verizon

PRIVATE IP SERVICE

1. GENERAL

1.1 **Service Definition.** Verizon offers four variations of this service: Private IP Service, Private IP Layer 2, Private IP Gateway and Private IP Interconnect, subject to availability. The Customer is aware that not all variations may be available in all countries.

1.1.1 **Platforms.** Except where explicitly stated otherwise, these terms apply to Optimized Service (denoted with a "+" and sometimes referred to as Rapid Delivery) and non-Optimized Service.

2. AVAILABLE VERSIONS PRIVATE IP SERVICE

2.1 Private IP Service

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

2.1.2 **Standard Service Features**

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

Expected Total Number 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 Private IP and in accordance with Verizon's then-current applicable assignment guidelines.

2.1.3 **Optional Service Features**

2.1.3.1 **Diversity.** With Diversity, Verizon provides a second equivalent circuit for the same Customer Site that may be configured as either active or passive, and as providing either Geographic Diversity or Router Diversity, as Customer elects.

2.1.3.2 **Dynamic Network Manager.** With Dynamic Network Manager (f/k/a Dynamic Bandwidth), Verizon provides a web-based interface through which Customer can dynamically manage its CAR and Private IP port values. Customer accesses the interface through the Verizon Enterprise Center or via an Application Program Interface.

2.1.3.3 **IP Multicasting.** With IP Multicasting, Verizon will simultaneously deliver a single stream of data to multiple recipients in Customer-provided multicast groups.

2.1.3.4 **Multiple Virtual Routing and Forwarding.** With Multiple Virtual Routing and Forwarding, Customer may create multiple virtual private network connections via a single Private IP port. Customer may use those connections to extend the privacy and security of the Private IP service to the various LANs at Customer's Site. Customer understands and accepts that packet drops may occur if Customer creates an oversubscription of virtual private network connections on the Private IP port and Verizon is not responsible for such packet drops.

2.1.3.5 **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 Internet Engineering Task Force Differentiated Services or Diff-Serv model. If Customer does not set different classes, Verizon will route all Customer traffic using the BE class as the default priority designation.

2.1.3.6 **WAN Analysis.** (Non-Optimized Service only) For customers receiving Non-Optimized Private IP services, the terms and conditions for WAN Analysis are located at the following URL:

For U.S. Services:
www.verizon.com/business/service_guide/reg/cp_war_plus_wan_analysis_reporting.pdf

For non-U.S. Services:
www.verizon.com/business/service_guide/reg/cp_war_plus_wan_analysis_reporting_2017DEC01.pdf

2.1.3.7 **Burstable Billing.** (Optimized Only) With Burstable Billing, Customer selects a Bandwidth Commitment and may burst up to a higher selected bandwidth as required.

2.1.3.8 **Converged IP.** (Optimized Only) With Converged IP, Customer selects a Private IP port that will be used to connect to Virtual Network Services – Security Service via a single Ethernet access circuit. Customer must purchase Virtual Network Services – Security under a separate Service Attachment.

2.1.3.9 **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.

2.1.3.10 **LTE Business Internet.** In the U.S., LTE 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. 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. LTE 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 LTE 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 Customer Premises Equipment 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-Equipment. Speeds represent the maximum speed but may be lower in the event of network congestion. After the data de-prioritization threshold is met on a line during any billing cycle, usage on that line may be prioritized behind other customers in the event of network congestion for the remainder of the billing 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.

2.1.3.11 **5G Business Internet.** In the U.S., 5G 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. 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 mobile broadband service, and can only be activated on select 5G C-Band compatible Customer-provided data routers or designated devices sold through Verizon. A compatible 5G-enabled receiver/router is required, either Verizon-Equipment or Customer-provided. If Customer supplies its own receiver/router, Customer is responsible for (i) ensuring that such receiver/router is compatible for use with 5G 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 Customer Premises Equipment from Verizon pursuant to a separate Service Attachment. When purchasing the device through Verizon, this device will be self-set-up. Customer is responsible for following the setup and activation instructions provided with the Verizon-Equipment. 5G Business Internet plan includes an unlimited data allowance. The monthly access fee will be pro-rated when changing price plans during a billing cycle. Speed Tier Limit represent the maximum downlink speed but may be lower in the event of network congestion. Uplink speeds may be lower than downlink speeds. These plans are fixed location plans. Customer agrees to only use the Service at the qualified service address that Verizon approved at the time the Service was activated.

If Customer uses the Service 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.

2.1.3.12 **Mobile Private Network (MPN).** MPN extends Customer's IP network to its wireless equipment by segregating the data between such devices and Customer's servers from the public Internet. Dynamic Mobile Network Routing (DMNR) allows Customers to remotely access IP addresses of devices that are connected to a MPN through a wireless router.

