verizon

NETWORK AS A SERVICE SOLUTIONS +

1. GENERAL

1.1 **Service Definition.** Network as a Service Solutions (NaaS) is a framework that integrates advanced network, security and cloud elements into site-specific solution bundles. NaaS is a managed global network solution designed, implemented and managed by Verizon based on 5 defined solution bundle types (each, a Site Type). Each Site Type combines a set of Managed Services including access, transport and CPE options.

1.2 **Site Types Overview.** Each Site Type comprises various core solution bundle service elements and optional services (as available) as set forth in the table below. The table highlights the minimum site requirements, that are further detailed in the Site Type Details section, for the Site Type Service Level Agreement (SLA) to apply. Customer Provided Transport and access is limited to Verizon approved providers as shown in the SLA. This Service Attachment contains Service terms generally applicable to NaaS as well as specific terms applicable to the core service elements. The Schedules contain additional terms applicable to the optional service elements.

Site Types		Highly Available	Large	Medium	Small	Extra Small
CORE SOLUTION BUNDLE ELEMENTS	**Transport A**	Verizon: Private IP, Internet Dedicated, Ethernet Dedicated E-Line, Ethernet Switched E-Line, Ethernet Switched E-LAN	Verizon: Private IP, Internet Dedicated, Ethernet Dedicated E-Line, Ethernet Switched E-Line, Ethernet Switched E-LAN	Verizon: Private IP, Internet Dedicated, Broadband (wireless and wireline) Ethernet Dedicated E-Line, Ethernet, Switched E-Line, Ethernet Switched E-LAN	Verizon: Private IP, Internet Dedicated, Broadband (wireless and wireline with Platinum, Gold Access), Secure Hybrid Network (SHyN), Ethernet Dedicated E-Line, Ethernet Switched E-Line, Ethernet Switched E-LAN	Verizon: Broadband (wireless and wireline with Silver, Bronze Access) Secure Hybrid Network (SHyN)
		Customer Provided: MPLS, Dedicated Internet access, Ethernet Services	Customer Provided: MPLS, Dedicated Internet access, Ethernet Services	Customer Provided: MPLS, Dedicated Internet access, Broadband, Fixed Wireless Access, Ethernet Services	Customer Provided: MPLS, Dedicated Internet access, Broadband, Fixed Wireless Access, Ethernet Services	Customer Provided: Broadband, Fixed Wireless Access

	Transport B	Verizon: Private IP, Internet Dedicated, E-Line, Ethernet E-Line, E-LAN	Verizon: Broadband (wireless and wireline), Secure Hybrid Network (SHyN), Ethernet Dedicated E-Line, Ethernet Switched E-Line, Ethernet Switched E-LAN	Verizon: Broadband (wireless and wireline), Ethernet Dedicated E-Line, Ethernet Switched E-Line, Ethernet Switched E-LAN	N/A	N/A
		Customer Provided: MPLS, Dedicated Internet access, Ethernet Services	Customer Provided: Broadband, Fixed Wireless Access, Ethernet Services	Customer Provided: Broadband, Fixed Wireless Access, Ethernet Services		
	Network Feature	SD WAN, SDSB	SD WAN, SDSB	SD WAN, SDSB	Routing	Routing
	Redundant Network CPE?	Yes, 2 configured for high availability	Yes, 2	No	No	No
OPTIONAL SERVICE ELEMENTS	Managed Local Area Network (MLAN) Managed Wireless Local Area Network (MWLAN) Secure Access Service edge (SASE) NaaS Cloud Management					

1.3 **Site Type Details.** The NaaS framework provides Site Type SLAs, uniform Activation Date and invoicing for the minimum required service elements and optional elements set forth below. Select the hypertext links below to see more detail on each service element.

1.3.1 **Highly Available.** A Highly Available Customer Site is configured with the following service elements:

1.3.1.1 **Access.** Access provides a point-to-point circuit to reach associated Verizon services. Highly Available sites will be configured at the Platinum performance grade (or Gold if Platinum is unavailable) with the Network Survivability and Diversity (NS&D) Layer 2 Aggregation Geographic Diversity providing alternative mechanisms for maintaining network access during a disruption of regular service.

1.3.1.2 Transport. Two transport circuits that can be a combination of any of the following:

- **Private IP.** Private IP is a wide area data networking service which provides any-to-any connectivity to transport Customer Data between Customer Sites. If there are two Private IP circuits Private IP will be configured with Service Edge Geographic Diversity.
- **Internet Dedicated Service.** Internet Dedicated Service (IDS) provides connectivity to the Internet via the Verizon Network. If there are two IDS circuits, IDS will be configured with Service Edge Geographic Diversity.
- **Ethernet Dedicated E-Line or Ethernet Switched E-Line.** Ethernet Dedicated E-Line and Ethernet Switched E-Line (collectively, E-Line) are wide area data networking services which provide point-to-point and/or hub and spoke connectivity to transport Customer Data between Customer Sites. If there are two E-Line connections E-Line will be configured with Service Edge Geographic Diversity.
- **Ethernet Switched E-LAN.** Ethernet Switched E-LAN (E-LAN) is a wide area data networking service which provides any-to-any connectivity to transport Customer Data between Customer Sites. If there are two E-LAN connections E-LAN will be configured with Service Edge Geographic Diversity.
- **Customer Provided Transport.** Transport provided by Verizon-approved ethernet, Dedicated Internet, or multi-protocol label switching (MPLS) providers. Customer Provided Transport must have the same performance grade and the same diversity features as Verizon provided transport.

1.3.1.3 **CPE and Maintenance.** The Customer Site will have two fully redundant Managed Devices to terminate the transport circuits configured for High Availability. The Managed Devices will be under 24x7x365 Verizon Care or approved Third Party maintenance with a 4 hour response time.

1.3.1.4 **Managed Services.** Where available, the Customer Site will have Managed WAN (MWAN) including SD WAN or Software Defined Secure Branch (SDSB), or Virtual Network Services (VNS) including SD WAN or SDSB with the Managed Devices at Full Management.

1.3.2 **Large.** A Large Customer Site is configured with the following service elements:

1.3.2.1 **Access.** Large sites must be configured at the Platinum performance grade or Gold if Platinum is unavailable.

1.3.2.2 **Transport.** Two transport circuits that can be a combination of any of the following:

- **Private IP.** If there are two Private IP circuits Private IP will be configured with Service Edge Diversity.
- **Internet Dedicated Service**
- **E-Line.** If there are two E-Line connections E-Line will be configured with Service Edge Diversity.
- **E-LAN.** If there are two E-LAN connections E-LAN will be configured with Service Edge Diversity.
- **Secure Hybrid Network.** Secure Hybrid Network (SHyN) allows Customer to access the Private IP and Public IP networks with one single port. SHyN consolidates the delivery of traditional and cloud-based applications over a single, optimized network. SHyN may only be used as the backup "Transport B" circuit into a Customer Site.
- **Broadband.** Broadband includes LTE Business Internet, 5G Business Internet and other wireless and wireline broadband access technologies. Broadband may only be used as the backup "Transport B" circuit into a Customer Site.
- **Customer Provided Transport.** Transport provided by Verizon-approved ethernet, Dedicated Internet, Broadband, or fixed wireless access providers. Customer provided transport must have the same performance grade and the same diversity features as Verizon provided transport.

1.3.2.3 **CPE and Maintenance.** The Customer Site will have two fully redundant Managed Devices to terminate the transport circuits. The Managed Devices will be under 24x7x365 Verizon Care or approved third party maintenance with a 4 hour response time.

1.3.2.4 **Managed Services.** Where available, the Customer Site will have MWAN including SD WAN or SDSB, or VNS including SD WAN or SDSB with the Managed Devices at Full Management.

1.3.3 **Medium.** A Medium Customer Site is configured with the following service elements:

1.3.3.1 **Access.** Medium sites must be configured with Access at the Silver performance grade or higher.

1.3.3.2 **Transport.** Two transport circuits that can be a combination of any of the following:

- **Private IP**
- **Internet Dedicated Service**
- **E-Line**
- **E-LAN**
- **Broadband**
- **Customer Provided Transport.** Transport provided by Verizon-approved ethernet, Dedicated Internet, broadband, or fixed wireless access providers. Customer Provided transport must have the same performance grade, or higher, as Verizon provided transport.

1.3.3.3 **CPE and Maintenance.** The Customer Site will have one Managed Device to terminate the transport circuits. The Managed Devices will be under 24x7x365 Verizon Care or approved third party maintenance with a 4 hour response time.

1.3.3.4 **Managed Services.** Where available, the Customer Site will have MWAN including SD WAN or SDSB, or VNS including SD WAN or SDSB with the Managed Devices at Full Management.

1.3.4 **Small.** A Small Customer Site is configured with the following service elements:

1.3.4.1 **Access.** Small sites must be configured with Access at the Gold performance grade or higher.

1.3.4.2 **Transport.** One transport circuit that can be any of the following:

- **Private IP**
- **Internet Dedicated Service**
- **E-Line**
- **E-LAN**
- **SHyN**
- **Broadband**
- **Customer Provided Transport.** Transport provided by Verizon-approved ethernet, Dedicated Internet, Broadband, or fixed wireless access providers. Customer provided transport must have the same performance grade, or higher, as Verizon provided transport.

1.3.4.3 **CPE and Maintenance.** The Customer Site will have one Managed Device to terminate the transport. The Managed Devices will be under 24x7x365 Verizon Care or approved third party maintenance with a 4 hour response time.

1.3.4.4 **Managed Services.** The Customer Site will have MWAN routing or VNS routing with Managed Devices at Full Management with OOB Access.

1.3.5 **Extra Small.** An Extra Small Customer Site is configured with the following service elements:

1.3.5.1 **Access.** Extra Small sites must be configured with Access at the Silver or Bronze performance grade or higher.

1.3.5.2 **Transport.** One transport circuit that can be any of the following:

- **SHyN**
- **Broadband**
- **Customer Provided Transport.** Transport provided by Verizon-approved ethernet, broadband, or fixed wireless access providers. Third party transport must have the same performance grade, or higher, as Verizon provided transport.

1.3.5.3 **CPE and Maintenance.** The Customer Site will have one Managed Device to terminate the transport. The Managed Devices will be under 24x7x365 Verizon Care or approved third party maintenance with a 4 hour response time.

1.3.5.4 **Managed Services.** The Customer Site will have MWAN routing or VNS routing with Managed Devices at Full Management with OOB Access.

1.3.6 **Optional Service Elements.** Site Type SLAs are available for the following optional services:

1.3.6.1 **Managed LAN.** Managed Local Area Network service (Managed LAN or MLAN) provides a range of service options enabling Customer to transfer all or part of its local area network to Verizon, including local area network design, planning, implementation, and management (subject to availability).

1.3.6.2 **Managed Wireless LAN.** Managed Wireless LAN service (Managed WLAN or MWLAN) extends Customer's Verizon-managed WAN or LAN infrastructure to include wireless LAN access.

1.4 **General Terms.** The following terms are applicable to all Services offered under NaaS, except as otherwise stated:

1.4.1 **Design Services.** Verizon will create a Customer Design Document (CDD) for Customers that will be based upon Customer's written statement of requirements (SOR). The CDD will be reviewed and agreed upon by Customer prior to finalization. Verizon will provision, activate, monitor, and manage the Customer Network as set forth in the CDD.

1.4.2 **Network Engineering (NE) Service.** For larger Customer Networks, i.e., with 20 or more Managed Devices under Full Management, Verizon can optionally provide additional reporting, analysis, engineering planning, design, and change-management support services as part of VNS, MWAN, MLAN, MWLAN, and MWOS.

1.4.3 **NaaS Implementation Options.** NaaS offers two implementation options to bring devices under Verizon management: a) Managed Implementation where Verizon provides planning, system engineering, overall project management and implementation of a new network and/or b) where available, Managed Take Over (MTO) is where Verizon takes over management of Customer's existing, operating networks. Implementation may be done in steps with an initial MTO and later replacement of the network elements. The MTO and Implementation steps will be detailed in the CDD.

1.4.3.1 **Site Survey.** Verizon may request that a site survey be carried out at the Customer's expense to assess Customer Site readiness for NaaS. If a site survey finds that Customer Equipment requires upgrading, the upgrade must be carried out prior to the Customer Equipment being included as a Managed Device.

1.4.3.2 **Network Discovery.** Network Discovery is part of the implementation process for MTO Customers. Managed Implementation Customers may order Network Discovery separately, subject to an additional cost. With Network Discovery, Verizon electronically collects information on devices for the purpose of identifying all devices that are a part of the Customer Network. For Verizon to conduct Network Discovery, Customer will provide accurate information about the proper scope of the Network Discovery and represents that it has all necessary authority to have Verizon undertake the Network Discovery requested under these terms. Verizon reserves the right to stop or not perform a Network Discovery. Customer's sole remedy for any failure, inadequacy or other problem of Network Discovery is to request that Verizon reperform it.

1.4.3.3 **Supportable Devices.** Any uncertified devices must be tested and certified at Customer cost prior to MTO. If any remediation or upgrading work is required on any device, it must be completed by Customer prior to being included as a Managed Device. Customer will also be responsible to ensure devices associated with Customer Network remain supportable as per the CDD.

1.4.4 **Activation Date.** The elements of the NaaS solution at each Customer Site is defined in the Order under one or more NaaS Solution IDs. The Activation Date for the Services defined in each NaaS Solution ID at a Customer Site will be the date on which the last Service under such NaaS Solution ID is activated.

1.4.4.1 **Installation.** Installations of NaaS will be performed during Business Hours, excluding holidays, as determined by Verizon. At Customer's request, Verizon will use commercially reasonable efforts to perform installations After Hours for an additional charge.

1.4.4.2 **Requested Implementation Date.** If Customer requests an implementation date (Requested Implementation Date) for delivery of NaaS at a Customer Site, Verizon will confirm the date of delivery following acceptance of the Order. Any Customer-requested change to the Requested Implementation Date is subject to approval of Verizon and payment by Customer of related Expedite Charges or any Third Party costs, if applicable.

1.4.5 **Transport Diversity.** The following diversity capabilities are available with Private IP, IDS, E-Line and E-LAN:

1.4.5.1 **Service Edge Diversity.** With Service Edge Diversity, Verizon will provide a second circuit connected to a separate edge device as determined by Verizon.

1.4.5.2 **Service Edge Geographic Diversity.** With Service Edge Geographic Diversity, Verizon will provide a second circuit connected to a separate edge device in a different building as determined by Verizon.

1.4.6 **Dynamic Network Manager (DNM).** With Dynamic Network Manager, Verizon provides a web-based interface through which Customer can dynamically manage its connection speed or settings for Private IP, IDS, E-Line and E-LAN services, as available. Customer accesses DNM through the VEC or, for Private IP, via the VEC or an Application Program Interface (API).

1.4.7 **Software Updates and Patches.** Verizon will provide relevant software patches and updates as provided by the manufacturer of the Managed Device or Managed VNF, as applicable, from time to time for installation during a fixed update time period (maintenance window), mutually scheduled by the Parties. Warranties on software updates, if available, will be provided directly by the manufacturer.

1.4.8 **Verizon Enterprise Center.** Verizon will provide Customer with login credentials to allow access to the Verizon Enterprise Center (VEC) at sso.verizonenterprise.com/amserver/sso/login.go? or other URL provided by Verizon. The VEC provides access to information and activities relating to NaaS, 24 hours a day, seven days a week, which may include a consolidated view of Customer Network information, access to contact information, project status, service status, information about Managed Devices and other feature related information. In addition, the VEC provides access to other portals (Customer Portals) that provide additional information about certain features of the services.

1.4.8.1 **VEC/Customer Portal User Names and Passwords.** Customer must immediately notify Verizon upon learning of any unauthorized use of Customer's login credentials. Customer is responsible for all activities and Charges incurred through the use of the compromised login credentials.

1.4.8.2 **Reports.** All reports, data, recommendations, documentation, printouts, or other materials in any media form provided to Customer by Verizon about NaaS are Verizon Confidential Information. Customer Confidential information embedded in such reports and data remains Customer Confidential Information. The Parties acknowledge that except as explicitly stated, reports are informational and not designed for use in calculating SLA claims.

1.4.9 **Customer Support Help Desk.** NaaS has support available for the Customer 24 hours a day, seven days a week.

1.4.10 **Service Disclaimers.** Verizon makes no warranties, guarantees, or representations, express, or implied

that: i) NaaS will protect the Customer Network from intrusions, viruses, Trojan horses, worms, time bombs, cancelbots or other similar harmful or destructive programming routines; ii) any security threats and vulnerabilities will be prevented or detected; or, iii) the performance by Verizon or NaaS will prevent unauthorized access to Customer's systems or render Customer's systems invulnerable to security breaches. Neither Verizon nor its Third Parties are responsible for data or files lost when Customer is using NaaS. Customer is responsible for maintaining an overall security program, including but not limited to: (a) exercising due diligence in protecting Customer systems and information that might be used to access, exploit, or otherwise affect NaaS (b) modifying, updating, deleting and otherwise administering such access information and passwords with respect to Customer's authorized user accounts for any components in the service, and (c) promptly notifying Verizon in writing of any security compromise with respect to such information or authorized user accounts.

1.4.11 **Customer Data.** As part of providing NaaS, Verizon may transfer, store and process Customer Data in the United States or any other country in which Verizon or its agents maintain facilities. By using NaaS services, Customer consents to this transfer, processing and storage of Customer Data.

1.4.12 **Changes to NaaS.** Any Change Order will not be effective, and no changes in NaaS will be initiated, until the Change Order is accepted by Verizon. If changes result in an increase or decrease in Charges, such adjustments will be reflected in the written Change Order.

1.4.13 **Power Supply.** It is Customer's responsibility to provide an uninterrupted power supply (UPS) device for all Managed Devices. Customer will maintain the UPS device(s) in good working condition at all times during the duration of NaaS services.

1.4.14 **Availability of NaaS.** Certain NaaS services, or some features or options related thereto, may not be available in certain countries or jurisdictions.

1.4.15 **Customer Responsibilities and Financial Terms.** The Customer Responsibilities and Financial Terms are applicable to Customer's NaaS solution.

2. **SERVICE LEVEL AGREEMENT.** The NaaS service level agreement (SLA) may be found at the following URL: www.verizon.com/business/service_guide/reg/NaaS-SLA.pdf

3. **ACCESS** (Back to Site Type Details)

3.1 **Access Services**

3.1.1 **Service Definition.** Access is a circuit connection between a Customer Site and the edge of the Verizon Network from which Customer can connect to other Verizon and Third Party connectivity services. Access may be provided via Verizon Facilities or from a Third Party, as Verizon may determine from time to time, including, changes in or substitution of facilities. The available Access types include the following technologies: a) wireless Access and b) wireline Access.

3.1.2 **Standard Service Features.** Access provides a point-to-point circuit to reach associated Verizon connectivity services.

3.1.3 **Optional Service Features.** The following optional service features are available with all types of Access:

3.1.3.1 **Network Survivability and Diversity (NS&D).** NS&D provides alternative mechanisms for maintaining network access during a disruption to regular service. Verizon determines the location of

particular NS&D features, all of which are subject to availability.

- **Layer 2 Aggregation Geographic Diversity.** Verizon provides two circuits in a mated pair relationship. The Layer 2 aggregation devices on the first circuit will be located in different buildings and/or survivable from the Layer 2 aggregation devices on the second circuit.
- **Customer Premises Diversity (U.S. Only).** Verizon will deliver Access via either a two or four wire facility, rather than a single wire facility.
- **Carrier Diversity.** Where Verizon provides the primary Access circuit, and Customer orders Carrier Diversity, Verizon will obtain an additional Access circuit from an alternate access provider, where available. Carrier Diversity does not provide path diversity nor ensure full geographic diversity.
- **Preferred Carrier Designation.** Verizon will obtain the Access circuit from an access provider selected by Customer from available carriers. The Preferred Carrier Designation feature does not provide path diversity nor ensure full geographic diversity.

3.1.3.2 **Proactive Notification.** Where a Customer receives proactive notification for a particular connectivity service, it will also apply to the Access connected to that connectivity service.

3.2 Wireless and Wireline Access

3.2.1 **Standard Service Features.** The following features are standard for Access:

- **Access Speed.** Verizon provides capacity throughput based on the Access speed selected by Customer, which is the maximum possible speed.
- **Performance Grades.** Verizon provides operational performance (e.g., mean time to repair and availability) and application performance (e.g., data delivery ratio) at the performance grade (e.g., Platinum, Gold, Silver, Bronze) selected by Customer.
- **Handoff.** Verizon hands off Access at the Customer Site based on the Customer Equipment (e.g., Ethernet or Wireless). Verizon provides either an electrical or optical Demarcation:
  - For an Ethernet handoff from Customer Equipment, Verizon provides a User Network Interface (UNI) at the speed ordered by Customer.
  - For Wireless outside of the U.S., Access via a wireless connection can be used as primary or back up access into Verizon-provided connectivity services.
  - Wireless within the U.S., Verizon Wireless provides a wireless connection (Wireless Service) into Customer's Verizon-provided service or the Internet via LTE Business Internet or 5G Business Internet sold by MCI Communications Services LLC dba Verizon Business Services pursuant to a resale agreement with Verizon Wireless.
  - For Software Defined Interconnect (SDI), Verizon provides an interconnection across a Third Party vendor's network between a Customer's Verizon-provided service and their collocated equipment or Cloud Service Provider (CSP) - within select Third Party data centers. Customer must have a suitable existing arrangement with the Third Party vendor network or suitable CSP agreement, and Customer must separately have a contract for the Verizon provided service in order to utilize SDI as an access method for that service.

3.2.2 **Optional Service Features.** The following optional service features are available.

3.2.2.1 **Wireless Back Up.** When available, Verizon provides wireless back up for Internet Dedicated or Broadband service, or connection from a remote Customer Site into a Verizon connectivity service.

3.2.2.2 **Network Survivability & Diversity.** The following NS&D options are available:

- **Layer 2 Aggregation and Geographic Diversity.** Verizon provides two Access circuits in a mated pair relationship. The Layer 2 aggregation equipment on the first circuit will be located in a different building and/or be survivable from the Layer 2 aggregation equipment on the second circuit.
- **Carrier Diversity.** Verizon will obtain an additional Access circuit from an alternate Third Party,

where available. This feature does not provide path diversity nor ensure full Geographic Diversity.

