



## MANAGED WIRELESS LAN + SERVICE LEVEL AGREEMENT

1. **Overview.** The Service Level Agreement (SLA) for Managed Wireless LAN+ (Managed WLAN) Service described herein sets forth Customer's sole remedies for any claim relating to the performance of Managed WLAN Service. Capitalized terms that are not listed in section 13 Definitions, will have the same meaning as defined in the Agreement, Managed WLAN Online Terms, or Service Order, as applicable.

### 2. Regional Qualifications

2.1 **For Customers with Managed WLAN Service in EMEA and Asia Pacific.** This SLA is offered as part of the ~~"Verizon Managed Wireless LAN"~~ MWLAN Service ~~(Service)~~. To qualify for this SLA, Customer must have committed to an Initial Service Term of at least one year. This SLA is incorporated into and forms part of the contract for the provision of ~~the~~ MWLAN Service as set out in the relevant Service Order and applicable master terms and conditions of MWLAN Service (for example the International Master Services Agreement or the Asia Pacific Services Agreement) (Agreement). This SLA will apply for the duration of the Service Term commencing with the Service Activation Date for MWLAN ~~the~~ Service.

2.2 **Contracts under German and Austrian Law.** The following paragraph is solely applicable to contracts governed by German or Austrian Law: This SLA, including any Service Credits for breach of quality parameters, is an independent commercial agreement. The quality parameters detailed in this SLA are neither implied warranties of the quality of MWLAN ~~the~~ Service ("Beschaffensvereinbarungen") nor guarantees under the German or Austrian Civil Code ("BGB" or "ABGB"). Service Credits paid under this SLA will be set-off against any potential damage compensation payments.

3. **Available Service Levels/Objectives.** Managed WLAN includes the following service levels:

- WLAN Controller Availability
- Time to Repair (TTR)
- Managed WLAN Installation
- Proactive Outage Notification

Managed WLAN includes the following Service Objectives:

- Change Management.
- Software Defined Wireless LAN Quality of Service (QoS).

To be eligible for coverage under this SLA, a Managed WLAN site must have at least one Verizon Managed WAN circuit, unless CCAP or SDWLAN features are used by Customer as part of the Managed WLAN Service.

### 4. Parameters

4.1 **Location.** The location of Customer's Site(s) and level of Managed WLAN Service determines the parameters for the applicable service levels. Countries covered under this SLA are divided into three categories:

- (i) U.S. – Includes the U.S. Mainland and Hawaii, except as otherwise expressly noted.
- (ii) Global Tier A

Europe	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom.
Asia-Pacific	Australia, China, Hong Kong, Japan, Singapore, South Korea
Americas	Argentina, Brazil, Canada, Chile, Colombia, Mexico, Panama, Peru Venezuela

- (iii) Global Tier B – Includes those countries where Verizon provides Managed WLAN Service that are not in the U.S or Global Tier A.

## 4.2 SLA Parameters

Managed WLAN – Full Service			
SLA	U.S.	Global Tier A	Global Tier B
WLAN Controller Availability	99.95%	99.95%	99.95%
Service Installation	45 Business Days (Hawaii excluded)	Not Available	Not Available
TTR – Verizon-provided or Customer-contracted Third-Party Maintenance	3.5 Hours	4 Hours	6 Hours
TTR – Verizon-provided or Customer-contracted Third-Party Maintenance with Onsite Break-fix Maintenance on Cloud-Controlled Access Point and Software Defined Wireless LAN	Next Business Day	Next Business Day	Next Business Day
Proactive Outage Notification	15 Minutes	15 Minutes	15 Minutes

Managed WLAN – Physical Service			
SLA	U.S.	Global Tier A	Global Tier B
Proactive Outage Notification	15 Minutes	15 Minutes	15 Minutes

Managed WLAN Monitor and Notify			
SLA	U.S.	Global Tier A	Global Tier B
Proactive Outage Notification	15 Minutes	15 Minutes	15 Minutes

5. **Service Installation SLA.** The Installation SLA is defined as the period of time to install the Managed WLAN at a Site.

