



METRO PRIVATE LINE SERVICES

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1. GENERAL

- 1.1 **Service Definition.** Metro Private Line Access Service (MPLA) is an interstate service that provides point-to-point or multi-point service between Intra-LATA or designated corridor locations giving the Customer dedicated access to private telecommunications networks, wide area networks, connections with information service providers and interexchange carriers that transport interstate traffic. Four versions of MPLA are available: Digital, SONET, Wave and Metro Storage Transport. MPLA is provided by MCI Legacy Company.
- 1.2 **Platforms.** These terms apply to non-optimized Metro Private Line Access Services only.
- 1.3 **Configurations**
 - 1.3.1 **Network Configuration.** Metro Private Line Access Service is available in the following configurations. Different configurations may be available for different versions of MPLA, depending on location.
 - 1.3.1.1 Type 1 service is provided when the connections at each end of a circuit are provided via MCI Legacy Company facilities, and the circuit itself is provided via MCI Legacy Company facilities.
 - 1.3.1.2 Type 2 service is provided when one connection on a circuit is provided via MCI Legacy Company facilities, and the other connection is on a circuit is not provided via MCI Legacy Company facilities. The circuit is provided via MCI Legacy Company facilities.
 - 1.3.1.3 Type 3 service is provided when the connections at each end of a circuit are not provided via MCI Legacy Company facilities, but the circuit itself is provided via MCI Legacy Company facilities.
 - 1.3.1.4 Type 4 service is provided as follows:
 - Beginning August 31, 2010, Type 4 access service is available in the following network configurations and pursuant to the following conditions.
 - Type 4a access service is provided when the connections at each end of a circuit are at locations formerly provided via MCI Legacy Company facilities and are now provided via either MCI Legacy Company Facilities, Verizon Telecom Company or Verizon Telecom

Company-affiliate facilities, and the circuit itself is provided by one or more of the following: MCI Legacy Company facilities, Verizon Telecom Company or Verizon Telecom Company-affiliate facilities.

- Type 4b access service is provided when one connection on a circuit is at a location formerly provided via MCI Legacy Company and that connection is provided via MCI Legacy Company facilities, Verizon Telecom Company or Verizon Telecom Company-affiliate, and the other connection of that circuit is not at a location formerly provided via MCI Legacy Company facilities and that connection is also provided via Verizon Telecom Company or Verizon Telecom Company-affiliate facilities. The circuit itself is provided by one or more of the following: MCI Legacy Company facilities or Verizon Telecom Company or Verizon Telecom Company-affiliate facilities.
- Type 4c access service is provided when the connections at each end of a circuit are at locations not formerly provided via MCI Legacy Company facilities and are provided via Verizon Telecom Company or Verizon Telecom Company-affiliate facilities, and the circuit itself is provided by one or more of the following: MCI Legacy Company facilities, Verizon Telecom Company or Verizon Telecom Company-affiliate facilities.
- Beginning July 1, 2003, the Type 4 access service arrangement provided when the connections at each end of the circuit are not provided via Company or Company-affiliate facilities and the circuit itself is not provided via Company facilities is no longer available for new Customers.

1.3.2 Service Configuration. Metro Private Line Access Service is provided on either a Point to Point Service or Multi-Point Service basis:

1.3.2.1 Point to Point Service Configuration. Point to Point Service is available as either Full Bandwidth or Channelized Service. Optical Wave Service is available using the MCI Legacy Company's shared ROADM local network, or in Type 4a configurations, provided by one or more of the following: MCI Legacy Company, Verizon Telecom Company or Verizon Telecom Company-affiliate facilities. The following are the MPLS optional features:

- A Type 1 Dedicated base system, capable of providing multiple channels, using equipment and transport facilities across the MCI Legacy Company's local network Dedicated to Customer's service. Optical Wave Dedicated base systems are not available in Type 2, Type 3, or Type 4 network configurations. The customer-specified locations are lit as type 1 on-net buildings. The circuits are then ordered separately as appearances, which each may be unprotected or protected (if Protected type base systems are deployed) on an individual case basis. The automatic protection switching is per appearance.
- Metro Private Line Optical Wave Dedicated Point to Point Base Systems are provided in either Unprotected, (1 degree ROADM), or Protected, (2 degree ROADM in a ring topology). Customers with Metro Private Line Optical Wave service networks or access loops that are single threaded may opt for protected access and it will be done via a single ROADM degree but in this case, only the ROADM transponders are protected and not the outside plant fiber or ROADM amplifiers.
- Unprotected Optical Wave Service is a linear circuit without automatic protection switching and as either Protocol Specific or Channelized.
- Protected Optical Wave Service is available for type 1 on-net access circuits and only where supported by the network. With the Electronic Network Protection, the Customer traffic for a single circuit is bridged to a dedicated working and a dedicated protect channel. The 1+1 Automatic Protection Switching used in Electronic Network Protection allows the circuit to automatically switch from the working channel to the protect channel upon electronics module failures on either channel. The objective is to help protect against outages due to single electronics module failures in the access circuit when the network supports two degrees of freedom from the customer premises location to the LD POP. Diversity between the working channel and the protect channel is not guaranteed but provisioned where the shared Verizon