- **Preferred Carrier Designation.** Verizon will obtain the Access circuit from an available Third Party as selected by Customer. This feature does not provide path diversity nor ensure full Geographic Diversity.
- **Network Connection Protection.** With Network Connection Protection, the Access circuit will be routed automatically to a secondary route in the event the primary route is unavailable. Both routes share the same Customer handoff and demarcation interface.

3.2.2.3 **Customer-Provided Carrier Facility Assignment (CFA) (U.S. Only).** Verizon will deliver Access to the designated meet-me point on the Customer's private Verizon or ILEC dedicated rings, hubs and channelized facilities.

3.2.3 **Supplemental Terms for Access**

3.2.3.1 **Access Availability.** The actual availability of Access cannot be determined definitively until the date of installation. If Customer-ordered Access is determined to be unavailable, Verizon will notify Customer promptly, cancel the unavailable order, and upon Customer request, requote the Access based on the latest availability information. There will be instances where a circuit is quoted, using the information available at the time of a quote, but at the time the order is placed, or upon installation, the Access is deemed not available and other Access, sometimes with higher Charges may be required and in such instances the circuit will be requoted to Customer.

3.2.3.2 **Diversity Availability.** Diversity which involves a Third Party Access provider will be provided only at Customer Sites where such diversity is available and provided by the relevant access provider as selected by Verizon. In the event that Verizon becomes aware of a Third Party provided Access failure or outage which impacts the diversity of circuits, Verizon will use commercially reasonable efforts to work with the Third Party Access provider to restore the diversity as soon as reasonably possible.

3.2.3.3 **Express Connect; Wireless Backup.** The Parties acknowledge and agree that Wireless Service delivered in the U.S., except Broadband Service, is sold and provided by Verizon Wireless.

3.2.3.4 **Customer-Provided Access.** Where Verizon has the necessary interconnection arrangement in place and subject to Verizon approval of the Customer Site, Verizon will connect a Customer-provided access circuit to its related Verizon connectivity service(s). An Access MRC and NRC will apply to cover Verizon's provision of a physical connection (cross connect) from that access circuit to the Service Equipment used to provide the associated Verizon connectivity service.

3.3 **Wireless Service, LTE Business Internet, and 5G Business Internet**

3.3.1 **General Terms.** LTE Business Internet and 5G Business Internet (collectively, Business Internet) are available with Access, Private IP, Secure Hybrid Networks, and Broadband. Wireless Service is available with Access. In the U.S., Business Internet is sold and provided by MCI Communications Services LLC dba Verizon Business Services pursuant to a resale agreement with Verizon Wireless. Current coverage details and additional plan information can be found at www.verizonwireless.com. Business Internet plans are for mobile broadband service, and can only be activated on select compatible Customer-provided data routers or designated devices sold through Verizon. If Customer supplies its own receiver/router, Customer is responsible for (i) ensuring that such receiver/router is compatible for use with Business Internet; and (ii) any necessary installation or connection to the Verizon Network. Customer should contact Customer's account representative to determine if a Customer-provided receiver/router is compatible. Customer can purchase CPE from Verizon pursuant to a separate Service Attachment. When purchasing the device through Verizon, this device will be self-setup. Customer is

responsible for following the setup and activation instructions provided with the Verizon provided equipment. Speeds represent the maximum speed but may be lower in the event of network congestion. If Customer uses Business Internet outside of the qualified service address without the specific written approval of Verizon Wireless or Verizon, Verizon Wireless reserves the right to terminate the service at any time thereafter upon written notice.

3.3.2 **LTE Business Internet.** These plans are restricted to the Verizon Wireless 5G Nationwide® network and 4G network (domestic and international roaming are not available). For avoidance of doubt, Verizon's 5G Nationwide® network is a separate network from Verizon's 5G Ultra Wideband network. After the data de-prioritization threshold is met on a line during any invoicing cycle, usage on that line may be prioritized behind other customers in the event of network congestion for the remainder of the invoicing cycle. All plans will be given 300 GB/month/line of data; if usage exceeds that allowance, blocks of 5 GB will be automatically added to your account for an additional charge. These plans can be used for point-of-sale, mobile terminal, and business productivity applications. Prohibited applications include, but are not limited to, continuously streaming video, public/Guest Wi-Fi, and web hosting systems without prior approval from Verizon. Voice calls cannot be placed or received on these plans other than to 611 or 911 (these calls may be placed anywhere in the Nationwide Rate and Coverage Area). Text messages cannot be sent or received on these plans.

3.3.3 **5G Business Internet.** This plan is restricted to the Verizon Wireless 5G Ultra-Wide Band (C-Band) network (domestic and international roaming are not available). 5G Business Internet plan is for wireless broadband service, and can only be activated on select 5G C-Band compatible Customer-provided data routers or designated devices sold through Verizon. 5G Business Internet plan includes an unlimited data allowance. The monthly access fee will be prorated when changing price plans during an invoicing cycle. Speed Tier Limit represents the maximum downlink speed but may be lower in the event of network congestion. Uplink speeds may be lower than downlink speeds.

3.3.4 **Wireless Services.** The following terms only apply to the provision of Wireless Service sold and/or provided by Verizon Wireless or LTE Business Internet and 5G Business Internet sold and provided by MCI Communications Services LLC dba Verizon Business Services pursuant to a resale agreement with Verizon Wireless in the U.S.:

- **Wireless Service Availability.** Wireless Service uses radio technologies and is subject to transmission and service area limitations, interruptions, and dropped calls caused by atmospheric, topographical or environmental conditions, cell site availability, the router or its installation, governmental regulations, system limitations, maintenance or other conditions or activities affecting operation. Wireless Service is only available within each applicable plan coverage area, within the operating range of the wireless systems, and routers that are approved to operate on our network. Wireless Service may be provided by a Third Party roaming carrier and subject to agreements with such carriers, and as such may be limited or slowed. Customer must activate and use the CPE within the areas served by our owned and operated network. Verizon Wireless or Verizon Business Services reserves the right to terminate any Wireless Service that roam permanently on a Third Party carrier's network. Customer Wireless Service must be used in a fixed location and must always be within the areas served by a Verizon owned and operated network.
- **Enhancement of Wireless Service.** Customer must obtain Verizon's written approval before installing, deploying or using any regeneration equipment or similar mechanism (for example, a repeater) to originate, amplify, enhance, retransmit or regenerate Wireless Service. Verizon may terminate Wireless Service if Customer violates this section.
- **Use of Wireless Service and CPE; MTNs; SIMs.** Wireless Service must be used for the purpose of connecting a Customer Site to the Verizon-provided network service or the Internet. Verizon may, in order to protect the Network, operations, and other customers, suspend or terminate the Wireless Service, if Wireless Service or CPE is used: (a) in an illegal manner (including "spamming" or other

abusive messaging); (b) in a manner prohibited by the Agreement; or (c) in a manner that has an adverse impact on the Network, operations or customers. Customer is solely responsible for the use of the Wireless Service to transmit, receive, store or process its data in compliance with applicable law and regulations. Verizon Wireless provides applications that involve the storage of information which are not designed or intended for use with protected health information (PHI), as defined by the Health Insurance Portability and Accountability Act of 1996, as amended; therefore, they must not be used to create, store, transmit or receive PHI. We will assign one mobile telephone number (MTN) to each line. You can port a MTN to another carrier, but you do not have any property right in the MTN. We may change, reassign or eliminate a MTN upon reasonable notice to you under certain circumstances, including fraud prevention, area code changes, and regulatory or statutory law enforcement requirements. If the CPE requires a Subscriber Identity Module (SIM) card provided by us, we own any intellectual property or software on the SIM card.

- **Limitation of Liability – 911 Calls.** NEITHER VERIZON NOR VERIZON WIRELESS WILL BEAR ANY LIABILITY FOR USE OF THE WIRELESS SERVICE PROVIDED UNDER THIS ATTACHMENT ARISING OUT OF THE USE OR ATTEMPTED USE OF, OR THE INABILITY TO ACCESS, LIFE SUPPORT OR MONITORING SYSTEMS OR DEVICES, 911 OR E911, OR OTHER EMERGENCY NUMBERS OR SERVICES.
- **Other Terms.** The speed provided by the Wireless Service is the maximum speed for such service. The Parties acknowledge and agree that with regard to Wireless Service the following uses are not permitted: Data sharing with another device; High bandwidth constant bit rate (CBR) or high bit rate applications; International or domestic roaming; Multimedia messaging (MMR).
- **Taxes, Surcharges and Exemptions.** If any federal, state, local or foreign tax, fee, assessment or other charge is required by law to be collected by Verizon Wireless (each, a Tax), or a serving carrier charges tax to Verizon Wireless on a roaming call, then Verizon Wireless or MCI Communications Services LLC dba Verizon Business Services pursuant to a resale agreement with Verizon Wireless (Verizon Business Services) may bill such amount to Customer, and Customer shall pay such amount. If Verizon Wireless incurs a tax (other than a net income tax) or other expense to comply with regulatory or administrative obligations, (such as payments to local telephone companies for delivering calls from Verizon Wireless customers to their customers), Verizon Wireless or Verizon Business Services may bill a surcharge to defray such expense (a Surcharge). Taxes and Surcharges may change from time to time. With respect to any Tax other than a Tax charged by a serving carrier on a roaming call, if Customer provides Verizon Wireless or Verizon Business Services with an exemption certificate in the form provided by law, or with other evidence of exemption acceptable to Verizon Wireless or Verizon Business Services, then that specific Tax will not be collected from Customer. If an exemption applied by Verizon Wireless or Verizon Business Services at Customer's request is found not to apply, then Customer shall upon demand pay Verizon Wireless or Verizon Business Services the uncollected Tax and all related interest, penalties and additions to the Tax. Verizon Wireless or Verizon Business Services shall not issue credits for a Tax that is billed prior to Verizon Wireless or Verizon Business Services' receipt of evidence of exemption.
- **Wireless Connections.** Customer will be billed monthly, and is responsible for paying all fees, charges, Taxes and Surcharges (as defined in the "Taxes; Surcharges; Exemptions" section above), on your data plans. Generally, Customer is billed the monthly access fees and feature charges in advance, and airtime overage and other usage charges in arrears. Monthly invoicing cycles vary and may not correspond to calendar months. For metered data plans overage usage (usage in excess of the monthly data plan amount) will be rounded to the next full GB of traffic and will be billed in arrears. Data usage not used in a particular monthly invoicing period may not be carried forward to another month in the data plan selected by Customer. With regard to Wireless UNI, Customer overage charges are based on data usage sent through the wireless connection (including resent data), not data usage received by Customer Equipment.
- **Wireless Connection - Upgrades.** With respect to Customer-requested upgrades to its data plan for Access with Wireless UNI, the MRC will be prorated according to the date the new data plan is

available to Customer. For metered data plans overage usage will be based on the data plan in effect on the last day of the invoicing period when traffic usage is calculated. The invoicing period with respect to overage usage may differ according to the country where Access with Wireless UNI is provisioned.

4. TRANSPORT

4.1 **Private IP (PIP) Service** (Back to Site Type Details)

4.1.1 **PIP Service Definition.** PIP is a wide area data networking service which provides any-to-any connectivity to transport Customer Data between Customer Sites.

4.1.2 **Available Versions of PIP.** Verizon offers two versions of PIP under NaaS: a) PIP and b) PIP Gateway.

4.1.3 **Standard Service Features of PIP**

- **Route Capacity and IPv4 and IPv6 Protocols.** Verizon will assign a maximum number of routes that Customer may introduce into a Customer VPN based upon the total number of Customer Sites expected in a given Customer VPN, as shown in the following table.

Expected Total Number Customer Sites	Maximum Routes IPv4	Maximum Routes IPv6
1 – 50	1,250	150
51 – 250	1,250	750
251 – 500	2,500	1,500
501–1,000	5,000	3,000
1,001+	10,000	6,000

Capacity constraints may vary for Customers using MVIC (available upon request). Customer will select either IPv4 or IPv6 protocol (where available), and a suitable number of IP addresses to be used in conjunction with PIP and in accordance with Verizon's then-current applicable assignment guidelines.

4.1.4 **Optional Service Features**

- **IP Multicasting.** Verizon will simultaneously deliver a single stream of data to multiple recipients in Customer-provided multicast groups.
- **Multiple Virtual Routing and Forwarding.** Customer may create multiple connections via a single Port. Customer may use those connections to extend the privacy and security of PIP to the various LANs at the Customer Site. Customer understands and accepts that packet drops may occur if Customer creates an oversubscription of VPN connections on the Port.
- **Class of Service Selection.** Verizon will route Customer traffic based on the priority assigned by Customer using different classes of service designations, which follow the Diff-Serv model. If Customer does not set different classes, Verizon will route all Customer traffic using the Best Efforts (BE) class as the default priority designation.
- **Burstable Invoicing.** Customer selects a Bandwidth Commitment and may burst up to a higher selected bandwidth as required.

4.1.4.1 **Broadband Technology.** Broadband services are based on different technologies and the quality of the service can vary based on the technology available, including from Third Parties.

4.1.4.2 **LTE Business Internet and 5G Business Internet.** Both LTE and 5G Business Internet are available with PIP.

4.1.4.3 **Bandwidth Shaping for Ethernet Access Circuit.** If Verizon provisions bandwidth shaping overhead adjustments on the Ethernet interfaces at the Provider Edge (PE) egress, it will be Customer's responsibility to apply policies at the Customer Edge (CE) egress to prevent packet loss due to Ethernet protocol overhead and traffic profile used within the PIP Network.

4.1.4.4 **Bandwidth Bursting.** Customer pays an additional Charge monthly per circuit for any measured usage level greater than Customer's Bandwidth Commitment. Verizon will sample the PIP Port usage every five minutes during the monthly invoicing period and Customer's measured usage level will be based on usage at the 95th percentile of samples with the highest five percent of usage discarded for invoicing purposes. Incremental usage will be rounded up to the next full Mbps or Gbps.

4.1.4.5 **Reconfiguration.** A reconfiguration Charge applies where Customer requests Verizon to re-terminate a circuit to a different router or reconfigure a Port.

4.1.5 **PIP Gateway**

4.1.5.1 **Service Description.** Verizon provides an interconnection between two private networks based on the characteristics of the gateway, as described below. Verizon provides the PIP Gateways described below.

4.1.5.1.1 **Private Wireless Gateway (U.S. Mainland Only).** Verizon provides Customer a Port that Customer may use to connect Customer's wireless traffic to the PIP Network.

4.1.5.1.2 **MVIC Service (Select Locations).** Verizon connects Verizon's PIP Network to a MPLS Partner's network.

4.1.5.2 **Secure Cloud Interconnect.** Verizon provides an interconnection with the network of select third-party cloud providers (with whom Customer has separately contracted) enabling Customer to utilize those third-parties' cloud services over PIP, as well as Switched E-LAN, or Switched E-LINE. Verizon also provides network address translation (NAT). However, Customer may provide Customer's own NAT with the understanding that Customer accepts sole responsibility if Customer fails to properly configure NAT or if such failure permits a third party to have access to Customer's PIP addresses. Secure Cloud Interconnect details are available on request. In addition, Verizon may terminate Secure Cloud Interconnect, in whole or in part, upon 30 days prior written notice, where Customer is utilizing Secure Cloud Interconnect on a usage only basis, and has not used it for a continuous period exceeding 10 months.

4.2 **Ethernet Dedicated and Switched E-Line** **(**Back to Site Type Details)

4.2.1 **Service Definition.** Verizon's Ethernet Switched and Dedicated E-Line (collectively, E-Line) provides point-to-point and point-to-multipoint connectivity between two Customer Sites, including data center-to-data center, LAN-to-LAN, and host-to-remote sites (subject to availability).

4.2.2 **Standard Service Features**

4.2.2.1 **Dedicated E-Line.** Dedicated E-Line uses dedicated virtual circuits, with security characteristics similar to traditional private line services. As these circuit paths are predetermined, Dedicated E-Line also provides predictable latency, in addition to options for diverse, redundant connections for business continuity (subject to availability). With Dedicated E-Line, Verizon provides a static, predetermined Ethernet Virtual Circuit (EVC) that is provisioned through Verizon's private network (sometimes known

as Explicit Routing Option or ERO) with the highest Class of Service (CoS) for priority routing.

4.2.2.2 **Switched E-Line.** Switched E-Line uses a switched path EVC that allows frames to move between two Customer Sites. With Ethernet Switched E-Line, Verizon provides CoS choices that allows Customer to select a single CoS on an EVC for prioritized handling of various types of data. Basic, priority and real time CoS are provided as standard features of EVCs on the relevant Order.

4.3 **Ethernet Switched E-LAN** (Back to Site Type Details)

4.3.1 **Service Definition.** Ethernet Switched E-LAN (E-LAN) provides multi-point, any-to-any connectivity between Customer Sites (subject to availability).

4.3.2 **Standard Features**

4.3.2.1 **Ethernet Virtual Connection.** Verizon provides multi-point connectivity using EVC between two or more Customer Sites within a Customer domain, as designated by Verizon.

4.3.2.2 **Class of Service.** As a part of the standard EVC, E-LAN provides CoS that allows Customer to select either a single CoS or multiple CoS for prioritized handling of priority, business, and basic data.

4.3.3 **Optional Features**

4.3.3.1 **Traffic Replication.** With Traffic Replication, Verizon allows Customer to replicate its traffic from a single Customer Site to all Customer Sites within a Customer domain, as designated by Verizon.

4.3.3.2 **Real Time Class of Service.** As an option for a Customer selecting multiple CoS, Verizon offers Real Time CoS, which provides an additional, higher priority CoS on an EVC.

4.3.3.3 **Media Access Control Address Blocks.** Verizon provides a defined number of Media Access Control (MAC) addresses (MAC Address Block) based on the number of Customer Sites per Customer domain. Customer may order an additional MAC Address Block with 50 MAC addresses within a particular Customer domain to supplement the Verizon-provided MAC Address Block.

4.4 **Internet Dedicated Services** (Back to Site Type Details)

4.4.1 **Service Definition.** Internet Dedicated Service (IDS) provides connectivity to the Internet at the Internet Service Location.

4.4.2 **Standard Service Features**

- 7x24 hour customer support, monitoring and notification
- Static or dynamic IP routing
- Assignment of non-portable IP addresses (IPv4 and/or IPv6 protocol, upon request). IP addresses are provided by Verizon to be used by Customer for transporting Internet traffic with IDS.
- Traffic utilization statistics.

4.4.3 **Optional Service Features**

4.4.3.1 **Domain Name Services.** Verizon offers primary and secondary domain name hosting services with IDS. Upon Customer request, Verizon will apply for and enter into a registry agreement to register domain names on Customer's behalf.

4.4.3.2 **RIPE Registration (Europe).** Upon Customer request, Verizon will register an Autonomous System Number and/or provider-independent IP address ranges with the relevant registry (www.ripe.net) on Customer's behalf, subject to applicable registry guidelines and policies.

4.4.4 **Pricing Plans.** Customer may select from one of the following: IDS Tiered or Burstable pricing plans. Customer may change to a different pricing plan, or upgrade or downgrade within a pricing plan, once per calendar month per circuit, at any time after the Service Activation Date.

4.4.4.1 **Tiered Service.** Verizon provides full Internet access at the Customer-selected speed (Tier).

4.4.4.2 **Burstable Service Options.** Customer may subscribe to a Bandwidth Commitment which is less than the full speed of the selected IDS and may subsequently burst to the full speed of the selected IDS as required.

- For Burstable Service, Customer selects one of the following Burstable Internet Dedicated pricing plans.
  - Burstable Select. If Customer's Measured Use Level is greater than Customer's Bandwidth Commitment per circuit for any month, Customer will pay the price for each Mbps over the circuit's respective Bandwidth Commitment.
  - Burstable Aggregation. Customer may associate multiple circuits together as a Burstable Aggregation Group and will designate a Master Site within each defined group. Customer will pay the overage price based on the Master Site rates for each Mbps over the Measured Use Level in a month for the sum of the Bandwidth Commitments within a Burstable Aggregate Group.
  - Customer may request changes to a Burstable Aggregation Group once per calendar month. When Customer requests a new Bandwidth Commitment or change to a Burstable Aggregation Group, Verizon will implement the new Bandwidth Commitment or changed Burstable Aggregation Group on the first day following the end of the invoicing cycle if feasible, but in any event, no later than the first day of the invoicing cycle thereafter.

4.5 **Secure Hybrid Network** (Back to Site Type Details)

4.5.1 **Service Definition.** Secure Hybrid Network (SHyN) allows Customer to access both the Private IP and Public IP networks with one single port. ShyN consolidates the delivery of traditional and cloud-based applications over a single, optimized network.

4.5.2 **Standard Service Features**. Verizon provides SHyN with the following standard features:

- Aggregation of public and private transport methods through a single port to provide a transport-agnostic experience.
- Quality of service (QoS) capability enables prioritization of critical traffic.
- Comprehensive Unified Threat Management offers protection for all traffic, whether accessing public or private networks.
- Congestion management.
- Customized firewall policies.

4.5.3 **LTE Business Internet and 5G Business Internet.** Both LTE and 5G Business Internet are available with SHyN.

4.6 **Broadband** (Back to Site Type Details)

4.6.1 **Service Definition.** Broadband utilizes public internet protocol (IP) as a means of transport from Customer Sites to Verizon's and/or Third Party network services using a range of broadband access

technologies including but not limited to copper, wireless, fiber or cable. Verizon may provision Broadband to Customer either directly, through different Third Parties, either through resale of such Third Party's service to Customer or, as described below, as agent for such Third Party in certain locations within the United States. Broadband is intended to be used in conjunction with the Customer Network, for the purpose of connecting a Customer Site to the Customer Network. Broadband cannot be used solely for Internet access (and in some cases not at all) and is not sold on a standalone basis.

4.6.1.1 **Out of Franchise (OOF) Broadband (U.S. Only).** In certain locations within the U.S., Broadband will be provided to Customer directly by a Third Party (i.e., Verizon shall act as an agent on behalf of the Third Party in arranging Broadband) and, in such instances, Verizon may provide consolidated invoicing, customer care and other ancillary services to Customer pursuant to agreement with such Third Party (OOF locations). The identification of the OOF locations and details of such arrangements is available from Customer's account representative. With respect to Broadband provided in OOF locations, all references in this clause shall be deemed to be references to the applicable Third Party that is providing Broadband directly to Customer in such OOF locations.