- 5.1 **Calculation.** The Service Installation SLA time period starts on the date the SOR has been executed by both parties and ends the date Managed WLAN at a Site is made available for Customer's use and is billable.
- 5.2 **Credit Structure and Amounts.** Customer is eligible to receive a fifty percent (50%) credit of the Installation NRC for each Managed ~~WLAN~~-Device at a Site to the extent Verizon has not installed such Managed Device within 45 business days.
- 5.3 **Exclusions/Qualifications.** In addition to the General Exclusions set forth below, the following exclusions and qualifications apply to the Installation Service SLA:
- (i) A Customer-ordered installation date that is prior to the 45 Business Day Service Installation time period.
  - (ii) Delays resulting from an order suspension due to Customer credit issues.
  - (iii) Delays due to incomplete or non-installation of an associated Internet or Verizon Managed service.
  - (iv) Delays due to the failure of Customer or its third-party contractors to timely perform Customer's responsibilities in accordance with the Managed WLAN + Online Terms.
  - (v) Where a site survey or wireless site assessment is performed or is requested by Customer, any delays in the performance of such site survey or assessment due to (a) Customer or its contractors; and (b) remediation work identified in such site survey or assessment.

6. **WLAN Controller Availability SLA.** A WLAN Controller is available if during the period within the Service Term in which Customer has subscribed to Managed WLAN (i) no alarm events have occurred on the Network Operations Center's ("NOC") Network Management System, or (ii) no Trouble Ticket has been opened by Customer. If multiple WLAN Controllers are unavailable because of a single WLAN Controller issue, Verizon will only consider the Outage of the single WLAN Controller in its calculation of the Availability SLA; other WLAN Controllers and LAPs attached logically or physically to that single WLAN Controller will not be considered unavailable. WLAN Controller availability is based on the total number of minutes in a calendar month during which the WLAN Controller is unavailable to exchange data divided by the total number of minutes in that month. WLAN Controllers are considered available if the WLAN Controller is available to pass data whether or not data is passing through the WLAN Controller. Each Trouble Ticket will be evaluated by Verizon for appropriate corrective action and Customer will be informed of the status of each closed ticket even where the WLAN Controller is within normal operating parameters.

- 6.1 **Calculation.** Availability is the percentage of time that the WLAN Controller is available within a given calendar month. Availability only applies to Outages.

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

$$1 - \left( \frac{\text{Total minutes of Outage per month}}{\text{Number of days in calendar month} \times 24 \text{ (hrs.)} \times 60 \text{ (min.)}} \right) \times 100$$

- 6.2 **Credit Structure and Amounts.** For any month in which Verizon fails to meet the applicable availability standards for a WLAN Controller, Customer will be eligible for an SLA credit equal to a percentage of the Managed WLAN MRC applicable in that month for the affected WLAN Controller, as indicated in the following tables.

Managed Availability		Percentage of the Managed WLAN MRC for the Affected Month		
From	To	U.S.	Global Tier A	Global Tier B
100%	99.95%	0%	0%	0%
99.94%	99.50%	15%	10%	10%
99.49%	99.40%	25%	20%	20%
99.39%	99.00%	35%	30%	30%
98.99%	98.00%	45%	40%	35%
97.99%	96.70%	50%	50%	40%
Less than 96.7%		100.0%	100.0%	100.0%

- 6.3 **Exclusions/Qualifications.** In addition to the general exclusions found in Appendix A, the following conditions apply to the Availability SLA:
- (i) WLAN Controllers are not considered unavailable during periods of Outage resulting in whole or in part from Managed WLAN degradation, such as slow data transmission.

- (ii) WLAN Controllers are not considered unavailable during interruptions not reported by Customer, or for which no Trouble Ticket was opened.
- (iii) SLA coverage is only applicable to WLAN Controllers for which (a) out-of-band access is available, and (b) Customer has purchased a maintenance plan with minimum coverage of 7 days per week by 24 hours per day by 4 hour (i.e., 7x24x4) response time.
- (iv) Virtual Controllers with Aruba IAP Management, Lightweight Access Points, Aruba Instant Access Points, Cloud-Controlled Access Points and Software Defined Wireless LAN are not included.
- (v) WLAN Controllers are not considered unavailable if Verizon did not receive from Customer the login credentials of the **Managed** Devices for troubleshooting purposes.
- (vi) WLAN Controllers are not considered unavailable if the WLAN Controllers are deployed in High Availability ("HA") mode and the WLAN Controller function will be taken over by one of the other WLAN Controllers in the Customer's network.