metro transport network topology supports it. The switching time is typically less than 50 ms after systematic fault detection. Switching is typically non-revertive, so upon repair of failures, the traffic would not revert back to the original channel.

- Customers with metro networks or access loops that are single threaded on the Verizon shared network may opt for protected access and it will be done via a single ROADM degree but in this case, only the ROADM transponders are protected and not the outside plant fiber or ROADM amplifiers.

The following table provides Metro Private Line Point to Point Service availability by network configuration:

Point to Point							
Service Type	Type 1	Type 2	Type 3	Type 4a	Type 4b	Type 4c	
						IntraLATA	Corridor
Voice Grade – Full Bandwidth	X	X	X	X	X	NA	X
Voice Grade – Channelized	NA	NA	NA	NA	NA	NA	NA
Digital Data (DS0) – Full Bandwidth	X	X	X	X	X	NA	X
Digital Data (DS0) – Channelized	NA	NA	NA	NA	NA	NA	NA
High Capacity (DS1) – Full Bandwidth	X	X	X	X	X	NA	X
High Capacity (DS1) – Channelized	X	X	X	X	X	NA	X
Very High Capacity (DS3) – Full Bandwidth	X	X	X	X	X	NA	X
Very High Capacity (DS3) – Channelized	X	X	X	X	X	NA	X
Optical SONET (OC3/OC12) – Concatenated/ Non-Concatenated	X	X	X	X	X	NA	X
Optical SONET (OC3/OC12) – Channelized	X	NA	NA	X	NA	NA	NA
Optical SONET (OC48/OC192) – Concatenated/ Non-Concatenated	X	NA	NA	X	X	NA	X
Optical SONET (OC48/OC192) – Channelized	X	NA	NA	X	NA	NA	NA
Optical Wave – Stand-Alone Transparent/Protocol Specific/Channelized	X	NA	NA	X	NA	NA	NA
Optical Wave – Dedicated Base System	X	NA	NA	NA	NA	NA	NA



1.3.2.2 **Multi-Point Service Configurations.** Multi-Point Service is available in the following configurations:

- **Digital.** The following provisions apply to the Digital, Multi-Point configuration of Metro Private Line Service:
 - **Analog/Digital Hub.** Analog/Digital Hub Service consists of a Host connection and multiple Endlink connections.
 - **Host Connection (Hub).** The Host connection represents the higher bandwidth circuit between the Customer's primary premises and the MCI Legacy Company's local node, or in Type 4 network configurations, at a Verizon Telecom Company or Verizon Telecom Company-affiliate location, where multiplexing functionality is performed.
 - **Endlink Connections.** The Endlink represents the individual lower bandwidth circuits between the MCI Legacy Company's local node, or in Type 4 network configurations a MCI Legacy Company's local node for existing Hub arrangements prior to August 31, 2010, or a Verizon Telecom Company or Verizon Telecom Company-affiliate designated location, where multiplexing functionality is performed and a Customer's secondary designated premises.

Lower level connections from the Hub service to the Company's IXC Point of Presence will be billed as a [Network Service Local Access Service](https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm) (see https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm).

- **Digital Bridge Service.** Metro Private Line Digital Bridge Service is no longer available as of August 1, 2012 to new Customers and existing Customers may no longer add Metro Private Line Digital Bridge Service circuits. Digital Bridge Service is the connection of multiple equal bandwidth DS-0 and DS-1 circuits at the MCI Legacy Company's local central office node, or for Type 4 network configuration, at a Verizon Telecom Company or Verizon Telecom Company-affiliate location, that provides one-way connectivity for DS-0 circuits and one-way or two-way full time connectivity for DS-1 circuits. One-way communication permits a single host location to transmit communications to connected secondary locations, which are unable to transmit communications. Two-way communications permits connected host and secondary locations to transmit and receive communications. Endlink Service is required. Bridging is the connection at the MCI Legacy Company's local central office node, or for Type 4 network configuration, at a Verizon Telecom Company or Verizon Telecom Company-affiliate location.