4.6.2 **Standard Service Features for Broadband**

4.6.2.1 **IP Addresses.** Assignment of a suitable number of dynamic or static (as available) IP addresses (IPv4 protocol) will be used in conjunction with Broadband in accordance with the currently applicable assignment guidelines in the relevant region. These IP addresses are provided from the ASN network of a Third Party.

4.6.2.2 **Service Equipment.** Service Equipment may be via an Ethernet interface. In the countries where Service Equipment is not available as part of Broadband the Broadband circuit will be terminated on Verizon or Customer provided equipment.

4.6.2.3 **Broadband Technology.** Broadband services are based on different technologies and the quality of the service can vary based on the technology available, including from Third Parties.

4.6.2.4 **LTE Business Internet and 5G Business Internet.** Both LTE and 5G Business Internet are available with Broadband.

4.6.3 **Optional Service Features.** Additional IP address blocks may be available, though such availability and block size may vary. An IP justification form may be required if additional IP addresses are requested.

4.6.4 **Supplemental Terms for Broadband**

4.6.4.1 **Third Party End User Agreement.** Where Verizon acts as an agent on behalf of a Third Party for Broadband in the United States and Customer orders such services, the acceptance of an Order for the Third Party's Broadband services will constitute a contract with the Third Party Broadband provider and Customer agrees to allow Third Party Broadband provider to commence the provisioning process and to install and provide ordered services. Customer agrees to be bound by the terms and conditions of the end user services agreement for such services. Customer authorizes Verizon to submit the order for such services to the Third Party on Customer's behalf and to perform any administrative functions required to formalize the contract between Customer and the Third Party. If the Third Party provides notice to Verizon that Customer has breached the Third Party's end user services agreement, the applicable Broadband services will be terminated as directed by the Third Party. The Third Party end user services agreement is specified at the following URL: www.entelesource.com/exhibits/Verizon_EUSA_20.pdf.

4.6.4.2 **Technical Feasibility and Broadband Availability.** In order to determine whether Customer can receive Broadband, the Third Party may conduct a technical feasibility check after receipt of an Order signed by Customer. If Broadband is determined to be unavailable, Verizon will notify Customer promptly, cancel the unavailable order, and upon Customer request, requote Broadband circuit(s) based on the latest availability information. There will be instances where a circuit is quoted, using the information available at the time of a quote, but at the time the order is placed or upon installation, the Broadband circuit(s) is deemed not available and other Broadband circuit(s), sometimes with higher charges may be required and in such instances the circuit is requoted to Customer. For information purposes, sometimes it is only when an engineer arrives on site that a lack of capacity at the local level is discovered.

4.6.4.3 **No Control and No Warranty.** Customer acknowledges that where Broadband is provided via a Third Party, other than as specified in the Support for Broadband clause below, Verizon exercises no control over that Third Party, or any performance issues relating to broadband. Broadband is provided as-is. Neither Verizon nor Third Party warrants that Broadband will be available, uninterrupted or error-free.

4.6.4.4 **Support for Broadband.** In the event of Broadband interruptions or other performance issues, Verizon helpdesk will contact the Third Party and relay any information received from the Third Party to Customer.

4.6.4.5 **Termination of Broadband.** In the event Broadband is canceled or is no longer offered by the Third Party or when acting as an intermediary, its underlying suppliers, Verizon shall have a right to terminate the Broadband upon providing reasonable notice to Customer. In such cases, Verizon shall make reasonable efforts to provide a replacement service. If Customer does not wish to accept the functionally equivalent service or where such functionally equivalent service is not available, Broadband will be canceled.

4.6.5 **Speeds.** Any transmission speeds for Broadband as set out in the Order refers to the maximum download and upload speed achievable with Broadband under ideal conditions. For information purposes, the normally available download and upload speed and minimum download and upload speed may be lower than the maximum download and upload speed for a variety of reasons including without limitation, network congestion, line interference and Internet congestion.

5. MANAGED SERVICES

5.1 **Managed WAN** (Back to Site Type Details)

5.1.1 **Service Definition.** Managed WAN provides a range of service options enabling Customer to transfer all or part of its WAN management to Verizon, including network design, CPE configuration, service installation, proactive monitoring, fault notification, reporting, device management and software support (subject to availability). Managed WAN is offered with Full Management.

5.1.2 **General.** MTO may not be available for all Managed WAN service options listed herein.

5.1.3 **Full Management Level.** Full Management includes the capabilities described below.

5.1.3.1 **Monitoring and Resolution**. Verizon will resolve both logical and physical issues with Managed Devices, with Customer's cooperation, either remotely or by dispatching a technician, whether caused by Verizon, Customer or a third party.

5.1.3.2 **Managed Services Customer Portal**. Customer will have access to the Managed Services Customer

Portal via the VEC which provides a consolidated view and real time access to project, status, and contact information for Managed WAN.

5.1.3.3 **Cloud-Controlled Routing (CCR) Customer Portal.** Where applicable, the CCR Customer Portal may be accessed via the VEC. In order for Verizon to properly manage the Customer Network, Customer shall not add, move or remove devices or licenses in the CCR Customer Portal, or add or remove administrators in the CCR Customer Portal.

5.1.3.4 **CCR Customer Portal Administrative Access.** For CCR Customers under Full Management read-only administrative access will be available in the CCR Customer Portal.

5.1.3.5 **CCR Network Image.** A current image of the Customer Network is stored on the Cloud Infrastructure, but a roll-back to previous configurations is not supported by Verizon.

5.1.3.6 **Change Management Activities.** Verizon will perform the change management activities shown on the Managed Services Customer Portal as Standard Change Management at no additional charge. Optional Change Management activities will be performed at the Charges shown in the Managed Services Customer Portal**.**

5.1.3.7 **SD WAN and Software Defined Secure Branch (collectively, Software Defined Networking or SDN) Policy Management.** Customer can make certain policy changes using the VEC or the vendor's management console for select SDN service features. Additional service features will be added to the VEC from time to time. Verizon, working with Customer, will set the initial policies during implementation. Additionally, Verizon will, from time to time, set policies that are not accessible to Customer. Customer may obtain a list of available policies by way of the VEC or by contacting Customer's account manager. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.

5.1.4 **Co Management Service Level.** Customer can choose Co Management, which contains the capabilities of Full Management but allows Customer to manage certain capabilities as described below.

- **SDN Policy Management.** If Customer has Co Management, Customer can make certain policy changes using the VEC, API Gateway or the vendor's management console for select SDN service features. Additional service features will be added to the VEC and API Gateway from time to time. Verizon, working with Customer, will set the initial policies during implementation. Additionally, Verizon will, from time to time, set policies that are not accessible to Customer. Customer may obtain a list of available policies by way of the VEC or API Gateway or by contacting Customer's account manager. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.

5.1.5 **Optional Service Features**

5.1.5.1 **Customer Provided Transport Service.** If Customer has two or more managed Customer Sites, Verizon will monitor and manage covered third-party provided connectivity services and inform Customer of the existence of outages or problems with those third-party provided services.

5.1.5.2 **SDN Management.** Verizon proactively monitors all Verizon certified SDN Managed Devices up to the host controller for such Managed Devices, 24 hours a day, seven days a week.

Verizon will provide programmable, rules-based WAN routing services, optional additional services, and centralized management. Available services and options are based on vendor license capabilities, regional availability, and Verizon support capabilities, and may include the options below. Customer

may request a list of the services and options included in each vendor package by contacting Customer's account manager.

- **Routing.** The routing function enables basic routing capabilities with support for common routing protocols.
- **SD WAN Function.** This function maps Customer application traffic over the Customer Network in accordance with Customer defined policies that classify its traffic into application categories and define minimal requirements for loss, delay, and jitter per traffic or application group, such that application traffic can be routed over the preferred Customer Network paths as defined by Customer which can be updated by Customer either manually or automatically. Policies are customizable on an application-by-application basis. It also allows definition of parameters to prioritize handling of different types of application data through the quality of service (QoS) policy.
- **Centralized Enforcement of Access Control and Network Policies.** Any changes to the policy will be applied across the Customer Network automatically.
- **Encrypted Control and Application Traffic.** The application traffic can be encrypted end to end for additional protection of the data as it traverses the Customer Network.
- **Security.** Based on the vendor license and operating system and upon Customer's Order, Verizon will provide security functions that may include layer 4 firewall, next generation (layer 7) firewall, intrusion detection, anti-virus, content filtering features and zone based firewall functionality. For select vendor licenses, Customer can change certain policy settings for select security and UTM functions for Managed Devices under Full or Co Management. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.
- **Remote VPN Access.** Verizon will configure the Remote Access Server (RAS) Gateway to enable VPN tunneling and encryption between the RAS Gateway and a Remote Access Client on a remote user's endpoint device. This function enables Customer's users to remotely access the internet and corporate networks. Verizon manages the RAS Gateway but does not manage the Remote Access Client or the remote user's endpoint device.

5.1.5.3 **Managed Device Enhanced Features.** For certain Managed Devices under Full Management, Verizon can provide, if available, configuration, implementation, administration, monitoring, support, reporting, and installation of manufacturer-provided and/or hardware patch/upgrades for the following features as selected by Customer.

- **Firewall.** Verizon will manage Customer-selectable zones (e.g., external or untrusted, internal or trusted, DMZ), firewall policies, and firewall rule sets between all zones.
- **Content Filtering.** Verizon will configure Content Filtering to interface with Customer's Websense server based on information provided by Customer. Customer can use that server, and/or a backup list of up to 25 URL filters, to control web-based content accessed by end users.
- **Switching (For LAN Module on a Managed Device).** Verizon provides additional LAN Ports on the Managed Device. Verizon monitors the LAN module generally, but not individual Ports.
- **Encryption.** Where available and permitted, Verizon will encrypt Customer Data traffic between Managed Devices on the Verizon PIP network. Customer will provide at least two additional Managed Devices with the Encryption feature to act as key servers. If circumstances arise that cause the Encryption feature to fail and prevent communication to and from that Managed Device, Customer will notify Verizon.
- **WAN Acceleration.** Verizon will optimize traffic using compression, caching protocol optimization where other Customer Sites on the Customer Network have compatible application optimization devices.
- **Wireless LAN Controller Management.** Verizon will configure the Managed Device to provide Wireless LAN controller management capabilities for Customer Sites with compatible access point equipment.
- **Lightweight Access Point Management.** Verizon will configure the Managed Device with

embedded Access Point functionality such that it will interoperate with Verizon Managed Wireless LAN service.

- **IPSec Tunneling.** Available on certain Managed Devices, Verizon enables the tunneling and encryption of Customer Data traffic between two Managed Devices. Enabling this feature on a remote Managed Device is dependent on the same feature being enabled on a separate Customer Managed Device, typically located at the Customer Site designated as the hub.
- **Wireless LAN Access Point.** Verizon will configure the Managed Device as a wireless access point so long as at least one other site or Managed Device in the Customer Network has a compatible Wireless LAN Controller.
- **Managed VoIP Services including Voice Gateway, Analog VoIP Gateway, and Multi-Service IP-to-IP Gateway.** Verizon will manage VoIP CPE elements (not VoIP Service devices such as phones) at the same management level as the related Managed Devices. Certain Customer roles and responsibilities for the underlying VoIP Service may be impacted by Managed VoIP Services. Verizon will work with Customer to address such impacts.
- **Cloud Security Services.** For certain Managed Devices, Verizon will configure and manage the connection from the Managed Device to an external cloud-based security service. Approved security services may be provided by Verizon or Third Party.
- **Embedded WiFi.** For certain Managed Devices, Verizon will configure and manage WiFi service; WiFi services are standalone and not compatible or interoperable with Managed Wireless LAN service.
- **WAN Back Up.** Verizon configures a Managed Device to support a second access circuit (over separately provided Verizon or Third Party service) in the event the primary network connection fails. For certain Managed Devices, an embedded LTE modem is available for use to provide an access path for wireless WAN back up applications. For SD WAN Management or Software Defined Secure Branch, the wireless back up path is set up as a path of last resort.
- **Managed WAN Support for Dynamic Network Manager.** This feature is available for Managed Devices under Full Management. Under Full Management, Verizon is responsible for updating CE devices.
- **CCR Reporting.** This feature enables Customer to access comprehensive daily and ad hoc reporting via the CCR Customer Portal which may aid Customer in accessing the health and performance of Managed Devices under CCR.

5.1.5.4 **WAN Analysis.** WAN Analysis includes support for SDN reports for Verizon-supported vendors. WAN Analysis is not included for certain vendor software license levels under Software Defined Secure Branch that do not include SDN functions.

5.1.5.5 **Guest Access**

- Verizon offers two Guest Access options available per Lightweight Access Point or Wi-Fi-enabled Managed Device under Cloud-Controlled Routing: (i) Cisco Meraki, with additional information available at the CCR Customer Portal; and (ii) Purple Wi-Fi, with additional information available at http://verizon.purplewifi.net/ or other URL provided by Verizon from time to time (the Guest Access Portal). These Guest Access options provide the following functionality:
  - **Mobile Location Analytics (MLA).** This feature enables Customer to choose to (i) capture information broadcast by the wireless devices of guests and end users (collectively, such data is hereinafter referred to as MLA Data); and (ii) use MLA Data for the protection of the Customer Network and marketing purposes.
  - **Content Filtering (Purple Wi-Fi-only).** Customer can block inappropriate content by requesting either a specific category of sites to be blocked or the specific sites. Customer also has the option to limit traffic via bandwidth controls.
- **Notice.** Customers with Guest Access who utilize the MLA feature must display a notice, in a conspicuous location proximate to the area where the MLA data is collected, that at a minimum: (i)

identifies Customer as the Data Controller (as defined in applicable law); (ii) describes the type of personal information collected; (iii) describes the purpose(s) for which guests' and end users' personal information is processed; (iv) provides a summary of Customer's privacy practices and/or a link to its privacy policy; (v) describes any third parties to which Customer will disclose the personal information of guests and end users and the countries to which such personal information may be transferred; (vi) explains how guests and end users can contact the privacy officer or other person who is accountable for the Customer's privacy practices and how to access and/or correct their personal information; (vii) explains how such guests and end users can opt out from the collection and processing of their personal information; and (viii) notifies guests and end users that their decision not to opt out constitutes consent to the collection, processing, transfer and use of their personal information. Where the guest or end user is located outside of the United States, the opt out requirement in subclauses (vii) and (viii) above will not apply and instead the notice must: (1) include an "opt-in" click box or other mechanism that guests and end users must check or accept prior to gaining access to the MLA feature; and (2) notify guests and end users that their decision to opt-in constitutes express consent to the collection, processing, transfer and use of their personal information in accordance with the terms described in (i) through (vi) herein.

- **End User License Requirement.** Customer must cause guests to consent to an end user license agreement which states that guests' Wi-Fi-based activity will be monitored and information from such monitoring will be used for protection of the Customer Network, content filtering, and marketing purposes.
- **Indemnity – Guest Access.** Customer will indemnify and hold Verizon harmless from any claims based on the monitoring, capture, storage, use, or sharing of any data collected via Guest Access, including but not limited to claims by a guest or other end user that it did not provide its consent, that a guest or other end user was under the age of thirteen or was not offered a reasonable opportunity to opt-out of the collection of information as required in Guest Access Notice above.
- **Online Content.** With respect to Verizon's provision of optional Guest Access, Customer acknowledges that Verizon does not provide any online content to, or interact with end users or Customer's guests.
- **Children's Online Privacy Protection Act (COPPA) (U.S. Only).** Verizon Managed Services do not provide the tools to obtain the parental consent under the Children's Online Privacy Protection Act (COPPA). To the extent that Customer operates a website or other online service to which COPPA applies, Customer acknowledges that it will comply with COPPA, including, without limitation, providing notice and obtaining parental consent in accordance with COPPA.

5.1.5.6 **Device Management.** Customer may select from the following types of management for Managed Devices:

- Router Management – Full Management only
- SD WAN Management – Full Management only
- Virtual Host Management – Full Management only
- Analog VoIP Gateway – Full Management only
- Cloud-Controlled Routing – Full Management only. To effectively manage the Customer Network, all Customer Sites with Cloud-Controlled management (e.g., CCR) must be at the same service level.
- Software Defined Secure Branch –Full Management only

5.1.5.7 **IP Addresses.** Verizon may use secondary IP addressing if Customer is using unregistered IP address space. If secondary IP addressing is not available, Customer must pay reasonable costs for a dedicated management domain or an IP proxy hardware solution.

5.2 **Virtual Network Services** (Back to Site Type Details)

5.2.1 **Service Definition.** Virtual Network Services (VNS) provides managed virtual network functions (VNFs) deployed on cloud-based VMs in the Hosted Network Services (HNS) environment or in the public cloud, subject to availability. Verizon provides management of VNS up to the LAN interface of the VNF.

5.2.1.1 **Replacement of Traditional Network Equipment.** VNS is a suite of VNFs that allows Customer to replace traditional purpose-built, appliance-based, network equipment with virtual network services.

5.2.1.2 **Software Based Environment.** VNS operates within a virtual software-based environment rather than the traditional appliance-based network functions, where a single piece of proprietary, purpose-built hardware is associated with each distinct network service. VNS is offered either as a service chained together so that the network traffic passes through the applications in a certain specified order (e.g., traffic will pass through the firewall before the SD WAN service), or it can be separated so that some traffic will be directed to one set of network services, while other traffic will traverse another set. VNS supports both public Internet and MPLS connections in many locations, allowing Customer to access its services in any combination of private and public access.

5.2.1.3 **IP Addresses.** Verizon will designate IP addresses for use with VNS. Customer will not use non-approved IP addressing on VNS. Verizon also reserves the right to use border gateway protocol (BGP) routing when VNS terminates Verizon connectivity.

5.2.2 **Standard Service Features.** Verizon provides the following standard software-based services: Virtual Network Services – Routing, Virtual Network Services – Security, Virtual Network Services – SD – WAN, Virtual Network Services – Software Defined Secure Branch, and Virtual Network Services – Sessions Border Controller (SBCaaS).

5.2.2.1 **VNFs.** The VM based configuration provided by Verizon includes orchestration management software, which enables native instantiation, service chaining, and activation of the VNFs. The number and availability of VNFs supported on a given premise-based configuration will be dependent on the mix of VNFs chosen and premise-based configuration. Verizon will define the final determination of the supported combinations of VNFs and VM sizing according to Customer's requirements. Delivery of VNS includes both the initial configuration and deployment of the requested VNF on one or more of the HNS or in the public cloud and continuous operation of those services in accordance with the terms set forth herein.

5.2.2.2 **Access Technology and Interfaces.** All Ethernet access technologies are currently supported by Verizon VNS.

5.2.2.3 **Feature Package.** Each VNF may be available in up to three feature packages: Essential, Core, and Complete. Details regarding Customer's package will be set out in the Order.

- **Essential.** Essential provides functionality common within the industry.
- **Core.** Core provides additional functionality.
- **Complete.** Complete provides all the services that the Third Party makes available.

5.2.2.4 **Service Sizing.** Once a feature package is chosen, Customer will then choose the service size based on the transfer rate of the associated network connection(s), the number of maximum connections allowed or maximum number of concurrent calls, depending on the network service chosen. The sizing options are specified in the table below. The choice of feature packages and the service sizing are independent selections. Verizon will work with Customer to select the most appropriate combination of feature package and sizing based on Customer's specific requirements.

Service Feature	Capacity Unit								
Routing	Bandwidth (Mbps)	Up to 10	N/A	Up to 50	Up to 100	Up to 250	Up to 500	Up to 1000	Up to 2500
Security	Bandwidth (Mbps)	Up to 10	Up to 20	Up to 50	Up to 100	Up to 250	Up to 500	Up to 1000	Up to 2000
SBCaaS	Max Concurrent Calls	N/A	Up to 250	Up to 1000	Up to 5000	N/A	N/A	N/A	N/A
SD WAN	Bandwidth (Mbps)	Up to 10	Up to 25	Up to 50	Up to 100	Up to 200	Up to 500	Up to 1000	Up to 2500
Software Defined Secure Branch	Bandwidth (Mbps)	Up to 10	Up to 20	Up to 50	Up to 100	Up to 200	Up to 500	Up to 1000	N/A

5.2.2.5 **Virtual Network Services – Routing.** Verizon will provide the following routing functions based on the feature package chosen:

- **Routing Services.** Management of virtualized routers that provide routing capabilities for traffic traversing MPLS, Internet, or wireless circuits.
- **IP SEC VPN.** The provision of IP Sec VPN, a protocol suite for secure IP communications which authenticates and encrypts each IP packet of a communication session, utilizing a set of security protocols at the network or packet processing layer of network communications.

5.2.2.6 **Virtual Network Services – Security.** Verizon will provide security functions including firewalls to establish a barrier between a trusted, secure network and another unsecure network, such as the Internet. Some additional security functions that available:

- **Data Loss Prevention (DLP).** DLP utilizes business rules to classify and protect confidential and critical information to prevent access by unauthorized end users.
- **Threat Prevention.** Threat Prevention protects Customer from malware and fraud that may be found in links in emails or IMs, or malware attachments on servers that access the internet.
- **Distributed Denial of Service (DDOS).** DDOS helps prevent distributed denial of service attacks.
- **Intrusion Detection Services.** Intrusion Detection Service is a security management system for networks that analyzes information from various areas within a network to identify possible security breaches, which include both intrusions (attacks from outside the organization) and misuse (attacks from within the organization).
- **Intrusion Prevention Services (IPS).** IPS monitors the Customer Network activities for malicious activity and blocks such activity when identified.
- **URL/Web Filtering.** URL or Web Filtering helps Customer to prevent computer users from viewing inappropriate web sites or content, or to prevent access of known malware hosts, checking the origin or content of a web page against a set of rules provided by Customer and the Third Party security provider.
- **Antispam.** Antispam detects e-mail messages that are unsolicited advertisements, *i.e.,* spam, and divert the messages to a spam folder (junk mailbox).
- **Antivirus.** Antivirus detects and removes malicious software through an antivirus engine that is frequently updated as new threats emerge.
- **IP Sec VPN.** IP Sec VPN provides a protocol suite for secure IP communications by authenticating and encrypting each IP packet of a communication session, utilizing a set of security protocols at the network or packet processing layer of network communications.