2.1.4 **Customer Responsibilities**

2.1.4.1 **Bandwidth Shaping for Ethernet Access Circuit.** If Verizon provisions 'bandwidth shaping' overhead adjustments on the Ethernet Interfaces at the PE egress, it may be necessary for Customer to apply policies at Customer's CE egress to prevent packet loss due to Ethernet protocol overhead used within the Private IP Network (depending on the Private IP platform and Customer's traffic profile).

2.2 **Private IP Layer 2**

2.2.1 **Service Definition.** Verizon Private IP Layer 2 service provides point-to-point routing, with Customer control of routing, architectural and topology changes.

2.2.2 **Optional Service Features.** With the Private IP Permanent Visual Circuits feature, Verizon will add one or more Private IP PVCs on Customer's Private IP Layer 2 port upon Customer's request.

2.3 **Private IP Gateway**

2.3.1 **Service Definition.** With Private IP Gateway service, Verizon provides an interconnection between two private networks based on the characteristics of the gateway, as described below.

2.3.2 **Standard Service Features.** Verizon provides the following Private IP Gateways:

2.3.2.1 **Private Wireless Gateway (U.S. Mainland Only).** With Private Wireless Gateway, Verizon provides Customer a port that Customer may use to connect Customer's wireless traffic to the Private IP Network.

2.3.2.2 **MVIC Service (Select Locations).** With MVIC Service, Verizon connects Verizon's Private IP Network to an MPLS Partner's MPLS networks.

2.3.2.3 **Satellite Gateway.** The Satellite Gateway functions as a Network-to-Network Interface (NNI) between Verizon's Satellite Access service and the Private IP MPLS network. Customers using satellite access in conjunction with Private IP must order a satellite gateway port that is sized according to the customer's aggregate satellite bandwidth requirements. Each customer's individual Virtual LAN will be mapped to a Private IP PVC.

2.3.2.4 **Optimized Service-Only Standard Features**

2.3.2.4.1 **Secure Cloud Interconnect.** With Secure Cloud Interconnect, Verizon provides an interconnection with the network of select third-party cloud providers (with whom the customer has separately contracted) enabling Customer to utilize those third-parties' cloud services over Private IP, Switched E-LAN, or Switched E-LINE network. Verizon also provides network translation functionality (NAT), but Customer may provide Customer's own NAT with the understanding that Customer accepts sole responsibility if Customer fails to properly configure NAT and such failure permits a third party cloud provider to have access to Customer's Private IP addresses. Secure Cloud Interconnect has unique pricing, network designs, and capabilities; details are available on request. In addition, Verizon may terminate Secure Cloud Interconnect, in whole or in part, upon 30 days written notice, where

Customer is utilizing Secure Cloud Interconnect on a usage only basis, and Customer has not used this feature for a continuous period exceeding ten months.

2.4 **Private IP-Interconnect (PIP-I)** (Select Customers Only)

2.4.1 **Service Definition.** Private IP Interconnect, or PIP-I, is only available to Customers who have been approved by Verizon to receive this feature. With this service, Verizon provides a direct, point-to-point interconnection between Private IP site(s) Customer purchases from Verizon and Customer's third party MPLS-based network, using a shared port gateway designed to support multiple customers.

2.4.2 **Standard Service Features**

2.4.2.1 **PIP-I Connection and Port.** With PIP-I, Verizon provides a PIP-I Connection and a PIP-I Port. A PIP-I Connection is a physical Port that presents PIP-I at the demarcation point for interconnection to Customer's network. A PIP-I Port is a logical PIP Port associated with a VPN name that attaches to PIP site(s) that Customer has purchased from Verizon.

2.4.2.2 **Non-Supported Features.** PIP-I does not support multi-Virtual Routing and Forwarding, Dynamic Network Manager and multicasting. PIP-I does not support a redundant configuration.

2.4.3 **Customer Responsibilities**

2.4.3.1 **Ordering PIP-I Ports.** Customer will order PIP-I Ports only with an assignment to an existing or new PIP VPN name.

2.4.3.2 **Ordering Multiple PIP-I Ports.** Each PIP-I Connection can be used with multiple PIP-I Ports but each PIP-I Port can be associated with and route traffic to only one PIP-I Connection. Under no circumstances will Customer route traffic presented to PIP-I on one PIP-I Connection to another PIP-I Port on a different PIP-I Connection. If Verizon identifies any such usage of the Service, it reserves the right to immediately terminate the Service to Customer.

2.4.3.3 **Restriction on use of PIP-I with Existing Customers of Verizon.** Customer will not connect a PIP-I Port to a port on Verizon's MPLS network that is provisioned by Verizon to an existing customer of Verizon.

2.4.3.4 **Cross-Connection.** With Private IP port only, Verizon provides a cross-connection to a Verizon IP hub if Customer is located in the same building as the IP hub.

2.4.3.5 **Disconnection.** Customer shall ensure no PIP-I ports are active prior to disconnect order or the order will not be processed by Verizon.