The following table provides Metro Private Line Analog/Digital Point to Multi-Point Service availability by network configuration:

Analog/Digital Point to Multi-Point							
Service Type	Type 1	Type 2	Type 3	Type 4a	Type 4b	Type 4c	
						IntraLATA	Corridor
High Capacity (DS1) – Hub Arrangement	X	X	NA	X	X	NA	NA
Very High Capacity (DS3)- Hub Arrangement	X	X	NA	X	X	NA	NA

- **Metro Private Line Optical SONET Hub Service.** (Private Carriage Service) The following provisions apply to Metro Private Line Optical SONET Multi-Point Service:

Optical SONET Hub Service consists of a Host connection and multiple Endlink connections.



- **Host Connection (Hub).** The Host connection represents the higher bandwidth circuit between Customer's primary premises and the MCI Legacy Company's local node where multiplexing functionality is performed.
- **Endlink Connections.** The Endlink represents the individual lower bandwidth circuits between the MCI Legacy Company's local node where multiplexing functionality is performed and a Customer's secondary designated premises.
Lower level connections from the Optical SONET Hub service to the Company's IXC Point of Presence will be billed as a [Network Service Local Access Service](https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm) (see https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm).
- **Metro Private Line Optical Wave Hub Service.** (Private Carriage Service) The following provisions apply to Metro Private Line Optical Wave Hub Multi-Point Service:
 - **Optical Wave Hub Service.** Optical Wave Hub Service, available as protected or unprotected consists of a Host connection and multiple Endlink connections.
 - The Host connection represents the higher bandwidth circuit between the Customer's primary premises and the MCI Legacy Company's local node, or in Type 4 network configurations, at a Verizon Telecom Company or Verizon Telecom Company-affiliate location, where multiplexing functionality is performed.
 - The Endlink represents the individual lower bandwidth circuits between the MCI Legacy Company's local node, or in Type 4 network configurations, at a Verizon Telecom Company or Verizon Telecom Company-affiliate location, where multiplexing functionality is performed and a Customer's secondary designated premises.

Lower level connections from the Optical Wave Hub service to the Company's IXC Point of Presence will be billed as a [Network Service Local Access Service](https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm) (see https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm) for SONET circuits and Metro Private Line Optical Wave IXC POP to Customer Connection for Wave Transparent, Protocol Specific, and Channelized circuit types.

- **Optical Wave Metro Private Line Dedicated Hub Base Service.** (Private Carriage Service) Optical Wave Metro Private Line Dedicated Hub Base Service is also available as a Dedicated base system, capable of providing multiple channels, using equipment and transport facilities across the MCI Legacy Company's local network Dedicated to Customer's service between the Customer location and the MCI Legacy Company's local node. Optical Wave Dedicated Hub Service is available in Type 1 Network configurations only. Metro Private Line Optical Wave Dedicated Hub Base Systems are provided in either Unprotected, 1 degree, or Protected, 2 degree. Additional degrees are available per degree between the existing locations on the Dedicated Hub base system

The following table provides Metro Private Line Optical Wave Hub Point to Multi-Point Service availability by network configuration:

Optical Wave Hub Point to Multi-Point							
Service Type	Type 1	Type 2	Type 3	Type 4a	Type 4b	Type 4c	
						IntraLATA	Corridor
Optical Wave – Stand-Alone Channelized Hub Arrangement	X	NA	NA	X	NA	NA	NA
Optical Wave – Dedicated Hub Base System	X	NA	NA	NA	NA	NA	NA

- **Optical SONET Dedicated Multi-Point Service - SONET.** (Private Carriage Service) Metro Private Line Access Optical SONET Dedicated_Multi-point Service provides a dedicated connection between three or more locations on a SONET ring for provisioning of lower level (subordinate) point-to-point circuits. Optical SONET Dedicated Multi-point Service consists of multiple Premises Connections with or without a Hub Connection (each of which is described below). Optical SONET Dedicated Multi-Point Service is available in Type 1 Network configurations only.
 - Premises Connection is a Type 1 Optical SONET Dedicated Multi-Point Service connection at a Customer's designated location other than a MCI Legacy Company local central office node. An MCI Legacy Company IXC Point of Presence (POP) location is considered a customer designated location. Three or more Premises Connections are required when service is provided without a Hub Connection. When a Hub Connection is used, two or more Premises Connections are required. The combined bandwidth of Premises Connections must be equal to the Dedicated Multi-point Service bandwidth. A Premises Connection cannot terminate at an ILEC central office.
 - Hub Connection is a Type 1 Optical SONET Dedicated Multi-Point Service connection at the MCI Legacy Company local central office node. The bandwidth of the Hub Connection must be equal to or less than the bandwidth of the Dedicated Multi-point Service - SONET.

