

**Managed Session Border Devices  
("Managed SBD")  
Service Level Agreement ("SLA")**

1. **Overview.** The Managed SBD SLAs are as follows:

- Availability
- Network Time to Repair ("Network TTR")
- Physical Time to Repair ("Physical TTR")
- Proactive Outage Notification

2. **Details.** The Managed SBD SLAs vary by level of Managed SBD service, geographic location, network provider (voice and data), and maintenance provider as defined below.

2.1 **Geographic Location.** The location of a Customer site determines the applicable service levels. The countries covered under the Managed SBD SLA are divided into two categories:

- **United States:** Contiguous 48 states and Hawaii.
- **Global Tier A:**

Europe	
Austria	Luxembourg
Belgium	Netherlands
Czech Republic	Norway
Denmark	Poland
Finland	Portugal
France	Spain
Germany	Sweden
Hungary	Switzerland
Ireland	United Kingdom
Italy	

2.2 **Network Provider.** The network provider for primary access also determines the applicable service level. All SLAs provided herein are associated with Verizon’s network except where expressly noted.

2.3 **Maintenance Provider.** Maintenance may be provided by Verizon Data Maintenance–Network, by a Verizon-contracted third-party maintenance provider, or by an approved Customer-contracted third-party maintenance provider. The same SLA is provided to Customer whether maintenance is provided by Verizon Data Maintenance–Network or provided by Verizon-contracted third-party maintenance providers. When used in this SLA, the term “Third-Party Maintenance” refers to Customer-contracted third-party maintenance.

2.4 **Out-of-Band Access.** To be eligible under this SLA, each SBD must have out-of-band access except for those devices under the Monitor and Notify level of service.

3. **SLAs and Objectives by Country Category and Level of Managed SBD Service**

3.1 **Managed SBD Full Management SLA**

Parameter	Region		
	U.S. – Verizon Network only	Global Tier A All Networks	U.S. – Third-Party Networks
Availability (with Physical Location Redundant SBDs)	100%	100%	100%
Availability (with High Availability SBD)	99.95%	99.95%	99.95%

Parameter	Region		
	U.S. – Verizon Network only	Global Tier A All Networks	U.S. – Third-Party Networks
Availability (single SBD)	99.5%	99.5%	99.5%
TTR – Soft Outage	6 Hours	6 Hours	6 Hours
TTR – Physical Maintenance	Next Business Day	Next Business Day	Next Business Day
Proactive Outage Notification	15 Minutes	15 Minutes	15 Minutes

### 3.2 Managed SBD Physical Management SLA

Parameter	Region		
	U.S. – Verizon Network only	Global Tier A Verizon Network Only	U.S. –Third-Party Networks
TTR – Physical Maintenance	Next Business Day	Next Business Day	Next Business Day
Proactive Outage Notification	15 Minutes		

### 3.3 Managed SBD Monitor and Notify Management SLA

Parameter	Region		
	U.S. – Verizon Network only	Global Tier A Verizon Network Only	U.S. – Third-Party Networks
Proactive Outage Notification	15 Minutes		

## 4. Definitions

4.1 **Availability.** Managed SBD Availability is based on the total number of minutes in a calendar month during which Managed SBD is available to exchange data, divided by the total number of minutes in that month. Managed SBD is considered available whether data is passing through the primary device or through a back-up device. Availability is based on the total number of minutes per calendar month and site or service design:

4.1.1 **Calculation.** Availability is the percentage of time that the Customer’s session border device (“SBD”) is available within a given calendar month.

**Monthly Managed SBD Availability (%) =**

$$\left( 1 - \frac{\text{Total minutes of SBC Hard Outage per month}}{\# \text{ days in month} \times 24 \text{ hours} \times 60 \text{ min}} \right) \times 100\%$$

4.1.2 **Credit Structure and Amounts.** If calculation of Availability results in an SLA credit, Customer will be credited for the Managed SBD MRC for the affected SBD with Full management in accordance with the following tables.