3. **SUPPLEMENTAL TERMS**

3.1 **India Ports.** This clause applies if the Private IP Service contains ports in India.

3.1.1 **Additional Documentation.** Prior to the Activation Date Customer will complete and sign, or will procure the completion and signing by its Indian Affiliate (or other end user) receiving the Private IP Service in India, the Inspection Pro Forma document in the form found at the following URL: https://www.verizon.com/business/service_guide/reg/pro-formas.htm (Pro Forma). To the extent that the information required by the Pro Forma cannot be completed (or is otherwise not completed) until after

the Activation Date Customer authorizes Verizon to complete the Pro Forma or undertakes to provide any additional necessary information as requested by Verizon for that purpose.

3.1.2 **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.

3.1.3 **Usage.** To the extent usage of the Private IP 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.

3.2 **Provisioning Entities in China.** In the event of regulatory changes in China affecting Verizon's ability to provide PIP/PIP Gateway pursuant to this Order, Verizon may terminate [PIP/PIP Gateway] without liability or where possible transition its provision of PIP/PIP Gateway to Customer via a different Third Party network supplier at a price to be agreed between the Parties.

3.3 **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 judgement, 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.

3.4 **Voice over IP (VoIP) Restrictions.** Customer acknowledges that a number of jurisdictions impose restrictions and/or licensing or registration conditions on VoIP transmission over the Network. To the extent such regulations apply, Customer shall comply with those regulations and indemnify, defend, and hold Verizon harmless for any claims arising from Customer's violation of such regulations.

3.5 **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."

4. **SERVICE LEVEL AGREEMENT (SLA)**

Private IP Service Level Agreement for Optimized Private IP Service +:
www.verizon.com/business/service_guide/reg/cp_pip_plus_sla.pdf.

Private IP SLA Summary and Service Level Agreement for non-Optimized Private IP Service:
www.verizon.com/business/service_guide/secure/cp_pip_sla_summary_page_SG.htm.

5. **FINANCIAL TERMS**

5.1 **Optimized Service.** Customer will pay the charges for Optimized Private IP Service + specified in the Agreement, including those below and at the following URL:
www.verizon.com/business/service_guide/reg/applicable_charges_toc.htm.

Charges below are in U.S. dollars and will be billed in the invoice currency of the associated service.

5.1.1 **Administrative Charges**

Administrative Charges	Charge Instance	Port Type	Speed	NRC
Administrative Change	Per Change	n/a	n/a	$60.00
Cancellation of Service Order	Per Port	n/a	n/a	$800.00
Expedite	Per Port	n/a	n/a	$1,000.00
Physical Change	Per Order	n/a	n/a	$200.00
Reconfiguration	Per Port	Standard Port	64Kbps	$50.00
Reconfiguration	Per Port	Standard Port	256Kbps,512Kbps	$100.00
Reconfiguration	Per Port	Standard Port	T1, E1, 1M, 2M	$200.00
Reconfiguration	Per Port	Standard Port	Above E1	$600.00

5.1.2 **Bandwidth Bursting.** (Optimized Only) With Bandwidth Bursting, Customer will pay an additional charge monthly per circuit for any measured usage level greater than Customer's Bandwidth Commitment. Verizon will sample the Private IP port 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.

5.1.3 **Reconfiguration.** A reconfiguration charge applies for the modification of an existing Private IP circuit, at Customer request, for Verizon to reterminate a circuit to a different router or reconfiguration of the port.

Non-Optimized Service. Customer will pay MRCs and NRCs for non-Optimized Private IP Service as specified in the Agreement including those below and at the following URL:
5.2 www.verizon.com/business/service_guide/reg/applicable_charges_toc.htm.
~~5.2~~ In addition, online pricing for Service provided by a U.S. Verizon entity is at www.verizon.com/business/service_guide/reg/cp_private_ip_service.htm (for U.S. Services).

6. **DEFINITIONS.** The following definitions apply to Private IP Service, 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
Bandwidth Commitment	The portion of a port speed which Customer may use in a monthly period without incurring a Burstable Overage charge.

Committed Access Rate (CAR)	The amount of bandwidth to which Customer subscribes on a logical Port by logical Port basis.
Customer Edge (CE)	The edge of, or point in which customer traffic enters or exits, the Customer network.
Geographic Diversity	Automatically directs the second Customer circuit to a different Verizon gateway at a different Verizon POP.
MPLS	Multi-Protocol Label Switching - an Internet Engineering Task Force standard.
MPLS Partner	A third party MPLS provider with whom Verizon has an agency or reseller arrangement to provide interconnection to that party's in-country network.
MVIC	MPLS VPN Interprovider Connection.
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 Private IP Network.
Router Diversity	Automatically directs the second Customer circuit to a different switch or router.
Virtual Private Network (VPN)	Uses a logical connection to route traffic between network sites.