- **Optical Wave Dedicated Multi-Point Service.** (Private Carriage Service) Metro Private Line Access Optical Wave Dedicated_Multi-point Service provides a dedicated connection between three or more locations on a Wave ring for provisioning of lower level (subordinate) point-to-point circuits. Optical Wave Dedicated Multi-point Service consists of multiple Premises Connections with or without a Hub Connection. Optical Wave Dedicated Multi-Point Service is available in Type 1 Network configurations only.
 - Premises Connection is a Type 1 Optical Wave Dedicated Multi-Point Service connection at a Customer's designated location other than a MCI Legacy Company local central office node. An MCI Legacy Company IXC Point of Presence (POP) location is considered a customer designated location. Three or more Premises Connections are required when service is provided without a Hub Connection. When a Hub Connection is used, two or more Premises Connections are required. A Premises Connection cannot terminate at an ILEC central office.
 - Hub Connection is a Type 1 Optical Wave Dedicated Multi-Point Service connection at the MCI Legacy Company local central office node.
 - Metro Private Line Optical Wave Dedicated Multi-point Base Systems are provided in either Unprotected, 1 degree, or Protected, 2 degree. Additional degrees are available per degree - per existing locations on the Dedicated Multi-point base system. An additional degree to a new location would be an additional Premises Connection or Hub Connection.

- **Endlink Service.** Endlink Service may be connected to Analog/Digital Hub Service, Digital Bridge, Optical SONET Hub Service, Optical Wave Hub Service, Optical SONET Dedicated Multi-Point Service, or Optical Wave Dedicated Multipoint Service. Endlink Service is available on either a Full Bandwidth Service or Channelized Service basis for Analog/Digital and Optical SONET Service or Transparent, Protocol Specific, or Channelized for Optical Wave Service. The Endlink represents the circuit between the MCI Legacy Company's local central office node, or in Type 4 Network configurations, the location on the Verizon Telecom Company network where hub functionality is present, and the Customer's Premises.

Connections from the Hub service to the Company's IXC Point to Presence will be billed as a Network Service Local Access Service (see https://enterprise.verizon.com/service_guide/reg/cp_access_network_services_local_access.htm) for Analog/Digital and SONET circuits and Metro Private Line Optical Wave IXC POP to Customer Connection for Wave Transparent, Protocol Specific, and Channelized circuit types.

The following table provides Metro Private Line Point to Multi-Point End Link Service availability by network configuration:



End Link Point to Multi-Point							
Service Type	Type 1	Type 2	Type 3	Type 4a	Type 4b	Type 4c	
						IntraLATA	Corridor
Voice Grade – Full Bandwidth	X	X	NA	X	X	NA	NA
Voice Grade - Channelized	NA	NA	NA	NA	NA	NA	NA
Digital Data (DS0) – Full Bandwidth	X	X	NA	X	X	NA	NA
Digital Data (DS0) – Channelized	NA	NA	NA	NA	NA	NA	NA
High Capacity (DS1) – Full Bandwidth	X	X	NA	X	X	NA	NA
High Capacity (DS1) – Channelized	X	X	NA	X	X	NA	NA
Very High Capacity (DS3) – Full Bandwidth	X	X	NA	X	X	NA	NA
Very High Capacity (DS3) - Channelized	X	X	NA	X	X	NA	NA
Optical SONET (OC3/OC12) – Concatenated/Non-Concatenated	X	X	NA	X	X	NA	NA
Optical SONET (OC3/OC12) – Channelized	X	NA	NA	X	NA	NA	NA
Optical SONET (OC48/OC192) – Concatenated/Non-Concatenated	X	NA	NA	X	X	NA	NA
Optical SONET (OC48/OC192) – Channelized	X	NA	NA	X	NA	NA	NA
Optical Wave – Stand-Alone Transparent/Protocol Specific/Channelized	X	NA	NA	X	NA	NA	NA

1.3.3 **Geographic Service Configurations.** InterLATA Service, known as Corridor Service, is provided between: LATA 132 and LATAs 222 and 224; LATA 222 and LATA 224; and, LATA 236 and locations in LATA 246 for which the local loop is formerly provided in whole via Company-owned facilities. Corridor Service is applicable to [Service Areas](#) 2 and 3 in Type 4a, 4b, and 4c network configurations (see https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_service_areas.htm). All other Service Areas are intraLATA.