#### Availability with Physically Redundant SBDs

Availability Percentage		Credit as a Percentage of MRC for Managed SBD		
		U.S. – Verizon Network only	Global Tier A All Networks	U.S. – Third-Party Networks
From	To			
< 100%	99.90%	10%	10%	10%
99.89%	99.50%	15%	15%	15%

99.49%	99.00%	20%	20%	20%
98.99%	98.00%	30%	30%	30%
97.99%	97.00%	50%	50%	50%
Less than 97.00%		100%	100%	100%

#### Availability with Single High Availability SBD

Availability Percentage		Credit as a Percentage of MRC for Managed SBD		
		U.S. – Verizon Network only	Global Tier A All Networks	U.S. – Third-Party Networks
From	To			
100%	99.95%	0%	0%	0%
99.949%	99.90%	5%	5%	5%
99.89%	99.00%	10%	10%	10%
98.99%	98.00%	15%	15%	15%
97.99%	96.00%	25%	25%	25%
95.99%	94.00%	50%	50%	50%
Less than 94.00%		100%	100%	100%

#### Availability with Single SBD

Availability Percentage		Credit as a Percentage of MRC for Managed SBD		
		U.S. – Verizon Network only	Global Tier A All Networks	U.S. – Third-Party Networks
From	To			
100%	99.50%	0%	0%	0%
99.49%	99.00%	10%	5%	5%
98.99%	97.00%	15%	15%	15%
96.99%	95.00%	25%	20%	20%
94.99%	93.00%	35%	25%	25%
92.99%	90.00%	50%	30%	30%
Less than 90.00%		100%	100%	100%

4.1.3 **Exclusions.** In addition to the general exclusions set forth in Section 6 below, the following exclusions apply to the Availability SLA:

- Periods of Network Outage.
- Interruptions for which no trouble ticket was opened.
- Devices installed for less than one full calendar month.
- SBD not under 24 x 7 maintenance coverage with Verizon or a Verizon-approved Third- Party Maintenance provider.

4.2 **Soft Outage Time to Repair (“Network TTR”).** Soft Outage TTR is the time to resolve a Soft Outage trouble ticket at a site.

4.2.1 **Calculation.** The Soft Outage TTR will be based on the Soft Outage time per SBD for each outage event. The Soft Outage TTR time starts when a trouble ticket is opened after a Soft Outage by Verizon or the Customer, and concludes with the restoration of Managed SBD services. For all levels of service, the Soft Outage TTR SLA includes the SBD device only.

**Managed Device Time To Repair (Hrs.) = Length of trouble ticket resolution for Soft Outage per SBD per outage**

4.2.2 **Credit Structure and Amounts.** If calculation of Network TTR results in an SLA credit, Customer will be credited for the Managed SBD MRC charges for the affected SBD in accordance with the following table.

**Network TTR with Full Management and Verizon Data Maintenance or Approved Third-Party Maintenance (applies to each SBD at a Site)**

Time to Repair	Credit as a Percentage of MRC for Managed SBD		
Network/Soft Outage Repair Time (per Incident)	<b>U.S. – Verizon Network only</b>	<b>Global Tier A All Networks</b>	<b>U.S. –Third-Party Networks</b>
Greater than 6 hours	5%	5%	5%

4.2.3 **Exclusions.** In addition to the general exclusions set forth in Section 6 below, sites with Ethernet, DSL, EVDO, or VSAT access connections as primary access are excluded from the Network TTR SLA.

4.3 **Physical Time to Repair (“Physical TTR“).** Physical TTR is the time to resolve a Hard/Physical Outage trouble ticket at a site.

4.3.1 **Calculation.** Physical TTR will be based on the Hard/Physical Outage time per SBD for each outage event. The Physical TTR time starts when a trouble ticket is opened after a Hard/Physical Outage by Verizon or Customer, and concludes with the restoration of Managed SBD. For all levels of service, Physical TTR SLA includes the SBD device only.

