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U.S. PRIVATE LINE

1. GENERAL

1.1 **Service Definition.** U.S. Private Line (USPL) services provides private line transmission service within the U.S. Mainland. It is available in an Interstate version and an Intrastate version.

1.2 **Platforms.** These terms apply to non-optimized U.S. Private Line Services only.

1.3 **Standard Service Features**

1.3.1 **Web Digital Reconfiguration Services (Web DRS).** As of November 1, 2011, Web DRS is no longer available to new Customers. Web DRS provides Customers with a web-based platform to manage the configuration of their U.S. Private Line circuits, connecting or re-routing circuits as needed using the following Web-based tools:

1.3.1.1 **Switched DS1 Services (Web DRS SWDS1).** Web DRS SWDS1 allows Customers to temporarily access full DS1 bandwidth on demand, for example for infrequent high bandwidth applications such as video conferencing. It is available for DS1 only. Web DRS SWDS1 uses a mesh network of Inter Device Trunks (IDTs) that connects strategic Wideband Digital Cross Connects (DXCs) in the U.S. Mainland. Tail circuits connect Customer to the Switched T1 Wideband DXC. Using the Web DRS tool, Customer selects any two Customer end points for a connection. Usage charges apply only for the time the connections are active. The connections can be enabled at the time of the request or they can be scheduled to go up and down at a later time.

1.3.1.2 **Fixed Network Reconfiguration Service (Web DRS FNR).** Web DRS FNR allows Customer to redirect its DS0, DS1 or DS3 bandwidth when they temporarily need additional capacity at another location for applications such as disaster recovery. Web DRS FNR uses a fixed network of multiple pre-defined Customer circuit routes connected to a single DXC. Using the Web DRS tool, Customer may change the route to which the current Customer capacity is assigned and reassign that capacity to a different circuit route.

1.3.2 **Echo Control.** Echo Control provides echo cancellation equipment for DS1 circuits. Echo cancellation devices monitor an incoming signal and generate a negative image which is combined with an echo signal negating the effects of echo on the line. Echo Control is required for each end of a DS1 circuit for IXC lengths of 500 miles or greater when used to transmit voice and analog data.

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2. AVAILABLE VERSIONS

2.1 **U.S. Private Line Interstate Service.** As of October 1, 2010, orders for new circuits as well as orders for moves, adds, changes and upgrades for U.S. Private Line SONET are provided as Private Carriage Service.

2.1.1 **Service Description.** Interstate U.S. Private Line (USPL) services provides private line transmission service within the U.S. Mainland originating in a Verizon-designated Point-of-Presence (POP) in one Local Access Transport Area (LATA) and terminating in a Verizon-designated POP in another LATA via IXC transport. USPL offers a suite of analog, digital, and SONET services available on point-to-point, point-to-multi-point, and multipoint configurations. Access to these services is via dedicated Access or other compatible Verizon services.

2.1.2 **Terms.** U.S. Private Line Interstate Services are offered only on a jurisdictionally interstate basis. With respect to its use of U.S. Private Line Interstate Services, Customer agrees that more than 10 percent of Customer's per circuit traffic originates in one state and terminates in different state.

2.1.3 **Available Services.** The following USPL interstate services are available:

2.1.3.1 **Analog and Digital.** Analog and Digital USPL provide dedicated analog or digital service capable of supporting voice, data, and video communications via dedicated DS-0 (Hubless) Access, T-1 Digital Access, or DS-3 Local Access. The following services are available:

- **Analog.** Analog service (formerly Voice Grade Private Line or VGPL) provides analog signals at 2.4, 4.8, 9.6, and 19.2 kbps speeds. Multipoint and point-to-multipoint configurations are supported at data speeds of 2.4, 4.8 and 9.6 kbps. Analog circuits support Tie Line (TL), Automatic Ringdown (ARD), Manual Ringdown (MRD), Off-Premises Extension (OPX) and Foreign Exchange (FX) configurations. Effective August 12, 2014, VGPL is grandfathered and is no longer available to new USPL customers. Existing USPL customers may add, move, change and disconnect VGPL with the understanding that renewals of VGPL will not be permitted.
- **Digital.** Digital services transmit simultaneous, full-duplex digital signals at the following speeds. Multipoint and point-to-multipoint configurations are supported at data speeds of 2.4, 4.8, 9.6 and 56 kbps.
  - **DS0 (Digital Signal Level 0).** DS0 transmits at 2.4, 4.8, 9.6, 56 and 64 kbps. Effective August 12, 2014, DS0 is grandfathered and is no longer available to new USPL customers. Existing USPL customers may add, move, change, and disconnect DS0 with the understanding that renewals of DS0 will not be permitted.
  - **Fractional DS1 (FDS1).** FDS1 transmits at 112/128 kbps through 1344/1536 kbps, in increments of 56/64 kbps.
  - **DS1 (Digital Signal Level 1).** DS1 transmits at 1.544 Mbps.
  - **DS3 (Digital Signal Level 3).** DS3 transmits at 44.736 Mbps. One DS3 channel provides the equivalent information handling capacity of 28 DS1 channels or 672 voice equivalent circuits. DS3 is available in the following circuit topologies:
- **Linear DS3.** Linear DS3 is a single DS3 IXC connecting two designated Verizon terminals on Verizon's digital fiber-optic network.
- **Restorable DS3.** Restorable DS3 is a dedicated circuit that provides redundancy as it is provisioned over a physical ring topology.

2.1.3.2 **SONET.** (Private Carriage Service) Provides dedicated, point-to-point, optical private line services with synchronous optical network (SONET) transmission at speeds from 155 Mbps to 622 Mbps. The following bandwidths are available for IXC transport between Company-designated POPs: OC3 (155.520 Mbps), and OC12 (622.08 Mbps). Linear, and Restorable circuits are available for all speeds. Concatenated services are available for OC3s and OC12s. OC-48/48c and OC-192/192c may be available on an ICB basis.

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2.1.3.3 **Wave.** Provides ROADM-based layer 1 transport of point to point un-protected private line services. USPL Wave is priced ICB with customer interface options for:

- 3.1 10 Gb/s Wavelength Service with optical interfaces for:
  - 10GbE via 10G LAN PHY (10GBASE-xR)
  - 10GbE via 10G WAN PHY (10GBASE-xW)
  - 10G Transparent Synchronous Frame (TSF) specified by the customer as SONET OC-192 or SDH STM-64
- TSF allows transparent transport of the customer's Data Communications Channel (DCC) (Overhead bytes D1-3 and D4-12) as well as the K1 and K2 line overhead bytes used for APS in customer BLSRs.
  - OTU2 (10.7Gb/s) as OTM-0.2 via ITU-T G.959.1 Application Code P1I1-2D1
  - OTU2E (11.09 Gb/s) via ITU-T G.959.1 Application Code P1I1-2D1
- 40 Gb/s Wavelength Service with optical interfaces for:
  - 40GbE via 40GBASE-LR4
  - OTU3 (43.01 Gb/s) as OTM-0.3 via ITU-T G.695 Application Code C4S1-2D1.
- 100 Gb/s Wavelength Service with optical interfaces for:
  - 100GbE via 100GBASE-LR4
  - OTU4 (112 Gb/s) as OTM-0.4 via ITU-T G.695 Application Code 4I1-9D1F.
- Access to USPL Wave service is by
  - Type 1 access circuits are those for which the local loop is furnished wholly via (a) MCI Legacy Company facilities, (b) facilities which are collocated in MCI Legacy Company facilities, or (c) other Verizon facilities designated as Type 1 in the Guide;
  - Type 3 access circuits are those for which the local loop is not furnished via MCI Legacy Company facilities but are ordered and billed on Customer's behalf by Verizon.
  - The on-net Access to fMCI legacy company lit buildings (for the USPL Wave product) is provided via the Metro Private Line Access Services product in the Guide.
  - On-net access to Multi-tenant Data Centers and Carrier Hotels (for the USPL Wave product) is also available with special rates per the Metro Private Line Access Services product in the Guide.
  - On-net access (for the USPL Wave product) via fMCI legacy company dedicated rings uses the MPL DMS product as described in the Metro Private Line Access Services product in the Guide.
  - On-net access (for the USPL Wave product) via Verizon ILEC dedicated rings using the IOS (Integrated Optical Services) product is also available.
- Customer Provided Access (for the USPL Wave product) is also allowed when co-located at serving LD POPs, where Verizon cross-connects are made to the customer location per the Metro Private Line Access Services in the Guide.