**7. Time to Repair (TTR) SLA.** TTR is the time to resolve an Outage Trouble Ticket for a **Managed** Device.

**7.1 Calculation.** TTR is based on the Outage time per **Managed** Device for each Outage event. The TTR time starts when a Trouble Ticket is opened by Verizon or the Customer after an Outage and concludes with the restoration of **Managed** Device and the WLAN interface.

$$\text{Managed Device Time To Repair (Hrs.)} = \text{Length of Trouble Ticket resolution per Managed Device per Outage incident}$$

**7.2 Credit Structure and Amounts.** If TTR is exceeded for an Outage, Customer will receive a credit on its invoice equal to five percent (5%) of the MRC for Managed WLAN Service in the month of the Outage.

**7.3 Exclusions/Qualifications.** In addition to the General Exclusions set forth below, the following exclusions and qualifications apply to the TTR SLA:

- (i) For **Managed** Devices managed by the U.S. NOC, Trouble Tickets opened after 4 p.m. Eastern Time will be considered to be opened on the next business day.
- (ii) For **Managed** Devices managed by the EMEA NOC, Trouble Tickets opened after 4 p.m. Central European Time (CET), or Central European Summertime (CEST) when in effect, will be considered to be opened on the next business day.
- (iii) For **Managed** Devices managed by the APAC NOC, Trouble Tickets opened after 4 p.m. Philippines Time (PHT) will be considered to be opened on the next business day.
- (iv) If third-party-provided maintenance is modified pursuant to the provider's maintenance contract with Customer, Verizon may similarly adjust associated SLA commitments set forth herein to reflect the revised service levels provided by the third-party maintenance provider.
- (v) **Managed** Devices are not considered unavailable during periods of Outage resulting in whole or in part from the degradation of Customer's Wireless LAN, such as slow data transmission.
- (vi) SLA coverage is only applicable to (i) WLAN Controllers for which Customer has purchased a maintenance plan with minimum coverage of 7 days per week by 24 hours per day by 4 hour (i.e., 7x24x4) response time; and (ii) Cloud-Controlled Access Points and Software Defined Wireless LAN with Verizon-provided or Customer-contracted Third-Party Maintenance with Onsite Break-Fix Maintenance with minimum coverage of, 5 days per week, 8 hours per day and Next Business Day ("NBD") response time.
- (vii) WLAN Controllers are not considered unavailable if Verizon did not receive from Customer the login credentials of the **Managed** Devices for troubleshooting purposes.

**8. Proactive Outage Notification SLA.** The Proactive Outage Notification SLA provides credits if Verizon fails to notify Customer of a **Managed** Device Outage as provided below. Proactive Outage Notification will be provided to the Customer's designated point of contact by e-mail or pager. Verizon has fifteen (15) minutes to notify Customer's primary point of contact from the start point of the Notification Period, as defined below.

**8.1 Calculation.** The "Notification Period" begins with the opening of a Trouble Ticket for an Outage and ends when the Trouble Ticket is closed. Verizon is in compliance with the Proactive Outage Notification SLA if the Customer opened the Trouble Ticket or contacts Verizon within the Notification Period. Verizon will provide the ticket number and an initial status.

8.2 **Credit Structure and Amounts.** Customer is eligible to receive a credit equal to ten percent (10%) of the MRC for each Managed Device affected during an Outage for which timely notification was not provided to Customer.

8.3 **Exclusions/Qualifications.** In addition to the General Exclusions set forth below, the following exclusions and qualifications apply to the Proactive Outage Notification SLA:

- (i) Periods of Outage resulting in whole or in part from the degradation of Customer's wireless LAN;
- (ii) Interruptions not reported by Customer, or for which no Trouble Ticket was opened.
- (iii) The time resulting from Customer's point of contact unavailability due to incorrect contact information or other cause.
- (iv) SLA coverage is only applicable to WLAN Controllers for which out-of-band access is available (except for WLAN Controllers under the Monitor and Notify service level).
- (v) SLA coverage is only available if Verizon has received from Customer the login credentials of the Managed Devices for troubleshooting purposes.

9. **Change Management.** Verizon will strive to complete certain change management requests within 24 hours of the change being scheduled with Customer (an "Express Change"), or within four (4) hours if designated by Customer as an emergency (an "Emergency Change"). Emergency changes must be requested by Customer's submission of a Priority 1 Trouble Ticket.