**Physical Time To Repair = Length of trouble ticket resolution for Physical/Hard Outage per SBD per outage.**

4.3.2 **Credit Structure and Amounts.** If calculation of Physical TTR results in an SLA credit, Customer will be credited for Managed SBD monthly recurring charges for the affected site in accordance with the following tables.

**Physical TTR with Full Management And Verizon Data Maintenance or Approved Third-Party Maintenance (applies to each SBD at a Site)**

Time to Repair	Credit as a Percentage of MRC for Managed SBD		
Hard Outage Repair Time (per Incident)	<b>U.S. – Verizon Network only</b>	<b>Global Tier A All Networks</b>	<b>U.S. – Third-Party Networks</b>
Greater than Next Business Day	5%	5%	5%

**Physical TTR with Physical Management**

Time to Repair	Credit as a Percentage of MRC for Managed SBD		
Hard Outage Repair Time (per Incident)	<b>U.S. – Verizon Network only</b>	<b>Global Tier A Verizon Network only</b>	<b>U.S. –Third-Party Networks</b>
Greater than Next Business Day	5%	5%	N/A

4.3.3 **Exclusions.** In addition to the general exclusions set forth in Section 6 below, the following restrictions and exclusions apply to the Physical TTR SLA:

- U.S. sites with Verizon Data Maintenance–Network located between 60 and 120 miles from an authorized Verizon service center have a TTR objective of 6 hours. U.S. Sites with Verizon Data Maintenance–Network located more than 120 miles have a Physical TTR objective of 24 hours. There are no credits payable for not meeting these objectives.
- Periods of Soft Outage do not count against the Physical TTR SLA.

- For the Managed SBD Full level of service, if not under 24x7 maintenance coverage with Verizon or a Verizon-approved Third- Party Maintenance provider, the Physical TTR does not apply.

4.4 **Proactive Outage Notification SLA.** Credits are provided in accordance with this section if Verizon fails to notify Customer of a Hard Outage by electronic means (e.g., pager or e-mail).

4.4.1 **Calculation.** The Notification Period begins with the opening of a trouble ticket by Verizon for a Hard Outage. Verizon has 15 minutes to notify Customer's primary point of contact from the commencement of the Notification Period. Verizon is compliant with the Proactive Outage Notification SLA if Customer opens the trouble ticket itself or contacts Verizon within the Notification Period. Verizon will provide the ticket number and an initial status.

4.4.2 **Credit Structure and Amounts.** Customer will receive a credit equal to 10% of the MRC for each affected Managed SBD device during a Hard Outage for which Verizon did not provide proper notification.

4.4.3 **Exclusions.** In addition to the general exclusions set forth in Section 6 below, the following exclusions apply to the Proactive Outage Notification SLA:

- Periods of soft outage.
- Events that affect multiple customers, for example, cable or fiber cuts.
- Customer point of contact unavailability due to incorrect contact information or other cause.
- Outages due to group encrypted transport ("GET") VPN encryption failure.

5. **Credit Application Process.** Credits are not cumulative month to month. If the SLA issue exceeds 30 days or spans across two or more months, credits generated in a succeeding month do not accumulate to an existing credit for a preceding month. Each month's credits are determined on its own. The maximum credit within any one month for the aggregate SLA credits within that month is 100% of the total Managed SBD MRC for any one site. Verizon's data and calculations will be used to determine if an SLA has been missed and a credit is due. Verizon will issue a credit within 90 days following its determination of non-compliance with an SLA.

The next months credits will not accumulate to the existing credit, and, the customer will receive credits for the new months based on the original schedule

5.1 **Credit Application.** Customer must complete two steps in order to have an outage qualify for an SLA credit. First, a trouble ticket needs to be opened in response to Managed SBD issues at the time of the Managed SBD issue. Second, a written request for credit must be made to the Verizon account team.