5.2.2.7 **Virtual Network Services - SD WAN and Software Defined Secure Branch (SDSB).** With VNS – SD WAN and VNS – SDSB (collectively VNS SDN or SDN), Verizon will provide intelligent and programmable, rules-based WAN routing services, optional additional services, centralized management, and integration through APIs. The features packages associated with VNS – SDN are

installed as a VNF in the Hosted Network Services platform and/or in the public cloud. Available services and options are based on vendor license capabilities, regional availability, and Verizon support capabilities, and may include the options below. Customer may request a list of the services and options included in each vendor package by contacting Customer's account manager.

- **SD WAN Function.** This service feature maps Customer application traffic over any combination of the internet, wireless or MPLS networks in accordance with Customer defined routing policies that classify its traffic into application categories and define minimal requirements for loss, delay, and jitter per traffic or application group, such that application traffic can be routed over the preferred path as defined by Customer which can be updated by Customer either manually or automatically. Policies are customizable on an application-by-application basis.
- **Quality of Service (QoS).** With QoS, Customer has the ability to define parameters to prioritize handling of different types of business data.
- **Centralized Enforcement of Access Control and Network Policies.** Any changes to a policy will be applied across the Customer Network automatically.
- **Encrypted Control and Data Traffic.** The traffic can be encrypted end to end for additional protection of the data as it traverses the network.
- **Security.** Based on the vendor license and operating system and upon Customer's Order, Verizon will provide security functions that may include layer 4 firewall, next generation (layer 7) firewall, intrusion detection, intrusion prevention, anti-virus, content filtering features, and zone based firewall functionality. For select vendor licenses, Customer can change certain policy settings for select security and unified threat management (UTM) functions for Managed VNFs under the Full or Co Management service levels as described below. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.
- **Remote VPN Access.** Verizon will configure the Remote Access Server (RAS) Gateway to enable VPN tunneling and encryption between the RAS Gateway and a Remote Access Client on a remote user's endpoint device. This function enables Customer's users to remotely access the internet and corporate networks. Verizon manages the RAS Gateway but does not manage the Remote Access Client or the remote user's endpoint device.

5.2.2.8 **Virtual Network Services – Session Border Control (VNS - SBCaaS).** Verizon will provide security for VoIP traffic. In addition to VoIP, VNS - SBCaaS includes features that Customer may use for protocol interworking, quality of service (QoS) measurement and enhancement. The VNS – SBCaaS will be supported on the HNS environment. VNS - SBCaaS includes call routing. Additional features which may be available are as follows:

- **Basic Call Routing Engine.** Call routing based on called and calling party, trunk groups, codec filtering and Call Route Prioritization.
- **Advanced Call Routing.** Support for advanced routing features including routing based on, SIP username/URL routing, route prioritization including time of day, day of week, call screening and blocking.
- **Signaling Services.** Support for industry standard signaling protocols, such as SIP, SIP I/T and H.323 in addition to protocol interworking.
- **Media Services.** Border-based media control services such as, Network Address Translation (NAT) and Network Address Port Translation (NAPT) traversal, media anchoring, transcoding, DTMF detection and insertion.
- **Security.** Network protection including session aware firewall functionality, denial of service (DoS) and Distributed Denial of Service (DDoS) protection, topology hiding, rogue RTP protection, Malformed packet protection, media encryption (SRTP) and Signaling encryption (IPsec, TLS).
- **QoS.** Quality of Service network and prioritization policies including Bandwidth Management, Type of Service (ToS) Packet Marking, and Call Admission Control.

5.2.3 **WAN Analysis.** WAN Analysis includes support for SDN reports for Verizon-supported vendors. WAN Analysis is not included for certain vendor software license levels under Software Defined Secure Branch that do not include SDN functions.

5.2.4 **VNF Full Management.** VNS Full Management includes the following:

- **Monitoring and Management.** Verizon provides proactive monitoring of all Managed VNFs. Verizon will monitor the Managed VNFs via use of the simple network management protocol (SNMP) and internet control message protocol (ICMP commonly called a "ping") for status and error conditions (e.g., SNMP trap messages). If a problem is software-related, Verizon will remotely bring the Managed VNF back to operational condition. Management of Managed VNFs includes management of applicable software licenses that may be configured on Managed VNFs.
- **Notification.** Verizon provides fault notification for the Managed VNFs. Verizon will create a Trouble Ticket and attempt to notify Customer's designated point of contact via e-mail or automated phone message within 15 minutes of Verizon's determination of a Managed VNF or transport failure. Following the creation of a Trouble Ticket, Verizon will i) if the fault is due to a Verizon connectivity service, troubleshoot the data networking circuit until the problem has been verified as fixed and the ticket will then be closed, or ii) if the fault is due to causes other than a Verizon connectivity service, inform Customer of the fault and upon resolution by Customer, the ticket will be closed.
- **VNS Customer Portal.** Customer will have access to a VNS Customer Portal access via the VEC. Customer is limited to 10 user accounts and is responsible for ensuring that all users understand and comply with Verizon's confidentiality requirements.
- **Change Management Activities.** Certain change management activities shown on the VNS Customer Portal as Standard Change Management are provided at no additional charge.
- **Managed VNF Enhanced Features.** The features are provided as an embedded operating service feature at no additional charge. Verizon will provide relevant software patches and upgrades as provided by the Managed VNF manufacturer from time to time for installation during a scheduled maintenance period.
  - **Managed VNS Support for DNM.** When Customer places an Order for DNM, changes to the CE router are manually made by Verizon with concurrent changes to the PE router. Verizon's objective for completion of the CE changes is 72 hours from Customer's placement of the Order. Semi-automated support provided subject to the following:
    - Only one change per Business Day per CE router is permitted.
    - Not more than four changes per month per CE router are permitted.
    - Changes can only be submitted Sunday 12:01 PM Eastern United States time through 5:00 PM Eastern United States time.
    - Not more than five changes per Business Day per Customer Network are permitted.
    - The dynamic bandwidth schedule change feature is not available.
- **SDN Policy Management.** If Customer has Full Management, Customer can make certain policy changes using the VEC or the vendor management console for select SDN service features. Additional service features will be added to the VEC from time to time. Verizon, working with Customer, will set the initial policies during implementation. Additionally, Verizon will, from time to time, set policies that are not accessible to Customer. Customer may obtain a list of available policies by way of the VEC or API Gateway or by contacting Customer's account manager. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.

5.2.5 **Co Management Service Level (Co Management).** Co Management provides the same management functions as the Full Management with the exception of the following:

- **SDN Policy Management.** If Customer has Co Management, Customer can make certain policy changes using the VEC, API Gateway, or the vendor management console for select SDN service features. Additional service features will be added to the VEC and API Gateway from time to time.

Verizon, working with Customer, will set the initial policies during implementation. Additionally, Verizon will, from time to time, set policies that are not accessible to Customer. Customer may obtain a list of available policies by way of the VEC or API Gateway or by contacting Customer's account manager. Customer acknowledges and agrees that policy changes made by Customer may negatively impact application traffic, security, and UTM function performance.

6. CUSTOMER PREMISES EQUIPMENT (CPE) AND RELATED SERVICES (Back to Site Type Details)

6.1 **Service Definition.** As set forth in Customer's Order, Verizon will provide Customer CPE and CPE Services including: a) either title to, or use of, CPE, b) license for use of Software, c) deployment of CPE, Software, or Customer furnished equipment (CFE) or d) maintenance for CPE, Software, or CFE, subject to availability. Title to, or use of, CPE plus the license to use the associated Software are collectively a "System".

6.2 **Title and Use of Systems.** Verizon may provide a System to Customer via: a) purchase b) a monthly recurring plan (MRP) basis for use by the Customer or c) a Direct Third Party Arrangement.

6.2.1 **Purchase.** Where a System is purchased, Verizon will provide Customer title to hardware and license to related Software. Verizon keeps title until fully paid, at which point title passes to Customer. Customer shall not give anyone else other than a Customer Affiliate, a security interest in the System, or allow a lien to be placed on it, until Customer has paid Verizon in full. As between Verizon and Customer, Verizon retains all right, title and interest in and to all Software provided by Verizon. For Systems to which Customer holds title, upon replacement, Customer will hold title to the exchanged System or part thereof and Verizon will hold title to the replaced System or the part of a System that was replaced.

6.2.2 **MRP.** Verizon provides Customer use of hardware and a license for its Software and Customer does not have title to the System or any of its sub-elements. Customer waives and releases any right, title and interest that it may have in a System, other than its right to use the System. Customer will not: (a) assign, transfer or otherwise dispose of any System or its individual elements, or any right or obligation relating to the System and/or CPE Services, (b) provide a right of use of any of the System and/or CPE Services to any other person, or (c) create, incur, or permit to exist any security interest, lien or encumbrance with respect to any MRP System.

6.2.3 **Direct Third Party Arrangement.** Where Customer has entered into a separate financing arrangement with a third party to purchase a System, Verizon may agree to accept payments from that third party on Customer's behalf. (Direct Third Party Arrangement). Customer remains responsible to Verizon for payment and other obligations under these Service Terms if they are not fully satisfied by the third party. Verizon will keep title until the System is fully paid, then title shall pass to Customer's third party finance company where the System is purchased and delivered within the same jurisdiction. For other Direct Third Party Arrangement transactions, title passes to the third party finance company at the designated delivery point.

6.3 **Site Preparation Services.** With CPE Site Preparation Services, Verizon will provide (a) CPE site survey (Site Survey) or (b) inside wiring (Inside Wiring) and extended demarcation wiring (Extended Demarc) (Inside Wiring and Extended Demarc collectively referred to as Wiring Services). Site Preparation Services also includes certain Custom Site Services enabled by a Statement of Project Deliverables entered into between the Parties. The Site Preparation Services ordered will be provided at the locations shown on the applicable Order.

6.3.1 **Available Versions of Site Preparation Services**

6.3.1.1 **Site Survey.** A Site Survey consists of a physical on-site survey of the proposed location for installing CPE and report on that location's suitability for that purpose with respect to environmental conditions (e.g., temperature, humidity, availability equipment cabinets/racks/closets), the availability of an appropriate power source, and the need for any additional inside wiring.

6.3.1.2 **Wiring Services.** The following are the types of Wiring Services:

- Inside Wiring services consist of the installation of wiring to connect two items of Customer equipment.
- Extended Demarc services consist of the installation of wiring that extends wiring from the circuit LEC demarcation point (the point at which the LEC's regulated network ends and Customer's inside wire responsibility begins) to a point adjacent to Customer's network or equipment, as directed by Customer.

6.3.1.3 **Custom Site Services.** Custom Site Services includes Site Surveys, Installation Services, Decommissioning Services and certain other on Site services as defined in a Statement of Project Deliverables and further defined in the related Order.

6.3.2 **Supplemental Site Preparation Services Terms**

6.3.2.1 **Requirements and Limitations for Site Surveys.** Site Surveys are subject to the following limitations:

- All Site Surveys must be conducted on-site.
- The time to complete the on-site Site Survey and generate a report must not exceed two hours.
- All on-site work must be indoor work.
- All on-site work must be completed in one site visit.

Site Surveys do not include:

- Any logical data collection for any networking device or terminal access to any networking device.
- Cabling or circuit tracing.
- Physically moving any equipment from its current location (e.g. unplug or un-rack any equipment) in order to gather the necessary data.
- CAD/Visio drawings in the Site Survey report

6.3.2.2 **Requirements and Limitations for Wiring Services.** Wiring Services are subject to the following limitations:

- Following the completion of Wiring Services, Customer will own and be responsible for the care and maintenance of the installed wire, and any associated hardware and connectors installed as a result of the Wiring Services.
- Wiring Services are only available in the United States.
- All work must be standard, non-custom indoor work, requiring no special equipment.
- All work must be completed in one site visit.
- New wire will be delivered as specified by Customer at time of order and identified on Customer's quote. Verizon will use appropriate materials for the application if Customer does not specify the category of performance at the time of order.
- The length of new wire for Customer will be described in Customer's quote and will not exceed a total length of 150 feet.
- Wiring will not be installed between floors and must not be more than 12 feet in height from the ground or floor.
- Verizon is not responsible for moving furniture, modifying fixtures or other site changes.
- Work may involve surface installation or installation through available ducts or other reasonably accessible conduits.

6.3.2.3 **Requirements for Custom Site Services.** In addition to any specific requirements outlined in a Statement of Project Deliverables, Custom Site Services are subject to the following requirements and limitations:

- **Order Terms and Conditions.** Each Custom Site Services project is governed by an Order and the Agreement. Within an Order, the order of precedence (in descending priority) is: (a) the relevant Order and (b) the Statement of Project Deliverables. Verizon will document any request to change a Statement of Project Deliverables in a proposed change order to be executed by the Parties.
- **Verizon IP.** Verizon retains ownership, including worldwide intellectual property rights, in any and all: (a) reports or other deliverables specified in the applicable Statement of Project Deliverables and related Order (Deliverable), other than the copyright to any part of a Deliverable that is unique to Customer, first created by Verizon in the performance of a project, and delivered to Customer under the Order; and (b) underlying materials owned by Verizon that are incorporated into any Deliverable, such as templates, forms, and methodologies, and that are not themselves specified as part of the Custom Site Services that are incorporated into any Deliverable, such as templates, forms, and underlying methodologies.

6.3.3 **General Site Preparation Service Provisions**

6.3.3.1 Site Preparation Services are available within the 48 contiguous United States. Site Preparation Services in Alaska, Hawaii, and other countries are available with Verizon pre-approval and may be subject to a Statement of Project Deliverables.

6.3.3.2 Site Preparation Services are performed between the hours of 8:00 a.m. and 5:00 p.m. local time, during a business day, excluding Verizon observed and local holidays (Business Hours). Site Preparation Services to be performed outside of Business Hours must be ordered via a Statement of Project Deliverables as a Custom Site Service or a statement of work with Verizon Professional Services.

6.3.3.3 Verizon will provide Customer notice indicating the date Site Preparation Services are complete (the In-Service Date). Should Customer request delay of Site Preparation Services, or should Site Preparation Services be delayed as a result of Customer's action or inaction, Verizon may store the CPE, or any portion thereof, at Customer's risk and expense. Wait time in excess of 30 minutes at a Customer Site may result in an additional charge at Verizon's current time and material rate.

6.3.3.4 Verizon will attempt to meet Customer’s requested In-Service Dates; however, Verizon cannot guarantee any In-Service Date. In-Service Dates are subject to the availability of materials and resources.

6.3.3.5 Verizon will use reasonable efforts to avoid interruption of Customer’s network service during Business Hours. If it is necessary to interrupt network service during Business Hours, Verizon will notify the Customer contact at least 48 hours in advance.

6.3.3.6 Customer will have five Business Days after the In-Service Date to test Site Preparation Services (the Test Period). Customer may indicate its approval of the Site Preparation Services by its signature on the Verizon-provided acceptance document or other mutually agreed upon means (Customer Acceptance). Customer will document any issues with Site Preparation Services in writing to Verizon and provide those issues to Verizon within the Test Period. Upon receipt of the issues list, Verizon will have 10 Business Days to respond and remediate any issues, as required. Customer’s use of Site Preparation Services for any other purpose than testing will be deemed to constitute Customer Acceptance. Additionally, Customer Acceptance for Site Preparation Services will be deemed to have

occurred if the Test Period passes without notification of issue or acceptance by Customer. The Service Activation Date for Site Preparation Services occurs upon Customer Acceptance.

6.3.3.7 **Service Order Changes.** Customer may change, add or delete specific Site Preparation Services on a Service Order at any time. Customer may order such change, addition or deletion by a signed or unsigned request as specified in this section and Verizon will provide an order change form documenting each addition and the estimated cost. Customer may also cancel an entire Service Order at any time and Customer will pay Verizon for any Service Order in progress based on the percentage of the Service Order, or other appropriate measure of work then completed (without limiting other remedies under the Agreement or the law). In certain circumstances, Verizon may also initiate an order change, for example when the actual work required exceeds the quote. In such cases, Verizon will provide an order change form documenting each addition and the estimated cost.

6.4 **Deployment Services.** Verizon provides staging, installation, move/add/change, de-installation, and/or custom services ordered by Customer. Verizon provides Deployment services during Business Hours.

6.4.1 **Standard Deployment Features.** Verizon will stage and then ship the System to the Customer Site(s). Verizon will unpack and verify CPE with package documentation, record serial numbers, load operating system and incremental operating system updates, apply Customer-provided asset tags, power-up test, repackage, and ship (as applicable). Verizon will configure the System as requested by Customer.

6.4.2 **Optional Deployment Features**

6.4.2.1 **Installation.** Verizon will install the System at the Customer Site(s), verify System power-up and operation of network interfaces. Verizon will install Service Equipment. Verizon will also perform on-Site tests to ensure management applications are properly applied and operational.

6.4.2.2 **Move, Add, Change (MAC)**

- **Move.** Verizon will de-install applicable equipment designated by Customer from the designated Customer Site and then install the same equipment in the newly designated Customer Site within the same building, as shown in the applicable Order. Customer will provide packaging to protect the equipment to be moved.
- **Add.** Verizon will install the System at the Customer Site.
- **Change.** Verizon will deliver the System components required to implement Customer's requested change to the Customer Site.

6.4.2.3 **De-installation.** Verizon will power down and pack equipment in Customer-provided packaging. Premises cables will be left in place.

6.4.2.4 **Custom.** Custom Deployment Services not included as a part of the standard may be provided as described in a statement of work (SOW) mutually agreed to by the parties.

6.4.2.5 **Customer-Furnished Equipment.** Verizon will provide Deployment services for approved Managed Devices that were originally furnished by the Customer. Such Managed Devices shall also be treated as a System for that purpose.

6.5 **Maintenance Services.** Verizon offers Verizon-branded maintenance as well as maintenance services through Third Parties.

6.5.1 **Verizon-branded Maintenance (Verizon Care).** With Verizon Care, Verizon will repair or replace defective covered Systems. Verizon offers several levels of Verizon Care, as indicated below.

Support Level	Response Time
24 x 7 Onsite	4 hours
8 x 5 Onsite	Next Business Day
8 x 5 Remote	Next Business Day
8 x 5 Remote	Reasonable Efforts

- Verizon will isolate System defects of which it has received notice from Customer.
- Verizon will repair or replace defective Systems or parts as needed.
- Where Systems or parts are replaced, Verizon will use new or like new replacements of like kind and functionality from a manufacturer of Verizon's choice.
- Verizon will restore the System to its prior working condition, except that Verizon will restore software to the last configuration implemented by Verizon, or to a later configuration if provided to Verizon by the Customer.
- Verizon will provide Verizon Care during the period of time that the manufacturer supports the affected System. After that, Verizon will use reasonable efforts to provide Verizon Care until Customer upgrades or replaces the affected System.

6.5.1.1 **Optional Maintenance Service Feature - Maintenance Reporting (also known as Verizon Advanced Care Reporting).** Verizon provides reports on Customer's installed Cisco network equipment inventory under Verizon Care.

6.5.2 **Maintenance Coverage.** Customer will confirm with Verizon that Verizon is able to provide Maintenance Service(s) before ordering if: (a) Verizon did not install the equipment or software intended to be covered by maintenance, (b) the equipment or software is out of warranty or out of Third Party or Verizon-provided maintenance coverage, or (c) Verizon has not provided Maintenance on the equipment or software for more than 60 days. Verizon will notify Customer if Verizon finds the CPE is not in good working order and/or not in compliance with all applicable manufacturer specifications and therefore cannot be under Maintenance Service. Customer may request that Verizon upgrade and/or repair such CPE for an additional cost, as set out in an Order, at Verizon's then current rate, so such CPE can be brought under Maintenance Service. Additionally, Verizon may recommend corrections or improvements to operating environments or configuration to be performed at Customer's cost and expense. Failure to comply with Verizon's recommended corrections or improvements may cause Verizon to reject the System (or the applicable part thereof) for Maintenance Service, or remove it from the Maintenance Service.

6.5.3 **Accrual for Maintenance Services.** Maintenance Services start 30 days after the Activation Date. After the initial maintenance period stated in the Order ends, Verizon will continue to provide that Maintenance Service(s) at the then current rate available with Verizon, unless or until Customer and Verizon agree to a new Order.

6.6 **MRP Terms**

6.6.1 **MRP System Generally.** MRP requires Deployment, Implementation, and Verizon Care or other Maintenance. All moves, modifications, or relocations of a System must be performed or authorized by Verizon. Systems may not be moved across international borders. The Service Commitment for the System under MRP begins upon the Activation Date, as specified in the Order.

6.6.2 **Event of Loss.** Customer will promptly notify Verizon in writing if any part of the System becomes unfit or unavailable for use due to an Event of Loss. Customer may within 60 days of an Event of Loss a) choose to repair or restore the System to the condition it had prior to the Event of Loss, b) replace the

System with Like Equipment, or if 60 days have passed, c) pay the System Casualty Value as of the date of the Event of Loss and title to such System will pass to Customer upon such payment.

6.6.3 **MRP Early Termination.** Notwithstanding any other provision in the Agreement, if Customer terminates MRP early for any reason (including without limitation a Force Majeure Event) except for Cause, or if Verizon terminates for Cause, Customer will: (a) pay to Verizon an amount equal to the aggregate of all remaining monthly recurring charges (MRC) as set forth in the Order from the date of termination through the end of the Service Commitment; and (b) return of the System as provided below. Customer acknowledges that this amount is liquidated damages reflecting a reasonable measure of actual damages and not a penalty. Customer agrees that as between Verizon and Customer Verizon has the right to determine which portion of Customer's MRP charges represents CPE Services (e.g., Maintenance) and which represent the System; this information will be detailed in the Customer's SOF.

6.6.4 **Return of Equipment.** Upon any termination of MRP, Customer will return the complete System at its expense, to Verizon or Verizon's designee, a) no later than 15 Business Days after the termination is effective; and b) at the location indicated in writing by Verizon. Failure to return the System within the above time period constitutes termination for Cause. After return, the System will be inspected and certified acceptable for the manufacturer's maintenance service. For any MRP System not in good repair, condition and working order, excluding ordinary wear and tear, Customer will pay Verizon the reasonable expenses incurred by Verizon in bringing the System up to that status, but not in excess of the System Casualty Value.