2.2 U.S. Private Line Intrastate Service

2.2.1 **Service Description**. Intrastate U.S. Private Line services provides private line transmission service within the state originating in a Verizon-designated Point-of-Presence (POP) in one Local Access Transport Area (LATA) and terminating in a Verizon-designated POP in another LATA within the state. Intrastate USPL offers a suite of analog, digital, and SONET services available on point-to-point, point-to-multi-point, and multipoint configurations. Access to these services is via dedicated Access or other compatible Verizon services.

2.2.2 **Available Services.** The following USPL services are available:

2.2.2.1 **Analog and Digital Services.** Analog and Digital services provide dedicated analog or digital service capable of supporting voice, data, and video communications via dedicated Intrastate Analog Local Access, Intrastate DS-0 (Hubless) Access, Intrastate T-1 Digital Access, or Intrastate DS-3 Local Access. The following services are available:

- **Analog.** Analog service (formerly Voice Grade Private Line or VGPL) provides analog signals at 2.4, 4.8, 9.6, and 19.2 kbps speeds. Multipoint and point-to-multipoint configurations are supported at data speeds of 2.4, 4.8 and 9.6 kbps. Analog circuits support Tie Line (TL), Automatic Ringdown (ARD), Manual Ringdown (MRD), Off-Premises Extension (OPX) and Foreign Exchange (FX) configurations. Effective November 4, 2013, VGPL is grandfathered and is no longer available to new USPL customers. Existing USPL customers may add, move, change and disconnect VGPL with the understanding that renewals of VGPL will not be permitted.
- **Digital.** Digital services transmit simultaneous, full-duplex digital signals at the following speeds. Multipoint and point-to-multipoint configurations are supported at data speeds of 2.4, 4.8, 9.6 and 56 kbps.
  - **DS0 (Digital Signal Level 0).** DS0 transmits at 2.4, 4.8, 9.6, 56 and 64kbps. Effective November 4, 2013, DS0 is grandfathered and is no longer available to new USPL customers. Existing USPL customers may add, move, change, and disconnect DS0 with the understanding that renewals of DS0 will not be permitted.
  - **Fractional DS1 (FDS1).** FDS1 transmits at 112/128 kbps through 1344/1536 kbps, in increments of 56/64 kbps.
  - **DS1 (Digital Signal Level 1).** DS1 transmits at 1.544 Mbps.
  - **DS3 (Digital Signal Level 3).** DS3 transmits at 44.736 Mbps. One DS3 channel provides the equivalent information handling capacity of 28 DS1 channels or 672 voice equivalent circuits. DS3 is available in the following circuit topologies:
- **Linear DS3.** Linear DS3 is a single DS3 IXC connecting two designated Verizon terminals on Verizon's digital fiber-optic network.
- **Restorable DS3.** Restorable DS3 is a dedicated circuit that provides redundancy as it is provisioned over a physical ring topology.

2.2.2.3 **SONET.** SONET provides dedicated, point-to-point, simultaneous full-duplex optical private line services with synchronous optical network (SONET) transmission at speeds from 45 Mbps to 622 Mbps. The following bandwidths are available for IXC transport between Verizon-designated POPs: DS3 (44.736 Mbps), OC3 (155.520 Mbps), and OC12 (622.08 Mbps). Linear, and Restorable circuits are available for all speeds. Concatenated services are available for OC3 and OC12 bandwidths. Other speeds may be available on an ICB basis.

3. SUPPLEMENTAL TERMS

3.1 **Local Access Service.** Local access service is required for USPL and is not included.

3.2 **Special Routing.** For circuits that include special routing, Verizon will periodically check the circuit routing throughout the circuit term to verify whether special routing has been maintained. If Verizon learns that special routing has been jeopardized, then Verizon will use commercially reasonable efforts to restore special routing. If Verizon cannot restore special routing within sixty (60) days after discovering a problem, Verizon will notify Customer that special routing cannot be restored and Customer has the option within sixty (60) days from such notification from Verizon to disconnect the circuit subject to the special routing requirement without any early termination liability.