5.2.1 **Opening a Trouble Ticket.** For the Availability, Physical TTR, and Proactive Outage Notification SLAs, a Hard Outage trouble ticket must be opened on Verizon's systems, either by Verizon or pursuant to Customer's request. For the Network TTR a Soft Outage trouble ticket must be opened on Verizon's systems, either by Verizon or pursuant to Customer's request. The trouble ticket provides the record of outage events.

5.2.2 **Submitting an SLA Credit Request.** Customer must make a request in writing (e-mail, fax, or mailed letter) to the Verizon account team for a credit within 15 days of the end of the month for which an SLA credit is due, with the following information:

- The date the site and circuit outage(s) occurred.
- The time the site and circuit outage(s) began and ended.
- The site(s) and circuit ID(s) for each affected site.
- Trouble ticket number for each site and event.

5.2 **Credit Time Limitation.** If Verizon has failed to meet the same SLA for three consecutive months, Customer may elect to:

- continue Managed SBD with a limit of six months of credits for any individual SLA within a 12-month period.
- discontinue Managed SBD without liability except for charges incurred prior to discontinuation of Managed SBD. Customer must submit a written disconnect notice to its Verizon account team within 30 days following the end of either the third or subsequent consecutive month of Verizon's failure to meet the SLA, and include a statement referencing this SLA credit time limitation.

If a Third-Party Network or Maintenance provider causes, in whole or in part, the payout of SLA credits for three consecutive months, Verizon has the following options:

- require a change of Third-Party Network or Maintenance provider, as applicable; or
- terminate its performance obligations for the relevant SLA for the affected sites with the non-compliant Third-Party Network or Maintenance provider.

**6. General Exclusions.** The following exclusions apply to all SLAs contained in this document:

- 6.1 No credit will be due to the extent the SLA is not met because of any act or omission on the part of Customer, its contractors or vendors, or any other entity over which Customer exercises control or has the right to exercise control, other than acts or omissions of Verizon-approved Third-Party Network or Third-Party Maintenance providers.
- 6.2 No credit will be due to the extent the SLA is not met because of a Force Majeure event, as defined in the Agreement.
- 6.3 No credit will be due to the extent the SLA is not met because of scheduled maintenance by Customer or by entities under Customer's direction or control.
- 6.4 No credit will be due to the extent the SLA is not met because of scheduled maintenance by Verizon within Verizon's maintenance windows.
- 6.5 No credit will be due to the extent the SLA is not met because Managed SBD is not up and billable, e.g., initial provisioning has been delayed by Customer, or post-provisioning, SBD has been terminated or suspended for cause or otherwise due to Customer's actions.
- 6.6 No credit will be due to the extent the SLA is not met because of the amount of time delays due to Customer Time.
- 6.7 No credit will be due to the extent the SLA is not met because proper power is not available to the SBD.

**7. Definitions.** The following definitions apply to the operation of this SLA.

Term	Definition
Circuit	A circuit is a Connection and Local Access.
Connection	Connection is a port on Customer's SBD ultimately connected to Verizon's or a Third-Party Network.
Customer Time	Time delays attributable to or caused by one or more of the following: <ul style="list-style-type: none"> <li>• Incorrect or incomplete information provided by Customer;</li> <li>• Verizon or the Verizon-approved maintenance provider being denied access to CPE or network components at the Customer location when access is required;</li> <li>• Failure or refusal by Customer to release the circuit for testing; or</li> <li>• Customer unavailability where needed to close a trouble ticket.</li> </ul>
Hard Outage	Managed SBD degradation such that Customer is unable to use Managed SBD and Customer is prepared to release the circuit to Verizon for immediate testing.
Local Access	The portion of service between Customer's premises and a Verizon-designated point-of-presence.
Soft Outage	Managed SBD degradation such that Customer is still able to use Managed SBD and Customer is NOT prepared to release the device to Verizon for immediate testing.
Site	A site is Customer's Managed SBD location that includes an SBD and a Connection.
Trouble Ticket	The result of notification to Verizon of either perceived Managed SBD outage or Managed SBD degradation.