6.7 **Cancellation.** A Customer canceling any Order or SOW for convenience before the Activation Date is subject to cancellation Charges, based on the stage the CPE Service or System has reached toward the Activation Date, which may include Charges: (a) for all System elements and CPE Services provided up to the date of cancellation; (b) for all expenses incurred up to the date of cancellation, including but not limited to the costs of canceling purchase orders, shipping Charges for the return of System elements, if permitted by Verizon, removal of System elements and other contractual obligations made by Verizon to meet its obligations under the Agreement, and (c) a minimum restocking fee of 35% of the price of the System, as shown on the applicable quote, Order for any System elements returned, provided such return is permitted by the provider of the System element, and as authorized by Verizon. Customer acknowledges that this amount is liquidated damages reflecting a reasonable measure of actual damages and not a penalty.

6.8 **Risk of Loss**

6.8.1 **Risk of Loss to a System.** Risk of loss or damage to a System delivered by Verizon or Verizon designee to Customer passes to Customer on the earlier of delivery to the Customer Site, or co-located in Verizon's facilities, or when Customer takes shipping responsibility (e.g., when Customer takes over shipping from point of import). Customer will give notice to Verizon if the System is lost or damaged as soon as Customer becomes aware of it.

6.8.2 **Risk of Loss to CFE.** Risk of loss or damage to CFE initially passes from Customer to Verizon when delivered to the Verizon-designated location, or Verizon takes shipping responsibility, whichever is earlier. Then, risk of loss or damage to CFE passes back to Customer when delivered by Verizon to the Customer Site or when Customer takes shipping responsibility, whichever is earlier.

6.8.3 **CPE or System Manufacturer End of Support.** In the event the manufacturer discontinues all or part of Software or CPE and/or associated support, Verizon will only provide CPE Services on the affected CPE for the period of time that the manufacturer continues to provide support. Verizon will use reasonable efforts to provide CPE Services on the affected CPE or Software until Customer upgrades or

replaces such CPE or Software that has been discontinued. Verizon may in its discretion agree to continue to provide support after the manufacturer discontinues support. Additional Charges for such services may apply as determined by Verizon.

6.9 **Insurance.** For any Systems owned by Verizon, Customer will obtain and maintain: a) commercial general liability insurance in an amount not less than $2,000,000 per occurrence, with a separate $4,000,000 annual general aggregate; and b) all risk property insurance against an Event of Loss, for the full replacement cost value of the System without a coinsurance provision, in such form and with such insurers having an A.M. Best rating of at least A - VII or an equivalent rating from a recognized rating agency or, as is otherwise reasonably satisfactory to Verizon. Each insurance policy will waive the subrogation rights of the insurance company against Verizon and name Customer as insured. Additionally, for MRP, Verizon and its successors and assigns will be named as additional insureds and loss payees as their interests may appear on a primary and noncontributory basis and the policy shall provide that it may not be canceled or materially altered to the detriment of Verizon without at least 30 days' prior written notice thereof being given to Verizon. Customer will provide Verizon with a certificate of insurance evidencing the coverage required by these terms.

6.10 **Property Taxes.** In addition to any Taxes or Governmental Charges, Customer will pay Verizon the amount of any personal property taxes incurred on the System, if applicable.

6.11 **Third Party Services**

6.11.1 **Service Definition.** With Third Party Services, Customer is receiving maintenance or other services from a Third Party at the level of service indicated in the applicable Third Party service agreement (TPSA) or has purchased a System from Verizon pursuant to the purchase terms provided herein.

6.11.2 **Standard Service Features.** The TPSA or the Third Party end user license agreement (EULA), as applicable, governs Customer's use of, and access to, the relevant Third Party Services. The TPSA or EULA is an agreement directly established between Customer and Third Party and is generally available on the vendor's website listed below. Verizon is not a party to Customer's TPSA or EULA. When ordering Third Party Services from the vendors listed below, Customer acknowledges having read and accepted the applicable TPSA or EULA.

- **Cisco Services.** www.cisco.com/go/servicedescriptions
- **Juniper Services.** www.juniper.net/support/guidelines/990216.pdf
- **Polycom Services.** www.polycom.com
- **Riverbed Services.** www.riverbed.com/license
- **Ribbon Communications.** www.ribboncommunications.com/
- **Versa Networks.** www.versa-networks.com/documents/Versa-Networks-EULA-End-UserLicense-Agreement.pdf.

6.11.3 **Third Party Services Disclaimer.** Unless otherwise provided in the terms of a SOF, SOW or elsewhere in the Contract**,** Verizon provides no warranties, guarantees or assurances of quality for Third Party Services. Customer acknowledges that it is not relying on any representations or warranties made by a Third Party vendor except for those warranties applicable to Customer expressly made in a EULA.

6.12 **System Export Terms**

6.12.1 **Purchase and Direct Third Party Arrangement.** Where a System is purchased and delivered within the same jurisdiction, delivery will be FOB Destination, freight paid and added to the invoice. Where a System is purchased locally, but delivered from another jurisdiction, provided Verizon has a legal presence that can serve as importer of record, delivery will be DDP. Otherwise, in all other

circumstances, delivery will be DAP.

6.12.2 **MRP.** Provided Verizon has a legal presence and serves as importer of record, System delivery to Customer Sites will be DDP. Otherwise, delivery will be DAP.

6.12.3 Where the delivery term is DAP, Customer will act as importer of Record and pay all import duties, fees, and taxes, if any, using Customer's Tax Registration Number. As importer of record, Customer may be subject to the obligations placed on 'Producers' under the Waste Electrical and Electronic Equipment Directive 2002/96/EC or similar local directives or regulations. Where the delivery term is DDP, Verizon will act as importer of record, and pay all applicable import duties, fees, and taxes.

6.12.4 **Compliance Obligations.** Consistent with its obligation to comply with applicable law, including restrictions on the export, import, and use of certain hardware, software, and technical data provided under this Service Attachment, in particular Customer commits not to:

- export, re-export, transfer or retransfer the System and/or maintenance or deployment without first complying fully with all applicable export laws and obtaining any and all required export, import and/or sanctions licenses.
- conduct business with any company, individual, organization or country that is subject to trade sanctions, embargoes, or other restrictions under applicable laws, or for any end-use prohibited under applicable law without complying fully with all applicable law and obtaining any and all required export, import and/or sanctions licenses.

6.12.5 **CPE for End-Use in China, Russia and Venezuela.** Without limiting the foregoing or its obligations to comply with applicable export law, Customer specifically represents that the CPE and/or System will not be used by a military end-user or for a military or any other prohibited end-use, as defined by the US Export Administration Regulations, in China, Russia or Venezuela.

6.13 **Warranty**

6.13.1 **CPE Maintenance, Deployment, and Site Preparation Services.** Verizon warrants it will perform the CPE maintenance, deployment, or Site Preparation Services (excluding Third Party Services) under this Service Attachment in a good and workmanlike manner. Customer's remedy for a breach of this warranty is for Verizon to re-perform the defective work and any Service Credits due under the applicable SLA. Verizon warrants that any cables and connectors between the System and any other equipment on Customer's premises that are provided by Verizon will be in good working order for a period of 30 days after installation unless the failure of the cables and connectors is caused by Customer's misuse or abuse. For Site Preparation Services, if any material (i.e., wire or connectors) provided by Verizon as part of Wiring Services fail solely due to a defect in Verizon's workmanship or materials within one year after installation, Verizon will repair or replace (at its discretion) the failed material. These warranties do not cover damage to or malfunction of the System caused in whole or in part by Customer or third parties through other than normal use of the System or caused by an event external to the System. If Verizon dispatches a technician in response to a Customer warranty claim and determines that the material failed for a reason other than a defect in Verizon's workmanship or materials, or if Verizon finds no trouble, Customer will pay a No Fault Found charge (NFF Charge).

6.13.2 **Systems.** Verizon will transfer or pass through to Customer the benefit of any and all manufacturer warranties capable of being transferred or passed through on the same terms as offered by the manufacturers. In China where a manufacturer may be required to obtain licenses and permits for equipment, Verizon does not warrant that the manufacturer has obtained all relevant licenses and permits for the provision of the System. If the System is not under Maintenance Services and becomes defective within the manufacturer's warranty period, Customer may contact the manufacturer directly for their

warranty policy.

6.13.3 **MRP Systems.** For MRP, Verizon or its assignee makes no warranty or representation, express or implied, including but not limited to fitness for a particular purpose, merchantability, quality, design, condition, capacity, suitability or performance of the System, the material and workmanship thereof or as to intellectual property rights, it being agreed that all such risks as between Verizon and Customer are to be borne by Customer alone and at Customer's expense. To the extent permitted by applicable law, Customer waives any and all rights or remedies conferred upon a lessee under section 2a-508 through 2a-522 of the United States Uniform Commercial Code or similar provisions under another commercial code or statute.

7. CUSTOMER RESPONSIBILITIES FOR NAAS (Back to Site Type Details)

7.1 General Customer Responsibilities

- **Customer Network.** Unless otherwise specified in the Agreement, Customer shall be responsible for obtaining, installing, inter-connecting, and maintaining all equipment, necessary for inter-connection with the Customer Network or otherwise for use in conjunction with NaaS. Customer will be the tenant for the public cloud space when VNFs are located on VMs in a public cloud. Customer must provide full access to Verizon to monitor and manage VNFs on the public cloud. Customer is responsible to resolve issues related to the public cloud infrastructure.
- **Forms.** Customer will comply with any instructions given by or on behalf of Verizon, including providing complete and accurate information to Verizon regarding the Customer Network. Where the Third Party or Verizon requires certain forms to be signed to process an Order (e.g., warranties of agency, letters of agency, right of entry, service terms, etc.), Customer shall sign such forms promptly or, if permitted by the Third Party, Customer authorizes Verizon as Customer's agent to sign such forms on Customer's behalf.
- **Toll Bypass.** The Parties will not use NaaS to bypass international/long distance charges in contravention of applicable law or regulation, specifically inclusive of telecommunications law and regulations in any country where NaaS is used.
- **VoIP Restrictions.** Customer acknowledges that a number of jurisdictions impose restrictions and/or licensing or registration conditions for VoIP transmission over the network. Customer shall comply with such regulations, as applicable.
- **Customer Equipment.** Except as otherwise set forth in the CDD or this Agreement, Customer is responsible for providing necessary Customer Equipment to connect the Customer Network to the Service Equipment and will work with Verizon to ensure that such Customer Equipment is fully compatible with the Service Equipment.
- **Internet Protocol Assignments.** Customer will utilize at least 80% of any IPv4 addresses obtained from any source prior to Customer's request for IP addresses for a new circuit order or for additional resources supporting an established circuit. Customer will utilize at least 80% of the requested IP addresses within 12 months of the point of issuance of the requested IP addresses. Customer acknowledges that IP addresses assigned to them will (a) be associated with the Internet Service Location, (b) remain non-portable, and (c) will be returned to Verizon upon circuit termination.
- **Cross Border Connection.** Customer acknowledges that where IDS is used in conjunction with a Cross Border Connection, IDS: (a) may be impacted to the extent its functionality depends on location; (b) is provided in and compliant with the laws of the country on the Internet Service Location. Customer represents and warrants that it, and its end users, when using the IDS, will at all times comply with all applicable laws and regulations in the countries of both the Customer Site and Internet Service Location, and will assist Verizon where required in its compliance obligations; and (c) will only be used for: (i) the primary purpose of being an access to or a component of its global corporate communications network; and (ii) where necessary, for the secondary purpose of access to the public Internet by its employees for business related purposes such as using cloud based business applications. IDS with Cross Border

Connection usage is not permitted for guest WiFi.

- **Installation, Implementation, Site Preparation Services, and Maintenance Support.** Except as otherwise provided in the Agreement, Customer will provide the following support to enable Verizon to complete installation implementation and maintenance activities:
  - Allow Verizon to inspect, test, repair, and replace Managed Devices, including suspending normal operations of the Managed Device to test, repair, and replace CPE as needed. Verizon will use reasonable efforts to minimize the impact of its work on the Customer Network.
  - Customer shall (i) grant or shall procure the grant to Verizon of such rights of entry to each Customer Site, including any necessary licenses, waivers and consents and (ii) respond promptly to notice from Verizon requiring Customer action, such as to coordinate Verizon entry to Customer Site needed for a change in facilities at a mutually convenient time within 30 days of such notice from Verizon.
  - Provide Managed Device interconnection requirements, non-Verizon facilities and permits.
  - Provide full access rights for VMs on the public cloud as necessary.
  - Provide space and power for Verizon terminating equipment if required to deliver service.
  - Ensure all facilities and internal cabling connect the Customer Site to the Demarcation point.
  - Provide notice to Verizon of the existence and location of wiring or any other risk factors at the Customer Site which may affect installation.
  - Remove existing equipment that may in Verizon's discretion interfere with provision of NaaS.
  - Ensure that there is no presence of any asbestos or other hazardous substance (as defined by any applicable hazardous waste or environmental law or regulation) or hazardous conditions at any Customer Site. Ensure conformance with any applicable codes, regulations, and laws, including but not limited to, electrical, building, safety, and health. If Verizon representatives encounter hazardous substance or condition, Verizon may immediately suspend performance of Services and Customer agrees to take all necessary steps to remediate such hazardous substance or condition, at its own expense. If Customer does not adequately remediate the hazardous substance or condition, Verizon may terminate for Cause.
  - Provide licensed copies of operating system and applications software.
  - Install or re-install software not provided by Verizon. Customer has all responsibility for such software (e.g., charges and license fees, version level maintenance and upgrade, resolution of problems, etc.)
  - Control all activities associated with Customer Equipment, including without limitation, changes, additions, or deletions of devices made by any non-Verizon technicians;
  - Properly dispose of, or in the European Union return to Verizon for disposal, all decommissioned equipment in accordance as instructed by Verizon and in accordance with applicable law.
  - Maintain backup copies of the original software, current platform configurations, and operating system and make copies available to Verizon when requested to aid in troubleshooting or issue resolution.
  - Immediately notify Verizon of any anticipated delay including a delay in building availability or inability to meet any of the above listed requirements. Where Verizon is unable to provide services due to a Customer related delay Verizon shall be entitled to invoice additional charges at its then current time and material rates and/or rescheduling fees, as applicable, (each available on request) for any time and resources expended by Verizon.
- **Special Construction or Off Net Build.** If, after an Order is placed, Verizon finds that Third-Party special construction services are needed to build, configure or install any additional facilities and/or equipment necessary for Verizon to provide Service, Verizon will notify the Customer of any such special construction Charges that are payable. Upon customer acceptance, special construction Charges may be billed separately and prior to completion of a circuit. If Customer does not accept the special construction Charges or changes in special construction Charges, Customer may terminate the Order(s) affected by the special construction Charges, subject to payment of any Third Party provider cancellation charges incurred by Verizon**.**
- **Customer Initiated Site Changes.** Customer shall notify Verizon via a Change Order of any change at a Customer Site affecting NaaS (e.g., powering down the Customer Site, Managed Device, Network

Terminating Unit (NTU), resetting equipment, or re-cabling).

- **Detected Failures**. Customer will report failures it detects and provide any related information to the appropriate Verizon Customer service contact.

7.2 **Customer Responsibilities for Managed Devices**

- **Physical Verification of Managed Devices.** Upon Verizon's request, Customer will reboot the Managed Devices, provide the LED light statuses of any third party telecommunications provider NTU where applicable, verify equipment power, verify if all cables are securely connected, and insert a loopback plug.
- **Accessing Managed Devices.** Unless otherwise directed or allowed by Verizon, Customer shall not access, configure, amend, modify, repair or remove Managed Devices. Customer grants to Verizon all access rights to Managed Devices as required to provide NaaS. Customer must provide full access to Verizon to monitor and manage VNFs on the public cloud and other elements of the virtual network such as express route gateway and BGP end point virtual routers.
- **In-Band Access.** Customer must:
  - not add, move or remove devices, licenses or administrators to or from the applicable Customer Portal, in order to ensure that devices, licenses and administrators are those provisioned by Verizon, and shall not modify the administrators that are used for the provisioning and fault monitoring interface with Verizon's systems. At all times, Verizon must have write administrative access to Managed Devices for provisioning and management through the applicable Customer Portal.
  - provide Verizon read access to the Managed Device configuration, and maintain any software licenses associated with Managed Devices. Customer will provide Verizon the Simple Network Management Protocol (SNMP) read/write community string to any Managed Device whose configuration it wants Verizon to automatically back up.
- **Out of Band Access (OOB).** If required by Verizon, Customer will provide OOB Access to each Managed Device over a separate PSTN line (analog OOB) or wireless connection (wireless OOB). Customer will not interfere with OOB Access or use it for any other purpose than enabling OOB management by Verizon. Where OOB Access is provided by a Third Party, the charges for OOB are separately paid by Customer to that Third Party. Where Verizon provides the OOB Access the Charges will be included on the invoice.
- **Change Management Request.** Customer will notify Verizon via Customer Maintenance Change Management Request via the VEC of any Customer maintenance that may affect Managed Devices.
- **Wireless Signal.** Where wireless primary or back up is needed for inline management access, Customer will ensure wireless connection is installed prior to ordering the relevant Service or feature. Wireless network coverage may affect the availability and performance of NaaS.
- **PSTN Line Disconnection.** Upon termination of NaaS for whatever reason, it is Customer's responsibility to disconnect the PSTN lines at Customer Sites where Customer has provisioned the lines.
- **Managed VoIP.** Customer will do the following for Managed VoIP:
  - **Configuration Requests.** Confirm configuration of its active Managed VoIP is consistent with its preferences.
  - **PSTN Lines.** Arrange for the purchase and installation of any PSTN lines for its Verizon or third party VoIP design.
  - **Feature Changes.** Make feature changes at the user or administrator level (e.g., setting up call forwarding for a phone or establishing an auto-attendant) through the VEC.
  - **IP Phone and PBX Changes.** Make IP phone and IP PBX configuration changes (unless Customer is subscribed to Verizon Managed IP PBX Service).
  - **Server Support.** Implement and maintain a server (e.g., for Cisco, a TFTP [trivial file transfer protocol] server) for IP phone configuration support.

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7.3 **Customer Responsibilities for Access Services**

- **Customer Provided Carrier Facility Assignment (U.S. Only).** Where Access is provided to a Customer-provided Carrier Facility Assignment (CFA), Customer will provide a letter of authorization (LOA) when the terminating facilities are not provided by Verizon as part of Access, including when the terminating facilities are provided by a Verizon ILEC. Customer will ensure there is adequate capacity on the facility when providing CFA.
- **Abuse or Fraudulent Use of SIM Cards.** Customer will use the SIM cards provisioned by Verizon in connection with Access only for Access.

7.4 **Customer Responsibilities for Broadband.** If required, Customer shall arrange for a Carrier-provided POTS line – standard telephone line – to be in place for Broadband. The POTS line should have the technical specifications required for Broadband.

7.5 **Customer Responsibilities for CPE and Related Services.** Customer is responsible for: (i) repairs or replacement necessitated by accident, casualty, neglect, misuse, intentional acts, harmful code (i.e., any virus or machine-readable instructions and data designed to intentionally disrupt the operation of the System or intentionally destroy or damage System or data) or any cause other than normal use of the System; (ii) damage caused by Customer, Customer facilities, or (iii) use of the System with any other device or system not supplied or approved by Verizon, or any use of any part of the System in a manner not recommended by a manufacturer.

8. COUNTRY SPECIFIC LIMITATIONS

8.1 General

8.1.1 **Turkey Use Prohibition.** Connections to and use of the public Internet, world wide web, and social media by a user in Turkey requires the exclusive use of the service of a locally licensed internet service provider (such as Verizon) in a manner that is compliant with all applicable laws and with any licenses, codes of practice, instructions, or guidelines issued by regulatory authorities. Customer must immediately notify Verizon of any known contravention of the foregoing. Any violation of this express prohibition may result in immediate suspension of the relevant Services by Verizon until, in Verizon's sole judgment, the violation has been cured. Customer is responsible for any fines, penalties, losses, damages, costs or expenses incurred by Verizon due to Customer's violation of this prohibition.

8.1.2 **Italy – Civil Code Acknowledgment.** The Parties expressly acknowledge that the clauses of this Service Attachment have been carefully assessed and/or negotiated by the Parties, pursuant to articles 1341 and following of the Italian civil code.

8.1.3 **United States - Health Care Information and Compliance.** Customer agrees not to cause, or otherwise request that Verizon create, receive, maintain or transmit protected health information (as defined under United States law at 45 C.F.R. § 160.103) for or on behalf of Customer in connection with any service related to NaaS or in any manner that would make Verizon a business associate (as defined under United States law at 45 C.F.R. § 160.103) to Customer. Customer shall assume and be solely responsible for any reporting requirements under law or contract arising from Customer's breach of this clause.

8.1.4 **United States – Intrastate or Interstate Service.** Access, Ethernet Switched E-Line, Ethernet Dedicated E-Line, and Ethernet Switched E-LAN and Secure Hybrid Network in the U.S. Mainland are considered interstate for regulatory jurisdiction purposes if more than 10% of the total traffic over an instance of such Service (e.g., a circuit) is Internet traffic, or otherwise begins and ends in different states. If more than 90% of the total traffic over a Service instance will begin and end in the same state, and is

not Internet traffic, then Customer may order it as intrastate for regulatory jurisdiction purposes. When ordering a Service as intrastate, Customer will be required to certify that (1) the traffic over the Service instance purchased will be intrastate, as defined above; (2) if this certification is incorrect, Customer will be responsible for any unbilled surcharges and applicable fees; and (3) if this certification is no longer true, Customer has a duty to notify Verizon within thirty (30) days.

