

Please note that any Customer related delay and/or the inability of Spectrum Enterprise personnel to access the location to perform corrective action would not be eligible for a credit. Service Disruptions exclude planned outages, routine maintenance, service problems resulting from acts or omissions of Customer, Customer equipment failures, and a Force Majeure Event.

**Chronic Issues Credit:** In the event that a specific Customer location experiences greater than 3 chronic issues in a 30 day period and that have been reported to Spectrum Enterprise and that are non Customer caused, this Customer location will be entitled to reimbursement of one-day of service credit to their current Customer account of record.

Should a Customer experience 8 or more Chronic Out of Service failures (non-Customer related) over a 30 day period, the Customer may elect to terminate the remaining term of their contract without being assessed an ETF, regardless if it was an ICB.

**Credits Provided for Spectrum Enterprise Business Class DIA and ME Fiber services:**

**Availability Service Level:** In the event Service becomes unavailable for reasons other than previously scheduled maintenance, Customer will be entitled to a service credit off of the monthly recurring charges (“MRC”) for the affected Service based on the unavailability of the affected Service in a given calendar month as set forth in the following table:

<u>Unavailability</u> (in hrs:mins:secs)	<u>Service Level Credit</u>
00:00:01 – 00:14:00	No Credit
00:15:00– 04:00:00	1 day credit
04:00:01– 23:59:00	2 days credit
Each Additional 24:00:00 period	2 days credit up to a maximum credit of the applicable MRC

**Packet Loss Service Level:** In the event packet loss is determined to be non-compliant during a period of four (4) consecutive hours or more in a 24 hour period (day) with measurements exceeding 0.1% packet loss on average between Spectrum Enterprise Hubs, Customer will be entitled to a service credit off of the monthly



recurring charges (“MRC”) for the affected Service based on the packet loss of the affected Service in a given calendar month as set forth in the following table:

<u>Packet Loss</u>	<u>Service Level Credit</u>
(in hrs:mins:secs)	
00:00:01 – 03:59:00	No Credit
04:00:00– 08:00:00	1 day credit
08:00:01– 23:59:00	2 days credit
Each Additional 24:00:00 period	2 days credit up to a maximum credit of the applicable MRC

**Packet Latency Service Level:** In the event packet latency is determined to be non-compliant during a period of four (4) consecutive hours or more in a 24 hour period (day) with measurements exceeding 60ms on average between Spectrum Enterprise Hubs, Customer will be entitled to a service credit off of the monthly recurring charges (“MRC”) for the affected Service based on the packet latency of the affected Service in a given calendar month as set forth in the following table:

<u>Packet Latency</u>	<u>Service Level Credit</u>
(in hrs:mins:secs)	
00:00:01 – 03:59:00	No Credit
04:00:00– 08:00:00	1 day credit
08:00:01– 23:59:00	2 days credit
Each Additional 24:00:00 period	2 days credit up to

**Fault Management Service Level:** Spectrum Enterprise will exercise commercially reasonable efforts to repair Spectrum Enterprise based upon the MTTR objectives. In the event Spectrum Enterprise does not meet this Fault Management Service Level for a particular Order, Customer will be entitled to a service credit off of the monthly recurring charges (“MRC”) as set forth in the following table:

<u>Fault Management</u>	<u>Service Level Credit</u>
Severity 1 - Critical	2 days credit
Severity 2 - Major	1 day credit
Severity 3 - Minor	No credit
Severity 4 - Informational	No Credit

**Chronic Issues Credit:** In the event that a specific Customer location experiences greater than 3 chronic issues in a 30 day period and that have been reported to Spectrum Enterprise and that are non Customer caused, this Customer location will be entitled to reimbursement of one-day of service credit to their current Customer account of record.

Should a Customer experience 8 or more Chronic Out of Service failures (non-Customer related) over a 30 day period, the Customer may elect to terminate the remaining term of their contract without being assessed an ETF, regardless if it was an ICB.