9.1 **Definition.** The following Change Management requests are covered by the Change Management Service Objective:

Activate Previously-configured LAN Interfaces  
DHCP Configuration – Modify  
Entity Host Name Change  
Interface Modify  
IP Address/Subnet Mask Change  
Modify Filters/Access-Lists – Single Managed Device  
Password Change  
Privilege Exec Commands – Modify  
Request Copy of Router Configuration  
Static Route – Add/Delete/Modify  
TACACS/Radius – Modify

Neither Emergency Change requests nor Express Change requests provide for scheduling, coordination, or follow-up with Customer by Verizon before or after the request. Verizon is not responsible for assessing or evaluating any Emergency or Express Change requests, and will not provide fault isolation of bad or unsupported configurations.

9.2 **Credit Structure and Amounts.** The Change Management Service Level Objective has no associated credit.

9.3 **Exclusions/Qualifications.** In addition to the General Exclusions set forth below, the following exclusions and qualifications apply to the Change Management Service Level Objective:

- (i) For Managed Devices managed by the U.S. NOC, requests submitted outside the hours of 7:00-17:00 ET, Monday through Friday will not be eligible for Express or Emergency requests.
- (ii) For Managed Devices managed by the EMEA NOC, requests submitted outside of the hours of 09:00-17:00 Central European Time (CET), or Central European Summertime (CEST) when in effect, Monday through Friday will not be eligible for Express or Emergency Change requests.
- (iii) For Managed Devices managed by the APAC NOC, requests submitted outside of the hours of 09:00-17:00 Philippines Time (PHT), Monday through Friday will not be eligible for Express or Emergency Change requests.
- (iv) The Change Management Service Level Objective shall be extended by the amount of time taken to obtain complete information, including specific commands and/or configurations.

10. **Software Defined Wireless LAN Quality of Service (QoS).** For Customers with the Software Defined Wireless LAN feature, Verizon will seek to meet or exceed certain performance parameters of the Managed WLAN Service 80% of the time.

- 10.1 **Definition.** The following performance parameters and target performance values are covered by the Software Defined Wireless LAN QoS Service Objective:

Software Defined Wireless LAN QoS Performance Parameters	
Performance Parameter	Target Performance Value
Time To Connect	4 seconds per session or less
Throughput	10 Mbps or more
Roaming	2 seconds per roam or less
Successful Connects	95% or more
Coverage	-72 decibel-milliwatts (dBm) or less
Capacity	20% or more
Access Point Uptime	95% or more

- 10.2 **Credit Structure and Amounts.** The Software Defined Wireless LAN QoS Service Level Objective has no associated credit.
- 10.3 **Exclusions/Qualifications.** In addition to the General Exclusions set forth below, the following exclusions and qualifications apply to the Software Defined Wireless LAN QoS Service Level Objective:

- (i) Missed performance targets that have not caused the overall performance parameter to be lower than 80%.
- (ii) In the event any performance parameters are disabled or any target performance value has been adjusted, based on the specific Software Defined Wireless LAN implementation of the Customer, the applicable performance parameter(s) and target performance value(s) will apply.
- (iii) Missed performance targets that are caused by outages, configuration updates or maintenance windows on Customer Equipment, such as, but not limited to, Customer-managed routers, switches, DHCP servers or disruptions caused by power outages.
- (iv) Missed Roaming, Coverage, Capacity, and Time To Connect performance targets for Customer Sites where Verizon has not provided a (remote or onsite) wireless assessment.
- (v) Missed Throughput performance targets for Customer Sites where the bandwidth capacity of the Wide Area Network (WAN) connectivity and / or Local Area Network (LAN) connectivity is below 10 Mbps per expected Customer user of the Wi-Fi network.
- (vi) Missed performance targets due to the use of legacy, co-existing Wi-Fi infrastructure and 802.11a/b Wi-Fi client devices.
- (vii) WLAN Controllers, Virtual Controllers with Aruba IAP Management, Lightweight Access Points, Aruba Instant Access Points and Cloud-Controlled Access Points are not included.

## 11. Credit Application Process.

- 11.1 **Credit Terms.** Credits are not cumulative month-to-month. If an SLA issue crosses months, the “triggering event” for purposes of credit will be deemed to have occurred in the month in which the SLA non-compliance occurs. 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 of determining a credit is due. The maximum credit within any one month for all SLA non-compliances within that month is fifty percent (50%) of the total MRC for Managed WLAN for all Managed Devices. A minimum of two Managed Devices must be managed by Verizon in a single network for any credits to be available. Except with respect to contracts under German or Austrian law, credits made by Verizon to Customer under this SLA are the sole and exclusive remedy available to Customer for any failure to meet an SLA.