8.1.5 **India**

- **Transport Service.** The following clauses apply to Private IP, Ethernet Switched E-Line, Ethernet Dedicated E-Line, Ethernet Switched E-LAN, Internet Dedicated Service and/or Broadband in India.
  - **Additional Documentation.** Prior to the Activation Date (and in any event for Broadband only not later than 15 days later), Customer will complete and sign, or will cause its Indian Affiliate (or other end user) receiving Service in India to complete and sign, the Inspection Pro Forma (Pro Forma) found here: www.verizon.com/business/service_guide/reg/pro-formas.htm. To the extent the Pro Forma cannot be completed (or is otherwise not completed) as required in this paragraph, Customer authorizes Verizon to complete the Pro Forma and undertakes to provide any additional necessary information as requested by Verizon for that purpose. Failure to complete the Pro Forma or permit any inspection as required by Verizon's license and/or applicable law may result in the Service being disconnected.
  - **Usage.** To the extent usage of a Service requires it Customer warrants that it and/or its Indian Affiliate (or other end user) is an OSP as described in the "Revised Guidelines for Other Service Providers (OSPs)" released by the Indian Department of Telecommunications (DoT) on 23 June 2021 as amended from time to time.
- **Private Networks**
  - **Restriction on Encryption Functionality in India.** This clause applies if the Private IP Service contains ports in India and to any use of Ethernet Switched E-Line, Ethernet Dedicated E-Line and/or Ethernet Switched E-LAN. Prior to connecting any encryption equipment to Verizon Facilities in India, Customer must obtain prior evaluation and approval from the relevant telecom authority.
- **Internet Dedicated Service and Broadband**
  - **No Internet Telephony.** Verizon's license from the Indian Ministry of Communications, DoT requires Verizon to restrict use of IDS and/or Broadband for Internet telephony. Customer shall not use, or permit others to use, IDS or Broadband for Internet telephony except in one of the following three ways: (i) personal computer (within or outside India) to personal computer (within or outside India); (ii) personal computer (within India) to the public switched telephone network (PSTN) outside of India (PSTN connection gateway located outside India); or (iii) IP-based H.323 or SIP terminal connected directly to a licensed ISP within India to a H.323, SIP, or similar terminal connected directly to a licensed ISP anywhere in the world (including India).
  - **Restriction on Encryption Functionality**
  - **IDS.** Customer may use encryption up to 40 bit key length in a RSA algorithm. If Customer requires encryption higher than this limit in connection with any use of IDS in India, then Customer must obtain approval from the relevant telecom authority. Customer will not employ bulk encryption equipment in connection with Verizon Facilities in India.
  - **Broadband.** The use of encryption shall be governed by the government policy/rules made under the Information Technology Act, 2000.
  - **End User Identification.** Customer acknowledges that DoT in India and other Indian governmental authorities may require Customer to identify the end users of IDS and or Broadband in order to monitor and prevent unlawful activity over Verizon Facilities. Where Customer uses Wi-Fi connectivity in relation to IDS or Broadband, Customer shall employ appropriate authentication processes to secure Verizon Facilities and retain records of all authorized end users of IDS and Broadband. Such records shall include sufficient details to permit DoT or other Indian governmental authorities to identify and locate end users.

8.2 **Access**

8.2.1 **Permitted Use.** For Access provided outside Hawaii and the U.S. Mainland or within Alaska, Customer will use Access only in conjunction with a Verizon-provided connectivity service. If Customer violates this use requirement, Verizon may terminate the Access or take other appropriate action to meet its legal and regulatory obligations.

8.2.2 **Australia.** Where Customer orders Access for delivery to a location in Australia, Customer shall, where relevant, comply with these additional terms and conditions: www.verizon.com/business/service_guide/reg/additional-terms-australia-customers.pdf. Customer is hereby notified that Verizon is not permitted to modify these terms and this is not allowed to enter into any required contracts on the Customer's behalf.

8.3 **PIP - Provisioning Entities in China.** In the event of regulatory changes in China affecting Verizon's ability to provide the domestic portion of PIP through its current local Third Party supplier, Verizon may terminate PIP without liability, or transition its provision of PIP to Customer via a different local Third Party supplier at a price to be agreed between the Parties.

8.4 **Systems and CPE Services**

8.4.1 **Greece.** For CPE Services and Systems provided in Greece, Verizon bears the after sales responsibilities according to the provisions of article 5 of LAW 2251/2004, as in force.

8.4.2 **Turkey.** No provision in the Agreement granting to Verizon a post-transfer retention of title in a System applies where the System is to be delivered in Turkey. Where a System is delivered in Turkey, title passes to the Customer upon physical transfer, provided that Customer has first issued an irrevocable bank guarantee issued by a bank lawfully established in Turkey in an amount no less than the value of the relevant System component(s).

8.4.3 **Poland.** Notwithstanding any terms to the contrary, for CPE Services and Systems provided in Poland, certain terms in the following clauses are revised as follows:

- Clause 6.5.4 - With regard to System Casualty Value, the present value of all remaining MRC for the System, or affected element, from the date of the Event of Loss through the end of the Financing Service Commitment discounted at an annual rate of 3%.
- Clause 6.6 - Customer will pay (i) pay to Verizon an amount equal to the aggregate of all remaining MRC as set forth in the Service Order from the date of termination through the end of the Financing Service Commitment discounted at an annual rate of 3%.

8.4.3.1 **Poland - Notification Requirements for Encryption.** When Customer serves as the importer of record for a Verizon-provided System in Poland, Customer is responsible for obtaining all import-related authorizations or permits, including but not limited to, submitting any required "Notification of the Intended Import," or "Intra-EU Transfer of Dual-Use Items Used for Telecommunications," or for "Information Security with the Polish Internal Security Agency" (the "Agencja Bezpieczenstwa Wewnetrznego").

8.4.4 **Germany.** Notwithstanding any terms to the contrary, for CPE Services and Systems provided under German law, certain terms in the following clauses are revised as follows:

- Clause 6.5.3 MRP Early Termination. The following sentence shall be included into the clause regarding liquidated damages: "Customer shall be entitled to prove that the actual damage occurred to Verizon may be lower."
- Clause 6.6 Cancellation. "Customer shall be entitled to prove that the actual damage occurred to

Verizon may be lower."

8.4.5 **Restriction on Encryption Functionality in India.** Prior to connecting any encryption equipment to Verizon Facilities in India, Customer must obtain prior evaluation and approval from the relevant telecom authority.

8.4.6 **IPT Covenants for Asia Pacific (AP) Countries**

- **Toll Bypass.** Customer will not, and will ensure that its Affiliates and end users will not, use the System and the underlying network service upon which IP Telephony (IPT) is provided to bypass international/long distance charges in any country where any part of the underlying network service or the System is used.
- **PSTN Interaction.** The underlying network service and the System may permit egress/ingress to/from the local PSTN for international IPT sessions only in the so-called PSTN Countries: Australia, the European Union member countries, Switzerland, Hong Kong, Japan, Korea, Singapore and the United States. In all other countries (the Excluded Countries), the international communications capabilities of the System and underlying network service will be used only for on-net-to-on-net sessions among a predefined set of end-users located at Customer and Customer Affiliate premise locations or connected via secure connection to a predefined PC/laptop (Closed User Groups). Customer and Customer's Affiliates will prevent use by the general public, and the System and underlying network service cannot be used to provide any part of a for-hire telecommunications service.
- **Third Party Solutions.** If Customer desires to connect a Verizon IPT solution with a third party's IPT solution not under Verizon management or control, Customer will ensure that the third party IPT functionality complies with all the terms of these Service Terms.
- **India OSP Requirement.** If any users in India of the System or underlying network service are in call centers or network operation centers, engaged in business process outsourcing, tele-marketing, tele-education, tele-medicine, tele-trading, or provision of e-commerce services, Customer will obtain OSP registration from the Indian Department of Telecommunication covering those activities and associated infrastructure prior to using the CPE or the underlying network service.
- **Compliance.** Customer will comply and cause each of its Affiliates and any direct or indirect users of the System or the underlying network service to comply with the terms of this IPT Covenants for AP.
- **Information.** Customer will cooperate with Verizon to provide any relevant information regarding Customer's IPT solution to any national regulatory authority upon their request, and Customer will provide compliance certifications in form and substance acceptable to Verizon upon request.

9. **FINANCIAL TERMS** (Back to Site Type Details). Customer will pay the MRCs and NRCs for NaaS as specified below and in the applicable Agreement. The Charges shown herein are in United States dollars with the understanding that Customer will be billed in the invoice currency for the associated Service. Some wireless services may have usage/overage charges.

9.1 **Administrative Charges.** The following administrative Charges are applicable to NaaS and the elements comprising NaaS. Administrative Charges will be charged, and Customer will pay, for each service element comprising the NaaS as applicable. Additional administrative Charges (shown as Ancillary Charges) are found in the Master Terms and at the following URL: www.verizon.com/business/service_guide/reg/applicable_charges_toc.htm.

9.1.1 **Access, PIP, Internet Dedicated Service, Ethernet Switched and Dedicated E-Line and Switched E-LAN, Secure Hybrid Network, and Broadband.** The following Administrative Charges are applicable to Access, PIP, IDS, Ethernet E-Line and E-LAN, Secure Hybrid Network, and Broadband:

Administrative Charges	Charge Instance	NRC

Administrative Change	Per Change	$60
Cancellation of Order	Per Circuit, Port, or Connection as applicable	$800
Expedite[1]	Per Circuit, Port, or Connection as applicable	$1,000
Pending Order Change[1, 4]	Per Circuit, Port, or Connection as applicable	$60
Physical Change [2,4]	Per Circuit, Port, or Connection as applicable	$200
Service Date Change[1,4]	Per Circuit, Port, or Connection as applicable	$60
Reconfiguration[3,4]	Per Circuit, Port, or Connection as applicable	$200

[1] Access excluded and shown below
[2] Internet Dedicated and Broadband excluded and shown below
[3] PIP and Internet Dedicated Service excluded and shown below
[4] Secure Hybrid Network is excluded

9.1.2 **Access.** The following additional Administrative Charges are applicable to Access:

Local Access Administrative Charges	Charge Instance	NRC
Expedite in the United States	Per Circuit	$1,400
Expedite in Canada and France	Per Circuit	$6,000
Expedite in other countries	Per Circuit	$3,000
After Hours Installation	Per Circuit	$600
Pending Order Change	Per Circuit	$200
Service Date Change	Per Circuit	$100

9.1.3 **PIP.** The following additional Administrative Charges are applicable to PIP:

PIP Administrative Charge	Charge Instance	Port Type	Speed	NRC
Reconfiguration	Per Port	Standard Port	64Kbps	$50
Reconfiguration	Per Port	Standard Port	256Kbps, 512Kbps	$100
Reconfiguration	Per Port	Standard Port	T1, E1, 1M, 2M	$200
Reconfiguration	Per Port	Standard Port	Above E1	$600

9.1.4 **Internet Dedicated.** The following additional Administrative Charges are applicable to Internet Dedicated Service

Administrative Charges	Charge Instance	NRC
After Hours Installation	Per Port	$1,000
Physical Change	Per Order	$60
Reconfiguration	Per Port	$300

9.2 **One-Time Management Charges**

9.2.1 **Managed WAN, Managed LAN, and Managed WLAN.** Optional Change Management (OCM) provides additional remote change management support for Managed WAN, Managed LAN and Managed WLAN for the NRC shown below. Customer can order specific OCM activities through the VEC. The Standard Change Management activities shown in the VEC are included in the MRC of the Managed WAN, Managed LAN and Managed WLAN Service.

Optional Change Management Charges

Change	Change Instance (Charged per device unless noted)	NRC
After Hours: Changes	Per request per site	$600
Implementation (Modify Existing)[1,3]	Change per device	$50
Design (Single Feature/Protocol)[2]	Change per device	$250
Design Plus (Multiple Feature/Protocol)[2]	Change per device	$400
Engineering – 1 Hour[4]	Per request and block of hours, 1 hour block	$300
Engineering – 5 Hours[4]	Per request and block of hours, 5 hour block	$1,375
Engineering – 10 Hours[4]	Per request and block of hours, 10 hour block	$2,500
Engineering – 20 Hours[4]	Per request and block of hours, 20 hour block	$4,500
Engineering – 40 Hours[4]	Per request and block of hours, 40 hour block	$8,000

[1] Implementation is used to modify existing features or protocols including the following: dynamic host configuration protocol (DHCP), IP network address translation, network routed protocol, MNSO IP address/subnet mask change, PVC Change, routing protocol changes, switch VLAN, dynamic Port/CAR, and VPN Tunnel.
[2] Design and Design Plus are used for requests to evaluate or add single (Design) or multiple (Design Plus) new or changed features, protocols or applications/policies in the Customer Network, including the following: add DHCP, QoS, NAT router configuration, traffic filter design, traffic shaping/queuing, application Aware routing, and SD WAN.
[3] Customer may create a new design at one site by selecting Design/Design Plus to add the new feature(s) or protocol(s) and then replicate the design across other sites by selecting Implementation for the remaining sites.
[4] Customer may select Engineering Hours and request additional Engineering OCM hours from time to time as needed. Verizon will track the number of hours spent per OCM request against the hours selected and will report remaining hours to Customer upon request.

9.2.2 **Managed WAN and Managed WOS.** Optional Change Management (OCM) provides additional remote change management support for Managed WOS for the NRCs shown below.

Optional Change Management Charges		
Change	**Change Instance (Charged per device unless noted)**	**NRC**
After Hours: Changes	Per request per site	$600
Implementation (Modify Existing)[1,3]	Change per device	$50
Design (Single Feature/Protocol)[2]	Change per device	$250
Design Plus (Multiple Feature/Protocol)[2]	Change per device	$400

[1] Implementation is used to modify existing features or protocols including the following: DHCP, IP network address translation, network routed protocol, MNSO IP address/subnet mask change, PVC Change, routing protocol changes, switch VLAN, dynamic Port/CAR, and VPN Tunnel.
[2] Design and Design Plus are used for requests to add single (Design) or multiple (Design Plus) new features, protocols or applications/policies that do not currently exist in the Customer Network, including the following: add DHCP, QoS, NAT router configuration, traffic filter design, traffic shaping/queuing, application Aware routing, and SD WAN.
[3] Customer may create a new design at one site by selecting Design/Design Plus to add the new feature(s) or protocol(s) and then replicate the design across other sites by selecting Implementation for the remaining sites.

9.3 **Quoted Charges for CPE.** Customer will pay the Charges stated in the Order provided that the Charges are current. For purposes of this provision, "current" means (a) that the Charges were first quoted within

45 days of the Order's acceptance, except; (b) when purchased CPE is not quoted in the same currency that the ordered CPE has been purchased in, then current means the Charges were first quoted within 14 days of the Order's acceptance; for Charges first quoted between 15 and 45 days of Order submission, Charges may be adjusted to reflect currency changes up to the time of the Commencement Date.

9.4 **Installation and Expedite Charges.** Installations shall take place during Business Hours. In the event that Customer requests an expedited installation at a Customer Site or requires installation at a Customer Site After Hours, such installation will be subject to the agreement of Verizon. In such cases, Customer shall pay the additional Expedite Charge or After Hours Installation Charge, as applicable. If Verizon fails to meet the Expedite Date, Customer will not be liable for the Expedite Fee unless such failure is caused, in whole or in part, by Customer failing to meet its obligations with respect to the installation. If an expedited install requires Third Party involvement there may be additional Charges payable.

9.5 **Access**

9.5.1 **Access Surcharges.** Local Access Services provided in the U.S. are subject to the following surcharges:
Federal Universal Service Fund (FUSF)
Carrier Cost Recovery Charge
Administrative Expense Fee

9.5.2 **Wireless Connections.** Overage usage (usage in excess of the monthly data plan amount) will be rounded to the next full GB of traffic and will be billed in arrears. Data usage not used in a particular monthly invoicing period may not be carried forward to the following month. With regard to Wireless UNI, Charges are based on data usage sent through the wireless connection (including resent data), not data usage received by Customer Equipment.

9.5.3 **Wireless Connection - Upgrades.** With respect to Customer-requested upgrades to its data plan for Access with Wireless UNI, the MRC will be prorated according to the date the new data plan is available to Customer. Overage usage will be based on the data plan in effect on the last day of the invoicing period when traffic usage is calculated. The invoicing period with respect to overage usage may differ according to the country where Access with Wireless UNI is provisioned.

9.5.4 **Access with Wireless Connection provided in the U.S.** When used with Verizon's Internet Dedicated Service, such connection is subject to the following Wireless Regulatory Surcharge: $0.02 per connection per month.

9.5.5 **NS&D Features.** Customer must order and pay for the two Access circuits from Verizon to configure Layer 2 Aggregation Geographic Diversity and Carrier Diversity, plus an additional charge for the Diversity Feature itself, as applicable. With Preferred Carrier Designation Diversity, Customer must order and pay for the access circuit, plus an additional charge for the Diversity Feature itself, as applicable. With Network Connection Protection, an additional charge is applicable.

9.5.6 **Third Party Charges for Cross-Connection and Extended Wiring.** In some instances, the Customer Site may be located at a data center or other facility owned by a third party and the third party may not permit Verizon to connect directly to Customer Site. In such instances, a third party data center/facility owner may only permit the third party to install a cross-connection from the Verizon Demarcation to Customer Site. If the third party data center/facility owner charges for that cross-connection and Customer does not directly pay the third party for such connection, Verizon will pay the third party for the cross-connection and Customer will be billed by Verizon for such charges.

9.5.7 **Access Speed Changes.** Speed changes on an existing Access circuit are only supported by Verizon

in specific limited circumstances. Otherwise, where alternative Access speeds are available from Verizon, Customer must present a new order to Verizon to obtain such alternative speeds and simultaneously terminate its existing Access service, for which it will pay early termination charges if applicable. Customer will be responsible for any Third Party charges incurred by Verizon in order to implement any requested Access speed changes or any termination. The applicable NRC and MRC associated with the new Access circuit speed will be effective from the day the changed Access bandwidth is available to Customer.

9.5.8 **Access Moves.** Customer-requested moves of Access to a new location will be quoted on an individual case basis and, as with speed changes, may require the termination of Customer's existing Access circuit and installation of a new one. For Customer-requested moves of Access to a new location, Customer will pay early termination charges as applicable and any Third Party charges incurred by Verizon in order to implement the move. The newly-contracted Access will include the applicable NRC and MRC associated with the new Access circuit.

9.6 Ethernet Switched E-LAN

9.6.1 **Burstable.** With Burstable, Customer will pay a Burstable overage charge monthly per circuit for any measured usage level greater than Customer's Bandwidth Commitment. Verizon will sample the E-LAN connection usage every five minutes during the monthly billing period and Customer's measured usage level will be based on usage at the 95th percentile of samples with the highest 5 percent of usage discarded for billing purposes. Incremental usage will be rounded up to the next full Mbps or Gbps.

9.6.2 **Scalable.** With Scalable, Customer will pay a Scalable overage charge per E-LAN connection based on connection speed changes Customer made during the month. Customer will be billed for a commitment speed and any overage speeds.

9.7 Ethernet Switched E-Line

9.7.1 **Reconfiguration.** Access must have sufficient bandwidth and the correct specification provisioned to support the reconfiguration request. This charge is in addition to the Administrative Change charge and applies per E-Line bandwidth reconfiguration.

9.8 Ethernet Dedicated E-Line

9.8.1 **Reconfiguration Charges.** An NRC applies per bandwidth reconfiguration, in addition to charges applicable to an Administrative Change. For orders which require a change in Customer's existing interface, physical access facility, and/or provider of the physical access facility, either Customer's Local Access circuit or Dedicated E-Line Service or both may need to be terminated and re-installed. Such termination may generate applicable Early Termination Charges for which Customer is responsible. Customer will also be responsible for any Charges resulting from installation of new Dedicated E-Line Service and/or Local Access circuit, as applicable.

9.9 CPE and Related Services

9.9.1 **Charges.** Except where Verizon is the importer of record, Customer will pay the Charges including but not limited to import duties, freight, and shipping and delivery (which may be identified as "landed costs"), for the System and CPE Services as set forth in the applicable quote and reflected in an Order. Verizon will not change a Customer's quote based on any non-currency-related change (e.g., the underlying Third Party price) for 90 days from issuance. For CPE which is procured by Verizon in a currency other than the currency of the quote, quotes may be adjusted to reflect currency changes after 14 days from the

date of issuance up to the time of Order acceptance.

9.9.2 **Additional Charges**

9.9.2.1 **Training Costs.** If Customer needs Verizon to follow Customer Site safety or security requirements that require training, Customer agrees to pay Verizon for that training time at Verizon's then current labor rate.

9.9.2.2 **Overtime.** If Customer requests that CPE Deployment Services be performed during Overtime or Weekend and Holiday Hours, Customer will pay Verizon its applicable labor rate, as reflected in the Order or as otherwise advised to Customer.

9.9.2.3 **Troubleshooting Dispatch Charges.** If Customer does not provide remote connectivity into a System and Verizon must Dispatch an engineer to Customer Site to troubleshoot an outage, Customer may incur a time and material charge at Verizon's then current rate.

10. **DEFINITIONS.** The following definitions apply to NaaS, in addition to those identified in the Master Terms and the administrative charge definitions at the following URL: www.verizon.com/business/service_guide/reg/definitions_toc_2017DEC01.htm.

Term	Definition
After Hours	Outside of Business Hours.
API	An Application Program Interface (API) is a computing interface which defines certain interactions between multiple software intermediaries, such as the kinds of calls or requests that can be made, how to make them, the data formats that should be used, and the conventions to follow.
ASN	Autonomous System Number
Bandwidth Commitment	The portion of a Port speed which Customer may use in a monthly period without incurring an overage charge.
Burstable Aggregate Group	A group of circuits aggregated together for the purpose of combining the Measured Use Level for the aggregate circuits for the Burstable Aggregation service.
Change Order	A proposed change to Customer's NaaS or Order.
CAR	The Committed Access Rate (CAR) is the amount of bandwidth to which Customer subscribes on a logical Port by logical Port basis.
CDD	Customer Design Document
Cross Border Connection	The Customer Site and the Internet Service Location are located in different countries as indicated on the Order.
Customer Edge (CE)	The edge of, or point in which Customer traffic enters or exits, the Customer Network.
Customer Furnished Equipment (CFE)	Equipment, a system and/or related software for which Verizon may provide CPE Services that Customer purchases from a party other than Verizon.
Customer Network	A collection of Managed Devices, Managed VNFs or LAN Switches and the network they are connected to.
Customer Portal	An Internet web portal accessible via the VEC that provides a secure, scalable, consolidated view of certain Customer Network features or information 24 hours a day, 7 days a week with real time access to project status, contact information and other service related information.