3.3 **Special Access Surcharges for Analog and Digital USPL.** Special Access Surcharges for Analog and Digital USPL will not be applied after receipt of an Exemption Certificate from Customer. A credit, not to exceed three months, will be given for a private line surcharge imposed during the period prior to the receipt of the Exemption Certificate.

3.4 **Minimum Service Term.** The minimum service term requirement for all SONET and Wave circuits is 12 months. If Customer terminates any SONET or Wave circuit before its 12-month commitment has expired, except for termination for Cause, such termination shall not be effective until 30 days after Verizon receives written notice of termination (Termination Date). In addition to paying all accrued but unpaid charges for the service incurred through the Termination Date, for each circuit terminated Customer may be required to pay, within 30 days after such Termination Date: (a) an amount equal 75

percent of the monthly recurring charges for the terminated circuit remaining in the 12-month commitment, if any; plus (b) all fees or early termination fees imposed by the access line provider, if any; plus (c) a pro rata portion of any and all credits received by Customer. However, in no event will Customer's total termination liability exceed the full contract value of the terminated SONET or Wave circuit.

4. **SERVICE LEVEL AGREEMENTS.** The following Service Level Agreement (SLA) applies:

4.1 **VBS III U.S. Private Line Service.** The U.S. Private Line SLA for VBS III is at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_uspl_service_level_agreement_11_01_07.htm.

4.2 **Pre-VBS III U.S. Private Line Service.** The U.S. Private Line SLA for pre-VBS III is at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_uspl_service_level_agreement.htm.

5. **FINANCIAL TERMS.** Customer will pay the charges for U.S. Private Line Services specified in the Agreement and at the following URL: https://enterprise.verizon.com/service/cp-uspl-rates-charges.pdf.

6. **DEFINITIONS.** The following definitions apply to U.S. Private Line Service, in addition to the definitions identified in the Agreement, and the administrative charge definitions at the following URL: www.verizonenterprise.com/service_guide/reg/definitions_toc_2017DEC01.htm.

Term	Definition
Tie Line (TL)	A dedicated circuit connecting two locations to establish an internal voice network by interconnecting into each location's PBX or other voice switching device.
Automatic Ringdown (ARD)	A dedicated circuit connecting two locations to provide immediate voice connection automatically.
Manual Ringdown (MRD)	A dedicated circuit connecting two locations to provide immediate voice connection by manual signaling.
Mileage Band	The airline mileage between two cities can be calculated using the Vertical (V) and Horizontal (H) Coordinates of the serving wire centers associated with Verizon's Terminal Locations. $\sqrt{((V_1-V_2)^2+(H_1-H_2)^2)}/10$ Where V_1 and H_1 correspond to the V & H coordinates of City 1 and V_2 and H_2 correspond to the V & H coordinates of City 2. Example: V H City 1 - New York 4997 1406 City 2 - Chicago 5986 3426 V_1 V_2 H_1 H_2 $\sqrt{((4997-5986)^2+(1406-3426)^2)}/10$ $\sqrt{(505852.1)}=711.2328$ Airline Mileage = 712 miles* Result will always be rounded to the next highest mile.
Off-Premises Extension (OPX)	A dedicated circuit connecting a distant location to a main PBX to provide the same voice capabilities available at the main Customer location.
Foreign Exchange (FX)	A dedicated circuit connecting a distant city to provide a 'local presence' to callers without the expense of maintaining a physical location in a distant city
Private Carriage Service	A Service provided to Customer on an individual basis, with rates, terms and conditions that are subject to negotiation between Verizon and Customer, and not offered for sale ubiquitously to the general public at publicly posted rates. If rates, terms and conditions cannot

	be satisfactorily negotiated with Customer, Verizon reserves the right not to sell such Private Carriage Service to Customer.
SONET Concatenated circuit	A dedicated circuit where several fibers are joined together end-to-end resulting in full bandwidth. Concatenated circuits are noted by a "c", e.g., OC3c.
SONET Linear circuit	A dedicated circuit provisioned as a logical SONET ring over a single physical connection.
SONET Restorable circuit	A dedicated circuit that provides redundancy as it is provisioned over a physical SONET ring topology.