### 11.2 Application Process for Credits

- 11.2.1 **Opening a Trouble Ticket.** To be eligible to qualify an Outage for an SLA credit, Customer must have requested that an Outage Trouble Ticket be opened on Verizon’s systems. A Trouble Ticket records the Outage event.

#### 11.2.2 Submitting an SLA Credit Request



11.2.2.1 **Installation SLA.** Customer must make a written request (e-mail or fax) to the Verizon Account Team within thirty (30) days after the date the Managed Device installation is completed with the following information:

- The Site identifier
- The date the parties agreed that the Managed Device should have been installed
- The date the Managed Device was installed
- The date that the SOR was executed by both parties

11.2.2.2 **WLAN Controller Availability, TTR, and Proactive Outage Notification SLA.** Customer must request a credit in writing (e-mail or fax) to the Verizon Account Team within thirty (30) days of the Outage with the following information:

- The date the Managed Device Outage occurred
- The time the Managed Device Outage began and ended
- The Outage location of the Managed Device.
- Trouble Ticket number for each Site and event.

11.3 **Enduring SLA Non-Compliance.** If an SLA is non-compliant for three consecutive months, Customer may elect to:

- Continue the Managed WLAN Service with a limit of six months of credits for any individual SLA within a 12-month period.
- Discontinue the Managed WLAN Service without liability except for charges incurred prior to discontinuation of the Managed WLAN Service. 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.

If Customer-contracted Third-Party Maintenance provider causes the payout of SLA credits for three consecutive months, Verizon has the following options:

- Require a change of Customer-contracted Third-Party Maintenance provider, as applicable; or
- Terminate its performance obligations hereunder for the related SLA.

12. **General Exclusions.** No credit will be payable pursuant to this SLA to the extent an SLA is not met:

- Due to 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 maintenance providers.
- Because of a Force Majeure event, as defined in the Agreement.
- Because of scheduled maintenance by Customer or entities under Customer's direction or control.
- Because of scheduled maintenance by Verizon within Verizon's maintenance windows.
- Because of the amount of time delays due to Customer Time, defined below.
- Due to performance-affecting issues related to or resulting from (but not limited to) rogue network devices, viruses, worms, misconfigured unmanaged network devices attached to the WLAN being managed, or other events/devices beyond the scope of Managed WLAN Service or control of Verizon.
- WLAN Controllers that do not have out-of band access except devices under Monitor and Notify level of service.
- Managed Devices with Cloud-Controlled Access Point under Full Management level of service, where Customer has been provided with write administrative access.

### 13. Definitions

Terms	Definition
<u>Customer Premise Equipment (CPE)</u>	<u>Managed WLAN equipment located at the Site.</u>

Terms	Definition
Customer Time	Time 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 site when access is required.</li> <li>• The analog telephone connection for OOB access is either unavailable or not maintaining a minimum 9600 bits per second connection such that Verizon cannot troubleshoot the <u>Managed</u> Device and Verizon has not been notified by Customer that such minimum OOB access has been restored.</li> <li>• Failure or refusal to release affected <u>Managed</u> Device(s) for testing.</li> <li>• Customer unavailability where needed to close a Trouble Ticket.</li> </ul>
<u>Managed</u> Device	Any WLAN CPE managed by Verizon pursuant to the provision of Managed WLAN Service.
Outage(s)	An Outage is defined as an unscheduled period in which the <u>Managed</u> Device is interrupted and unavailable for use by Customer for sixty (60) or more concurrent seconds (UAS) within a 15-minute period measured by Verizon. UAS is the American National Standards Institute standard (ANSI) T1.231.
Service Restoration Priorities	Process by which Managed WLAN disruptions are ranked by the Verizon Customer Service Center.
Site	A site is Customer's Managed WLAN location which includes a <u>Managed</u> Device.
Trouble Ticket	A ticket opened within Verizon's NOC from an internal Verizon report or a report by a Customer to Verizon of either a perceived Outage or Managed WLAN degradation.
Verizon Customer Service Center	Centers where Customers call in to report Managed WLAN issues.