	Customer Portals may be accessed via the VEC at the following URL sso.verizonenterprise.com/amserver/sso/login.go? or another URL as indicated by Verizon.
Customer Provided Transport	Customer provided transport from third parties approved by Verizon from time to time. Verizon will manage the Customer Provided Transport pursuant to a Customer provided Letter of Agency allowing Verizon to manage the Customer Provided Transport provider. Where possible Verizon will e-bond with the Customer Provided Transport provider help desk operations platform. Supported third party transport available includes, MPLS, dedicated Internet, broadband, LTE and 5G.
DAP	Delivered at Place - as defined in Incoterms 2020 published by the International Chamber of Commerce.
DDP	Delivered Duty Paid - as defined in Incoterms 2020 published by the International Chamber of Commerce.
Demarcation	The point where the access circuit is delivered. For jointly used office buildings, it is often a common entrance point for telecommunication providers, which may not be the Customer's physical location.
Dispatch	A Customer service request that results in Verizon going on to, or attempting to go on to, a Customer Site.
Dispatch Charge	A charge applied when a Customer service request results in Verizon going on to, or attempting to go on to, a Customer Site.
Event of Loss	Loss or damage to the System (or a part thereof) as a result of fire, explosion, theft, vandalism, natural catastrophe and such other risks of loss as are normally maintained under an all-risk property insurance policy.
Expedite	An Order that is processed, at the request of the Customer, with the objective of installing or changing the Service in a time period shorter than the Verizon's standard installation time period for that Service, whether or not the installation or change is completed in that time period.
FOB Destination	Pursuant to Article 2 of the Uniform Commercial Code from the Commission on Uniform State Laws, Free On Board (FOB) Destination means Verizon pays the freight charges, but bills them to Customer.
In-Band Access	In-Band access provided through a Verizon Managed WAN site connected to Customer's LAN network.
ILEC	Incumbent Local Exchange Carrier
Internet Service Location	The country/location where the Internet Port which connects to the Verizon IP Network is physically located.
Like Equipment	Equipment which: a) has been manufactured by the same manufacturer as the CPE; b) is of the same type and model as the CPE (or the manufacturer's equivalent type and model), with all engineering changes incorporated as specified by the manufacturer; c) has an equal or greater market value as the CPE Element replaced by Like Equipment; and d) meets all requirements for the CPE as set forth in the Order or these Service Terms.
LAN	Local Area Network
LAN Switch	The LAN switches and associated OOB modems or terminal servers, as specified by reference to these Service Terms, which will be managed at Customer Site by Verizon.
Managed Device	An item of equipment on the Customer Network (CPE, Customer Equipment or CFE) that has been designated by Verizon as supported

	by NaaS.
Managed VNF	A Virtual Network Function (VNF) that has been designated as supported by VNS.
Management Information Base (MIB)	A database of information stored by SNMP-compliant Managed Device.
Master Site	The circuit within a Burstable Aggregate Group that determines the overage Mbps price. There can only be one Master Site designated per Burstable Aggregate Group.
Measured Use Level	To calculate Customer's Measured Use Level, Verizon samples Customer's Service usage periodically throughout a given month. Customer's usage at the 95th percentile of samples (i.e., samples representing the highest five percentiles of usage are discarded) is Customer's Measured Use Level. For example, if Verizon took 100 samples of Customer's T3 Service in a given month and Customer's highest six samples were 15.67 Mbps, 14.73 Mbps, 14.72 Mbps, 13.22 Mbps, 12.35 Mbps, and 11.39 Mbps, Customer's Measured Use Level would be 11.39 Mbps for that month.
MLA Data	MLA Data consists of the information transmitted by the wireless devices of guests and other end users, including the geo-location of those devices and the devices' MAC address before the end user logs onto the Customer Network via a splash page.
MPLS	Multi-Protocol Label Switching - an Internet Engineering Task Force standard.
MPLS Partner	A Third Party with whom Verizon has an agency or reseller arrangement to provide interconnection to that party's in-country MPLS network.
MRC	Monthly Recurring Charges
MVIC	MPLS VPN Interprovider Connection
NRC	Non-Recurring Charges
OOB	Out of Band
Overtime	Means work extending beyond Business Hours.
Permanent Virtual Circuit (PVC)	A logical Customer-dedicated communications path defined between two Port connections.
Port	An entrance to and/or exit from a network.
Provider Edge (PE)	The edge of, or point in which Customer traffic enters or exits, the Verizon Network.
PSTN	Public Switched Telephone Network
Service Edge Diversity	Automatically directs the second Customer circuit to a different switch or router.
Service Edge Geographic Diversity	Automatically directs a second Customer circuit to a different Verizon gateway at a different Verizon POP.
SNMP	simple network management protocol (SNMP) community string is a password that allows access to CPEs MIB statistics.
Solution ID	A unique number used to identify a group of NaaS Services at a particular Customer Site.
SOR	Statement of Requirements
System Casualty Value	An amount equal to (i) the present value of all remaining MRC for the System, or affected element, from the date of the Event of Loss through the end of the Service Commitment, plus (ii) for MRP, the purchase price as of the date of the Event of Loss for such System, or affected element, as provided by Verizon promptly after its receipt of a notice of Event of Loss.

Trouble Ticket	A ticket opened within Verizon's NOC from an internal Verizon report or a report by a Customer to Verizon of either perceived Outage or NaaS degradation.
Virtual Private Network (VPN)	Uses a logical connection to route traffic between network sites.
Verizon Wireless	Cellco Partnership d/b/a Verizon Wireless
WAN	Wide Area Network
Weekend and Holiday Hours	Means hours of work other than Business Hours and Overtime.

SCHEDULES - AVAILABLE ADDITIONAL SERVICES. Each of the Schedules listed below contain additional terms applicable to the available additional services under NaaS.

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Schedule A to NaaS Service Attachment
MANAGED LAN

1. MANAGED LAN

1.1 **Service Definition.** Managed LAN Service provides a range of capabilities for managing Customer's Local Area Network (LAN) up to the access Ports on the LAN Switches, including design, planning, implementation, and network management.

1.2 **Implementation Options.** Managed Implementation and MTO are available for Managed LAN.

1.3 **Standard Service Features.** Managed LAN is offered at Full Management with the same capabilities as for Managed WAN Full Management.

1.4 **Optional Service Features**

1.4.1 **Device Management.** For Cloud Controlled Switching (CCS), the CCS Customer may select either "Switch Management" or "Cloud-Controlled Switching". To effectively manage the Customer Network, all Customer Sites with Cloud-Controlled Switching (e.g., CCAP, Cloud-Controlled Routing for Managed WAN, and CCAP for Managed WLAN) must be at the same management level.

1.4.2 **Wireless LAN Controller Management Feature (Full Management Only).** Supported only on certain models of LAN Switches. With this feature, Verizon manages compatible Wi-Fi access points in the Customer Network using the Wireless LAN Controller capability on the LAN Switch.

1.4.3 **Port Monitoring (Available under Switch Management at Full Management Only).** Verizon will monitor up to the maximum number of Ports shown below per LAN Switch size. For Verizon to monitor them, Ports must interface directly to another Customer internal network device which is available to Verizon on a continuous basis. Verizon will not monitor Ports connected to end user devices (which may be off for a wide range of reasons unrelated to their performance).

Port Monitoring			
Switch Size	**Small**	**Medium**	**Large**
Maximum Number of Ports Monitored	2	6	12

1.4.4 **Routing Support (Available under Switch Management at Full Management)**. Verizon will manage the configuration of intra-LAN (Layer 3) routing protocols for those LAN Switches that support it.

1.4.5 **CCS and CCC Reporting.** CCS and CCC Customers may access comprehensive daily and ad hoc reporting via the Customer Portal.

1.5 **Customer Responsibilities**

1.5.1 **General**. The Customer responsibilities for NaaS under the clauses entitled "Customer Responsibilities", and "Managed Device Responsibilities" apply to Managed LAN.

1.5.1.1 **LAN Switch Removal, Repair, and Access**. Customer will notify Verizon before removing or repairing the LAN Switch. For LAN Switches under Full Management, Customer will notify Verizon before physically accessing, configuring, amending, or modifying a LAN Switch. Customer will provide Verizon

with full access to the LAN Switches as needed to provide the Managed LAN Service.

1.5.1.2 **CCC.** Verizon access to audio or video is systematically restricted during normal operation of the Camera. Audio or video is otherwise only available to Verizon during Camera installation or replacement to ensure correct operation.

- **Fault Monitoring.** Verizon does not have access to the Camera's video or audio during normal operation, therefore, a Camera outage is limited to whether the Camera is up and connected to the Customer Network and excludes picture content or quality, optics, or audio quality.
- **Customer Video or Audio Content.** Customer is responsible for all activities related to the Camera video or audio content, including but not limited to, monitoring live and recorded surveillance footage, reporting incidents or suspicious behavior and contacting the authorities when necessary.
- **Legal Compliance.** Local law may govern how Cameras can be used. Customer is responsible for complying with all applicable local regulations and privacy laws.

2. **DEFINITIONS.** The following additional definitions apply to Managed LAN:

Term	Definition
Camera	The Camera which will be managed at Customer Site by Verizon for the MLAN Service.
Cloud-Controlled Access Point (CCAP)	The Cloud Infrastructure-controlled equipment that transmits and receives the radio signal at a Customer Site.
Cloud-Controlled Camera (CCC)	Cloud Infrastructure-controlled cameras at a Customer Site.
Cloud-Controlled Switching (CCS)	Cloud Infrastructure-controlled switches at a Customer Site.
Wireless LAN Controller (WLAN Controller)	The equipment that handles the system-wide functions of Managed Wireless LAN, including but not limited to security policies, intrusion prevention, radio frequency management, and quality of service.

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Schedule B to NaaS Service Attachment
MANAGED WIRELESS LAN

1. MANAGED WIRELESS LAN

1.1 **Service Definition.** Verizon's Managed Wireless LAN (Managed WLAN) service extends Customer's WAN or LAN infrastructure to include wireless LAN access.

1.2 **Implementation Options.** Managed Implementation and Managed Take Over are available for Managed WLAN. For purposes of this Schedule, "Managed Devices" includes Wireless LAN Controllers, Lightweight Access Points, Aruba Instant Access Points, Cloud-Controlled Access Points, and associated accessories, including but not limited to, antennas, power injectors, and mount kits, as applicable, installed at a Customer Site by Verizon for Managed WLAN.

1.3 To enable the flow of data traffic to support Customer's business applications (e.g., email), tunnels will be set up between an access point identified below and another device or infrastructure identified below:

Access Point or Service Node	Device or Infrastructure	Enables Flow of Traffic to:
Aruba Instant Access Point (IAP)	Virtual Wireless LAN Controller	Customer's wireless applications
Lightweight Access Point (LAP)	Wireless LAN Controller	Customer's wireless applications
Cloud-Controlled Access Point (CCAP)	Cloud Infrastructure*	Customer's wireless applications
Software Defined Wireless LAN (SD WLAN)	Cloud Infrastructure*	Customer's wireless applications
* The Cloud Infrastructure is maintained in a redundant fashion, with multiple data centers backing up each other. Failover Cloud Infrastructure instances run in stand-by mode and activate if primary Cloud Infrastructure instances fail.		

1.4 **Standard Service Features.** Managed WLAN is offered at Full Management with the same capabilities as for Managed WAN Full Management with the following additional capabilities.

1.4.1 **Full Management**

- If applicable, Customer will have access to the Software-Defined WLAN (SD WLAN) Customer Portal available at https://verizon.mist.com/ or another URL provided by Verizon from time to time. The administration and access condition of the SD WLAN Customer Portal are the same as for the CCR Customer Portal.
- **Managed WLAN Reporting.** Customer is provided with comprehensive daily and ad hoc reporting to quickly assess the health and performance of Managed WLAN, and may include, depending upon the type of reporting received, any of the following: daily uptime reports, daily managed device summary reports, daily inventory reports, daily new rogue reports, configuration audit reports, and wireless net usage reports.
- **SD WLAN Portal Administrative Access.** SD WLAN Customers have read-only administrative access in the respective Customer Portals.

1.4.2 **Scope of Managed WLAN.** Managed WLAN includes coverage for only those items (e.g., radios, LAN ports, or interfaces, etc.) that are directly connected to Managed Devices. Customer must purchase Full

Management Level to obtain Managed WLAN's CCAP feature.

1.5 **Optional Service Features**

- **Wireless Assessment.** Customer may request a wireless site assessment via a separate Professional Services Service Attachment and SOW with Verizon, or provide a completed wireless assessment from a third party if agreed to by Verizon. The wireless site assessment determines the wireless requirements, suitable locations for the Managed Devices, and identifies possible interference based on the results of a radio frequency (RF) analysis. If Customer opts not to contract for or provide such a wireless assessment, Verizon will deploy and monitor the WLAN based upon Customer's requirements, but no SLA will apply to such WLAN.
  - **Customer Changes After Wireless Assessment.** Changes to Customer Network may affect Verizon's ability to provide Managed WLAN in whole or in part. Such changes will suspend application of the SLA until a new Wireless Assessment has been done and any necessary adjustments are completed at Customer's expense.
- **Guest Access.** Verizon offers three options per IAP, LAP, CCAP, or SD WLAN as applicable, to enable Customer's guests to obtain wireless access to Customer's network (Guest Access): (i) Cisco Meraki, with additional information available at the Customer Portal; (ii) Mist Systems, with additional information available at https://verizon.mist.com/ or other URL provided by Verizon from time to time (the SD WLAN Customer Portal) and (iii) Purple WiFi, with additional information available at http://verizon.purplewifi.net/ or other URL provided by Verizon from time to time (the Guest Access Portal). All of the terms under the Section entitled "Guest Access" in MWAN Services Section of the Service Attachment apply to Managed WLAN Customers with Guest Access.
- **Device Management.** To effectively manage the network, all Customer sites with CCAP, CCR, CCS, and/or SD WLAN features must be at the same management level.

1.6 **Customer Responsibilities for Managed WLAN**

1.6.1 **General.** The Customer responsibilities for NaaS under the clauses entitled "Customer Responsibilities", "Managed Device Responsibilities" apply to the Managed WLAN Customer.

1.6.2 **SNMP.** Customer is responsible for application of the Verizon-provided SNMP "read access community string" for all monitored WLAN Controllers, or Virtual Wireless LAN Controllers with IAP Management and the application of Verizon-assigned management IP addresses, as required for management by Verizon.

1.6.3 **OOB Access and No OOB Access.** Managed Devices under Cloud-Controlled Routing do not require OOB Access.

1.6.4 **Authorized Users.** Customer is responsible for all guests' and other end users' use of the Managed WLAN. Verizon will inform Customer by email when it detects a rogue access point. Customer is responsible for determining whether or not the access point in question is unauthorized.

1.6.5 **Support for CPE**. Except for CCAP or SD WLAN CPE where the minimum maintenance coverage is at least eight hours a day x five days a week with a next business day response time, Managed Device must be under minimum maintenance coverage of at least seven days per week by 24 hours per day by four hours response time.

1.6.6 **Interference.** Customer will inform Verizon prior to any deployment of industrial, scientific, and/or medical wireless equipment or other equipment that could affect the performance of Managed WLAN.

1.6.7 **Guest Access Notice.** Managed WLAN Customers who utilize the MLA feature must comply with all of

the Guest Access requirements and provisions in the MWAN Service Section of this Service Attachment.

2. **Definitions.** The following additional definitions apply to Managed WLAN:

Term	Definition
Aruba Instant Access Point (IAP)	The equipment that transmits and receives the radio signal at a Customer Site.
Cloud-Controlled Access Point (CCAP)	The Cloud Infrastructure-controlled equipment that transmits and receives the radio signal at a Customer Site.
Cloud-Controlled Switching (CCS)	Cloud Infrastructure-controlled switches at a Customer Site.
Lightweight Access Point (LAP)	The equipment that transmits and receives the radio signal at a Customer Site.
Software Defined Wireless LAN (SD WLAN)	Cloud Infrastructure-controlled equipment that transmits and receives the radio signal at a Customer Site.
Wireless LAN Controller (WLAN Controller)	The equipment that handles the system-wide functions of Managed WLAN, including but not limited to security policies, intrusion prevention, radio frequency management, and quality of service.

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Schedule C to NaaS Service Attachment
SASE MANAGEMENT

1. SASE MANAGEMENT

1.1 **Service Definition.** SASE (Secure Access Service Edge) Management provides change management, incident management, and health monitoring on specific security cloud service instances. Verizon will provide integrated support across Customer's security cloud instances and Verizon-managed Software Defined WAN (SD WAN) which are connected to the security cloud instances.

SASE Management provides change management of Policy Rules created by Customer for security cloud service instances. SASE Management can be provisioned for Customers with a licensing agreement for implemented and configured instances of Third Party Vendor Software as a Service (SaaS) security cloud products. SASE Management provides ongoing management of the Policy through the Third Party Customer Portal.

1.2 **Service Implementation.** Verizon will assign a SASE Management project manager to Customer for implementation. The project manager will schedule a remote project introduction meeting to introduce the Verizon service delivery team. The Verizon service delivery team will provide the initial information that Customer will need to provide, and request necessary access to implement SASE Management.

1.3 **Service Features**

1.3.1 **Policy Change Management.** SASE Management provides Customer-initiated Policy change management for the security cloud instances. Verizon evaluates, prepares, and implements Policy Rule changes as described in Change Requests. Initial Policy Rule configuration and development and review of new Policy Rules are outside the scope of SASE Management. Migration of existing Policy Rules will be subject to a separate written work agreement and charged at the Applicable Rates.

1.3.1.1 **Change Requests.** A Change Request is a change which involves creation, modification, or deletion of less than 10 policy rules and/or 40 objects. SASE Management supports up to 5 Change Requests in a 4 hour window, or 10 changes in an 8 hour window (1.25 changes per hour) and up to 31 total Change Requests per month regardless of type. Additionally, the number of Change Requests per month cannot exceed the following limits per change type. Additional Change Requests above these limits are subject to fees.
Regular – 31 Change Requests
Fast Track – 10 Change Requests
Urgent – 10 Change Requests

Change Requests are submitted and tracked through the Verizon Enterprise Center (VEC). Verizon assigns a unique Change Request number to each Change Request submitted and Customer must use this number in all communications about the Change Request. Change Requests are categorized as Regular, Fast Track, Urgent, and Major Change Requests. Verizon will send a confirmation to the Authorized User who has submitted the Change Request.

1.3.1.2 **Regular Change Request (RCR).** Verizon supports up to 31 Regular Change Requests per month, subject to the overall quota of 31 total Change Requests per month. Verizon reviews and accepts an RCR within 24 hours after submission. Verizon implements an RCR in the next maintenance window, provided that the minimum time between Verizon's acceptance of the RCR and the implementation is

at least 48 hours. An RCR is a planned change to the topology of the infrastructure or security Policy Rule that:

- Is a planned change which involves changes to existing Policy Rules, or the creation of new Policy Rules and/or objects;
- Involves creation of new hosts in the Policy, and the host is part of a subnet that is already accessible and configured; or
- Involves the distribution of traffic between existing hosts.

1.3.1.3 **Fast Track Change Requests (FCR).** Verizon supports up to 10 Fast Track Change Requests per month, subject to the overall quota of 31 total Change Requests per month. Verizon reviews and accepts an FCR within 4 hours and implements an accepted FCR within 36 hours after acceptance. A FCR is a planned or unplanned change which:

- Impacts changes to existing Policy Rules or the creation of new Policy Rules and/or objects;
- Creates new hosts in the Policy, and the host is part of a subnet that is already accessible and configured in the service; or
- Allows or disallows traffic between hosts.

1.3.1.4 **Urgent Change Request (UCR).** Verizon supports up to 10 Urgent Change Requests per month, subject to the overall quota of 31 total Change Requests per month. Verizon reviews and accepts or rejects a UCR within 2 hours and will implement an accepted UCR within 4 hours after acceptance. Customer acknowledges that a UCR gives Verizon less time to review and mitigate security risks associated with the Change Request and implementation of UCR carries a higher degree of risk. The Customer accepts such risks associated with a UCR when submitting a UCR. The Customer will make an Authorized User available by telephone to further clarify the UCR, and provide written confirmation to Verizon via email(s) of Customer UCR decisions made during phone calls with Verizon. A UCR is an unplanned change consisting of:

- Modification of the existing Policy Rules or the creation of new Policy Rules and/or objects; or
- Specification of the required configuration setting and its new value.

1.3.1.5 **Major Change Request.** A Change Request is “Major” when it involves any change not covered by Regular, Fast Track, or Urgent Change Requests. Major changes are out of scope for SASE Management, but can be performed by Verizon under a separate work agreement and are charged at the Applicable Rates.

1.3.2 **Incident Management.** SASE Management provides incident management on the security cloud instances. Incident tickets are logged when a ticket is created by Customer or Verizon for service failures. Verizon created service-related incidents are based on data provided by Third Party Vendors.

Customer traffic may be impacted during Third Party Vendor maintenance windows or service outages. Verizon is not automatically notified of such maintenance windows or service outages by Third Party Vendors. Verizon shall inform Customer when such maintenance windows or service outages are determined as impacting user traffic.

1.3.3 **Monitoring.** Monitoring of the security cloud instances shall consist of tunnel up/down status checks from the SD WAN service to the security cloud instance. A ticket shall be logged when there is a tunnel down alert on the SD WAN service connected to the security cloud instance.

1.3.4 **Verizon Enterprise Center.** Authorized Users have 24x7 access, exclusive of Maintenance Windows, to the VEC.

1.3.5 **Requests for Information.** Customer shall submit a Request for Information (RFI), relative to SASE Management, through the VEC. Each RFI creates an RFI incident and will receive a unique reference number that must be used in all further communications on the RFI. RFI tickets can be raised by Customer for support requests not already covered by other tickets.

1.3.6 **Event and Log Data.** Verizon requires access to the Customer's logs and events on the Third Party Customer Portal in order to provide management for the cloud security instances, including implementation and verification of change requests from the Customer.

2. SUPPLEMENTAL TERMS

2.1 **Excluded Services.** SASE Management does not include device management of the endpoints themselves or of the Customer-owned endpoint software licenses. Changes to end-user systems and Customer devices are not included as part of SASE Management.

2.1.1 **Availability and Health Monitoring of Third Party Platform.** Availability and health monitoring of any Third Party Vendor platform is not part of SASE Management. Availability and health issues of any Third Party Vendor platform may impact the SASE Management. Customer will share availability and health monitoring data with Verizon.

2.1.2 **Third Party Services.** Configuration and diagnostics for network configurations for Customer access to Third Party Vendor services is not part of SASE Management.

2.1.3 **Third Party Product Maintenance.** SASE Management does not include maintenance of the Third Party Vendor-owned infrastructure, including hardware, software, software upgrade, or security configurations.

2.1.4 **Feature/Functionality Enhancements.** If during the term for SASE Management, the Third Party Vendor provides major feature/functionality enhancements that introduce additional configuration work beyond a standard Change Request, such work will be performed and charged at the Applicable Rates.

2.2 **Customer Responsibilities**

2.2.1 **Customer Deliverables for Implementation.** Customer will designate a point of contact to make decisions and take appropriate actions related to SASE Management (including but not limited to, coordinating meetings with the SASE service delivery team and identifying the appropriate internal resources for configuration and implementation calls) and work with the SASE service delivery team to resolve any issues that arise on the Customer's SD WAN and cloud security instances. Verizon will request specific information from Customer to allow Verizon to provision SASE Management. Customer is responsible for creation and implementation of the initial Policy Rules. Verizon may terminate Customer's Service Order if requested information is not received within a timely manner. Upon termination of any such Service Order(s), Verizon reserves the right to charge Customer for any expenses incurred by Verizon (including labor fees) up through the date of termination based on such delay.

2.2.1.1 **Third Party Configuration.** Customer is responsible for initial configuration of the security cloud instance required for SASE Management, including tunnel renaming. Initial configuration may be ordered separately from SASE Management and charged at Applicable Rates.

2.2.2 **Customer Deliverables for SASE Management.** Customer will provide the following information and access to Verizon for Customer's Third Party Vendor, as applicable.

2.2.2.1 **Third Party Customer Portal Access.** Verizon requires Verizon-specific administrative Login credentials to the Third Party Customer Portal to manage Policies. Customer will provide administrative Login access to Verizon during service implementation.

2.2.2.2 **Third Party Customer Portal Administration.** Verizon will implement Change Requests on behalf of Customer via the Third Party Customer Portal. Customer will provide Verizon with sole administrative control of the Third Party Customer Portal. Customer agrees that Verizon will have exclusive control of configuration via the Third Party Customer Portal. All configuration changes will be submitted to Verizon via Change Requests. Customer will only have read only access to the Third Party Customer Portal to view advisories and service reporting.

2.2.2.3 **Third Party Customer Portal Consent.** Customer has obtained, or will obtain, all required consents and permissions from users communicating over the Internet impacted by SASE Management or its configuration management, including without limitation the collection, use, processing, analysis and disclosure to Customer of Customer's Internet traffic data.

2.2.3 **Customer Environment and Maintenance Contracts.** Unless otherwise provided herein, Customer is responsible for monitoring and management of the Customer Environment. Customer will (i) procure and maintain with each Third Party Vendor adequate maintenance contracts and all licenses necessary to enable Verizon to properly perform SASE Management activities; (ii) comply with SASE Management prerequisites and operational procedures; (iii) promptly inform Verizon of any changes effectuated in the Customer Environment; and, (iv) inform Verizon of any changes to the nomination and/or authorization level of the individuals Customer has authorized to oversee, monitor or evaluate the provision of SASE Management.

2.2.4 **Interoperability.** Customer acknowledges that modifications or changes to the Customer Environment may cause interoperability problems or malfunctions within the Customer Environment. Customer acknowledges that it is Customer's responsibility to ensure that the individual components of the Customer Environment are interoperable.

2.2.5 **Installation Sites and Equipment.** Customer shall prepare any installation site and/or Customer Environment in accordance with Verizon's instructions to ensure that any equipment which enables a Verizon interface to the Customer's device(s) is properly configured as required and operates in accordance with the manufacturer's specifications. Customer is responsible for any costs associated with preparation of the installation site and Customer Environment. If Customer fails to make any preparations required herein and this failure causes Verizon to incur costs during the implementation or provision of SASE Management then Verizon reserves the right to invoice Customer for such costs.

2.2.6 **User Interface.** In connection with the provision of SASE Management, Verizon may provide Customer with one or more user Logins to access the VEC or Third Party Customer Portal. Customer shall at all times keep its Login strictly confidential and shall take all reasonable precautions to prevent unauthorized use, misuse or compromise of its Login. Customer agrees to notify Verizon promptly upon learning of any actual or threatened unauthorized use, misuse, or compromise of its Login. Verizon is entitled to rely on Customer's Login as conclusive evidence of identity and authority. Customer shall be liable for all activities and charges incurred through the use of Customer's Login, and hold Verizon harmless from all liabilities, losses, damages, costs and expenses (including, without limitation, reasonable attorneys' fees and costs) incurred by Verizon resulting from the use and/or compromise of Customer's Login, unless the unauthorized use, misuse or compromise of Customer's Login is solely attributable to a Verizon's gross negligence or willful misconduct.

3. **SERVICE LEVEL AGREEMENT.** The Service Level Agreement (SLA) can be found at the following URL:

www.verizon.com/business/service_guide/reg/verizon-sase-management-sla.pdf.

4. **FINANCIAL TERMS**

4.1 **Service Commitment.** The Service Commitment is for a one year, two year, three year, four year, or five year Service Commitment as shown on the Order. Billing period for SASE Management will begin when the first network or security cloud instance related to SASE Management is operational, (the Service Activation Date), and the Service Commitment term will commence at this time. At the end of a Service Commitment, the Agreement will continue until either Party terminates upon 60 days' written notice.

4.2 **Rates and Charges.** Customer will pay the non-recurring charges (NRCs), monthly recurring charges (MRCs) and annual recurring charges (ARCs) as set forth in the Order. Unless expressly indicated otherwise, all NRCs will be invoiced upon Commencement Date and the initial MRCs or ARCs will be invoiced upon Service Activation Date. Recurring Charges are determined by the pricing rate tier for the total number of users, service package, and Third Party Vendor security cloud instance type specified for the service instance in the Order.

5. **DEFINITIONS.** The following definitions apply to SASE Management.

Term	Definition
24x7	Nonstop service, 24 hours a day, seven days a week, 365 (366) days a year, independent of time zones and local or international public holidays.
Applicable Rates	The rates that apply for work not covered under this Service Attachment. All such work is subject to the execution of a separate written agreement that describes the activities and the Applicable Rates for performing such work.
Authorized Users	Customer personnel authorized by Customer to access the Third Party Customer Portal and/or the VEC and to interact with Verizon.
Change Request	A Customer-initiated request to update Policy Rules on the security cloud instance. A Change Request is a change which involves creation, modification, or deletion of less than 10 Policy Rules and/or 40 objects within a Policy Rule.
Customer Environment	The Customer network and/or information technology infrastructure.
Fast Track Change Request (FCR)	A Customer-initiated Change Request that Verizon reviews and accepts within four hours and implements an accepted FCR within 36 hours after acceptance.
Login	IDs, account numbers, personal identification numbers or codes, passwords, digital certificates or other means of authentication.
Maintenance Window	A time window used for Verizon's performance of maintenance or management services on SASE Management. During a Maintenance Window, the service may be temporarily disrupted or unavailable. In the case of Verizon's performance of Customer requested change

	request(s), the scheduling of Maintenance Windows may be agreed between Customer and Verizon.
Major Change Request	A Customer-initiated Change Request requiring: i) the creation, modification, or deletion of more than 10 Policy Rules and/or 40 objects within a Policy Rule and/or; ii) more than four hours (and less than eight hours) end-to-end, including assessment, preparation and implementation phase. Service level agreements do not apply for implementation of Major Change Requests.
Policy or Policies	Policies are the set of policy rules under which a specific security cloud instance functions to protect the Customer Environment as intended. Examples of such are Policy Rules under Access Policy, Security Policy, NAT Policy, Decryption.
Policy Rule or Policy Rules	Policy Rules are the rules which specify the action to be taken on a specific policy. For example, for Access Policy, potential policy rules could be to Allow Access and Block Access.
Project Manager	A Verizon-designated person who will act as the central point of contact throughout the implementation process. The Project Manager will be responsible for managing the schedule and will also collaborate with Customer to develop a project plan that will specify resources, dates, times, and locations for the tasks described in the project plan.
Regular Change Request (RCR)	A Customer-initiated Change Request that Verizon reviews and accepts within 24 hours after Customer submission and implements an accepted RCR in the next Maintenance Window, provided that the minimum time between Verizon's acceptance of an RCR and the implementation is at least 48 hours.
Third Party Vendor	The security vendor that is supported as part of SASE Management.
Third Party Customer Portal	The Customer portal of the Third Party Vendor whose product is supported under SASE Management.
Urgent Change Request (UCR)	A Customer initiated Change Request that Verizon reviews and accepts within two hours and will implement within four hours after acceptance.

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Schedule D to NaaS Service Attachment
NaaS Cloud Management

1. GENERAL

1.1 **Service Definition.** NaaS Cloud Management (NaaSCM) is a networking and security solution that enables mesh connectivity across cloud service providers (CSPs) and CSP regions. NaaS Cloud Management leverages Verizon's IP backbone, NaaSCM Bandwidth Connectivity, and NaaSCM Data Volume Connectivity products and third party management software as a service under the Network as a Service (NaaS) framework.

1.2 **NaaSCM Service Components:** NaaSCM Customers can procure all or a subset of the below set of services to meet their specific needs. Customers must procure (i) either one of the Connectivity Services at each Customer Site, and (ii) NaaSCM Managed Services. NaaSCM Fabric/OverlayMesh is an optional service and cannot be ordered by itself.

1.2.1 **NaaSCM – Connectivity.** Verizon's NaaSCM – Connectivity provides networking to seamlessly and securely connect Customers' networks to multiple clouds and utilize services from multiple CSPs. NaaSCM – Connectivity provides two interconnection options, Bandwidth Connectivity and Data Volume Connectivity, described in detail below:

- **Bandwidth Connectivity:** With NaaSCM Bandwidth Connectivity, Verizon provides an interconnection across a third party vendor's network between a Customer's Verizon-provided service and their collocated equipment or CSP - within select third party data centers. Customer must have a suitable existing arrangement with the third party vendor network or suitable CSP agreement, and Customer must separately have a contract for the Verizon Private IP service in order to utilize NaaSCM Bandwidth Connectivity as an access method for that service.

- **Data Volume Connectivity:** With NaaSCM Data Volume Connectivity, Verizon provides an interconnection with the network of select third-party cloud providers (with whom the customer has separately contracted) in select data centers locations, enabling Customer to utilize those third-parties' cloud services over Verizon's Private IP network. Verizon interconnects either directly to the cloud providers or with partners that in turn connect to the cloud providers.

1.2.2 **NaaSCM Fabric/Overlay Mesh:** The NaaSCM solution creates an overlay mesh network or fabric that enables applications running anywhere in the cloud to communicate with each other as though they are on the same network. The mesh services are provided either on Regional Edge nodes located in Verizon POPs or on Customer Edge nodes located in customer's environment.

Regional Edge node provided services are initially available through Base Services Bundles of either Tier 1 or Tier 2 services, which must be deployed first. A customer can add incremental packs of each individual service, providing the corresponding Tier Base Service Bundle has been deployed first. For example, if a customer has deployed the initial Tier 1 Base Services Bundle then they may add additional packs of individual Tier 1 services, but not Tier 2 services.

Services provided by Customer Edge nodes are licensed per Customer Edge, rather than by individual service, meaning customers can consume services up to the technical and capacity limitation of the deployed Customer Edge and its environment. Customer Edge nodes are available supporting both Tier 1 and Tier 2 services. In both Regional Edge node and Customer Edge nodes cases, Tier 2 service options include those in Tier 1.

The features provided in each of these locations are as follows:

- Regional Edge features: DDoS Protection, Rate Limiting Capability, Application Performance/Health Visibility, Secure Event Visibility
- Regional Edge Tier 1 Value Added Services (VAS): Multi-cloud Load Balancing, SSL Termination
- Regional Edge Tier 2 Value Added Services (VAS): Tier 1 services + Web Application Firewall, API Security, API Discovery
- Customer Edge Tier 1 features: Load Balancing (network or application), Multi-cloud Networking, Application Proxying, SSL Termination, Application Performance Observability, Service Discovery, L3 Routing Capability, Multi-cloud Networking Virtual Router, Network Firewall, Network Request Rate Limit
- Customer Edge Tier 2 features: Tier 1 services + Web Application Firewall, API Security, DDoS Protection

1.2.3 **NaaSCM Managed Services:** NaaSCM provides a comprehensive suite of Verizon managed services that manage all of the NaaS Cloud Management services on behalf of the customer. These managed services include orchestration, automation for connectivity across public, private clouds, and enterprise sites, integrated visibility, performance monitoring and service assurance of both underlay and overlay. NaaSCM Managed Services offer the following capabilities:

- Deployment and ongoing management of the Verizon NaaS Cloud Management solution elements.
- Respond to alarms generated that indicate an availability/health condition of cloud workloads has occurred. (*NaaSCM Fabric/Overlay Mesh only)
- Open trouble tickets on the customer's behalf.
- Proactively notify the customer that an outage condition exists, backed by Service Level Objectives. (*NaaSCM Fabric/Overlay Mesh only)
- Configure and manage all NaaS Cloud Management policies and connections on behalf of the customer. (*NaaSCM Fabric/Overlay Mesh only)
- Work with the customer to resolve any issues that the customer is facing after applying policy updates.

1.3 **NaaSCM Center Console.** The status and performance of the NaaSCM service design and functions can be monitored by the customer within the Verizon NaaSCM Center Console. Users will be able to view analytics for both network and security services, and in the future, the ability to manage, add/update network and security policies for both internal and external user personas will be enabled. This client dashboard will allow for integrated monitoring and management of the NaaSCM service elements. The dashboard will provide a Single Pane of Glass view of the network with drilldown insight into the performance and configuration of the sites, network, clusters, devices, etc. that comprise the end-to-end solution. The NaaSCM Center Console is available for Customers who order the Fabric/Overlay Mesh. It is not available to Customers who only purchase one of the NaaSCM – Connectivity options.

2. **SUPPLEMENTAL TERMS.** These supplemental terms apply to the NaaSCM Fabric/Overlay Mesh.

2.1 **Customer Edge Rights and Licenses.** Subject to the terms and conditions of the Agreement, and any applicable Orders, we grant you a limited, revocable, non-exclusive, non-transferable, non-sublicensable right to: (a) permit Users to install, execute and use the Customer Edge Software on Authorized Devices, in executable code form only; (b) permit Users to access and use the NaaS Cloud Management, solely through the Customer website portal specified in an Order; and (c) permit End Users to access and use the Customer Dashboard, solely through the Customer website portal specified in an Order, solely in connection with your internal business purposes during the applicable Service Term.

2.2 **Reservation of Rights.** We and our suppliers and licensors retain all right, title and interest in and to the Services and any software or other technology used in the provision of the Services and all modifications and derivative works thereof; all trademarks, names, logos; and all Documentation for the Services, including without limitation, all rights to patent, copyright, trade secret and other intellectual property rights. Other than as specifically described in this Section I2, you have no right under the Agreement to any of the Services, Documentation, or to any of Verizon or its suppliers and licensors' trademarks, patents, copyrights, or other intellectual property rights. Verizon and its suppliers and licensors retain all rights not granted herein.

2.3 **Use Restrictions.** You are responsible for all activities conducted by you and your Users with respect to the Services. You shall not directly or indirectly: (a) copy, modify, or create derivative works of the Services, any software component of the Services, or Documentation; (b) remove any proprietary notices from the Services or Documentation; (c) disassemble any hardware made available to you as part of the Services; (d) use the Services or Documentation in any manner or for any purpose that infringes, misappropriates, or otherwise violates any intellectual property right or other right of any person, or that violates any applicable laws; or (e) access or use the Services or Documentation for purposes of competitive analysis thereof or the development, provision or use of a competing software service or product.

2.4 **Third Party Access.** As part of the Services, you may have the opportunity to grant any third-party entity or website the ability to access your Account. Should you elect to do so, you acknowledge and agree that neither Verizon nor its licensors' shall be responsible for damages, harm, or losses that may arise from the third-party's access to your Account.

2.5 **Security and Privacy.** You will obtain any consents and provide any notices that are legally required for your use of the Software.

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2.6 **Notice to U.S. Government End Users.** The Customer Edge Software and Documentation qualify as "commercial items," as that term is defined in Federal Acquisition Regulation ("FAR") 48 C.F.R. 2.101 and consist of "commercial computer software" and "commercial computer software documentation" as such terms are used in FAR 12.212. Consistent with FAR 12.212 and DoD FAR Supp. 227.7202-1 through 227.7202-4, and notwithstanding any other FAR or other contrary provision in any agreement into which this Agreement may be incorporated, you may provide to a government end user or, if this Agreement is entered into directly with a government end user, you will acquire, the Customer Edge Software and Documentation with only those rights set forth in this Agreement. Use of the Customer Edge Software and/or Documentation constitutes an agreement by the government that the Customer Edge Software and Documentation are "commercial computer software" and "commercial computer software documentation," and constitutes your acceptance of the rights and restrictions herein.

2.7 **Third Party Beneficiary.** Verizon and its suppliers and licensors are express and intended third-party beneficiaries of the Agreement and may claim the benefits, exercise the rights, and enforce the terms set forth in the Agreement.

3. **CUSTOMER TERMS**

3.1 **Cloud Service Provider Access.** Verizon requires customer-specific administrative Login credentials to the Cloud Service Providers associated with NaaS Cloud Management. Customer will provide administrative Login access credentials to Verizon during service implementation and will provide updated credentials to the extent they change during the term in which Customer uses NaaS Cloud Management.

4. **SERVICE LEVEL OBJECTIVES.** The NaaS Cloud Management Service Level Objectives (SLO) defines and sets forth the requirements and other terms and conditions agreed to between the Customer ("Customer") and Verizon with respect to the support Verizon shall provide in order to maintain the delivery of NaaS Cloud Management service. The SLO can be found at: www.verizon.com/business/service_guide/reg/Naas-Cloud-SLO.pdf.

5. **FINANCIAL TERMS.** Customer will pay the charges for NaaS Cloud Management service specified in the Agreement.
Charges are in U.S. dollars and will be billed in the invoice currency of the associated service.

5.1 **Customer Edge Charges.** Customer Edges (CE) are hosted by Customer at their hosting expense. Customer can use as many services as they wish to be provided by their CE, up to the compute limitations of the CE. Customer can choose from either 4vCPU, 8vCPU or 16vCPU. These are dimensioning considerations which are priced incrementally. Customer can choose either standard (single node) or High Availability (three nodes) CEs.

5.2 **Change Orders**. Customer is allowed a certain number of no-fee change orders per month based on the number of NaaSCM Customer Sites. Specifically, the maximum number of no-fee change requests per month is calculated by multiplying the number of NaaSCM Customer Sites by 15. For example, the limit for a Customer with six NaaSCM Customer Sites would be 90 change requests per month. In the event that Customer exceeds this limit, Verizon reserves the right to issue Customer an overage charge of $60 for each change order over the limit. Change orders that are subject to this policy include, but are not limited to, the following:

- Security policy additions and changes
- Load balancer additions and network changes
- Networking changes with CSPs
- IP address changes and additions

- Border Gateway Protocol (BGP) configuration and network changes

6. **DEFINITIONS.** The following definitions apply to NaaS Cloud Management, in addition to those identified in the Master Terms and the administrative charge definitions at the following URL: www.verizon.com/business/service_guide/reg/definitions_toc_2017DEC01.htm.

Term	Definition
API Security	Blocks API attacks in real time and eliminates vulnerabilities at the source. The portal enables users to manage threat analytics, forensics, and troubleshooting.
Application Performance/Health Visibility	Detailed application telemetry in the form of metrics, logs, alerts and events are collected from across the platform. This data is available in graphical format in the console, via APIs for programmatic consumption.
Application Performance Observability	Detailed metrics, logs, requests, and notifications are centrally collected from every site to provide rich observability across application, infrastructure, network, and security services across the entire system. These metrics are used to provide a holistic view of application health, service connectivity, API requests, and infrastructure resource consumption. This gives the ability to easily debug and trace issues across the system while the centralized service can be used to integrate logs and metrics with external performance management systems like Datadog, Splunk, etc.
DDoS Protection	Web Application Firewall protection against vulnerabilities and the ability to configure custom Layer 7 policies.
Application Proxying	Ability to control the flow of application and API traffic by terminating incoming TCP connections or UDP streams from a client and initiating a new connection to the server.
L3 Routing Capability	The ability to connect virtual network segments by forwarding packets based on IP address.
Load Balancing	A centrally managed globally distributed load balancer and proxy with Service Discovery, health checking, application micro-segmentation, and application policy providing the most advanced implementation of edge load-balancer with ingress/egress capability for any service mesh.
Multi-cloud Load Balancing	A centrally managed globally distributed load balancer and proxy with Service Discovery, health checking, application micro-segmentation, and application policy providing the ability to terminate to back-end services residing in one or more public and/or private clouds.
Multi-cloud Networking	Seamless and secure connectivity to public and private clouds over the Verizon Private IP (PIP) Network.
Multi-cloud Networking Virtual Router	Provides the ability to route packets from a network segment on one cloud to a network segment on another cloud.
Network Firewall	An object that contains all the network security configuration for a site and serves as a single place to configure network policies, service policies, and access control lists.
Network Request Rate Limit	A method of protecting applications by controlling the rate of traffic coming into or out of an application.
Rate Limiting Capability	A method of protecting applications by controlling the rate of traffic coming into or out of an application.
Secure Event Visibility	Ability to view firewall events, logs, statistics and incidents via a graphical dashboard in the console.

Service Discovery	Ability for a site or virtual-site to automatically discover service endpoints and publish virtual IPs. This can be accomplished using the DNS, K8S, or Consul methods.
SSL Termination	The process of decrypting encrypted traffic before passing it to the back-end web/application server.
Web Application Firewall	Provides protection from a range of attacks on HTTP traffic with the ability to identify and act upon threats. Actions include logging and blocking.