1.3.4 **Availability.** Metro Private Line Access Service in Type 1, Type 2, Type 3, and Type 4 network configurations is available from locations in the following LATAs (Local Access Transport Areas):

LATA	CITY	STATE	Network Configuration
120	Portland	ME	1, 2, 3
122	Manchester	NH	1, 2, 3
126	Springfield	MA	4
128	Boston	MA	4
130	Providence	RI	4
132	New York Metro	NY	4
134	Albany	NY	4



136	Syracuse	NY	4
140	Buffalo	NY	4
222	Princeton	NJ	4
224	Newark	NJ	4
228	Philadelphia	PA	4
234	Pittsburgh	PA	4
236	Washington	DC	4
238	Baltimore	MD	4
246*	Ashburn	VA	4
248	Richmond	VA	4
320	Cleveland	OH	1, 2, 3
324	Columbus	OH	1, 2, 3
326	Toledo	OH	1, 2, 3
336	Indianapolis	IN	1, 2, 3
340	Detroit	MI	1, 2, 3
346	Lansing	MI	1, 2, 3
348	Grand Rapids	MI	1, 2, 3
356	Milwaukee	WI	1, 2, 3
358	Chicago	IL	1, 2, 3
422	Charlotte	NC	1, 2, 3
426	Raleigh	NC	1, 2, 3
438	Atlanta	GA	1, 2, 3
452	Jacksonville	FL	1, 2, 3
458	Orlando	FL	1, 2, 3
460	Miami	FL	1, 2, 3
468	Memphis	TN	1, 2, 3
470	Nashville	TN	1, 2, 3
474	Knoxville	TN	1, 2, 3
477	Huntsville	AL	1, 2, 3
482	Jackson	MS	1, 2, 3
490	New Orleans	LA	1, 2, 3
520	St. Louis	MO	1, 2, 3
522	Springfield	MO	1, 2, 3
524	Kansas City	MO	1, 2, 3
528	Little Rock	AR	1, 2, 3
536	Oklahoma City	OK	1, 2, 3
538	Tulsa	OK	1, 2, 3
552	Dallas	TX	1, 2, 3
556	Waco	TX	1, 2, 3
558	Austin	TX	1, 2, 3
560	Houston	TX	1, 2, 3
566	San Antonio	TX	1, 2, 3
628	Minneapolis	MN	1, 2, 3
656	Denver	CO	1, 2, 3
660	Salt Lake City	UT	1, 2, 3
664	Albuquerque	NM	1, 2, 3
666	Phoenix	AZ	1, 2, 3
668	Tucson	AZ	1, 2, 3
672	Portland	OR	1, 2, 3
674	Seattle	WA	1, 2, 3
720	Reno	NV	1, 2, 3
721	Las Vegas	NV	1, 2, 3

722	San Francisco	CA	1, 2, 3
726	Sacramento	CA	1, 2, 3
728	Fresno	CA	1, 2, 3
730	Los Angeles	CA	1, 2, 3
732	San Diego	CA	1, 2, 3
734	Bakersfield	CA	1, 2, 3
738	Stockton	CA	1, 2, 3
920	Stamford/Hartford	CT	1, 2, 3
922	Cincinnati	OH	1, 2, 3
952	Tampa	FL	4
974	Rochester	NY	1, 2, 3
*LATA 246 is only available where the Customer's location is connected to the Legacy MCI Company network in LATA 236.			

1.4 Optional Features

1.4.1 **Service Configuration Options.** The following Service Configuration Options are available:

1.4.1.1 **Metro Private Line Service Hub to Hub Connection.** A Metro Private Line Service Hub to Hub Connection may be used in lieu of an Endlink within one, or between two, local central office node(s), or in Type 4 Network configurations, the location on the Verizon Telecom Company or Verizon Telecom Company-affiliate network where hub functionality is present, is located in the same LATA or corridor, between:

- Two Metro Private Line Access Service Hub Service configurations;
- A Metro Private Line Access Service Hub Service configuration and an Optical SONET or Optical Wave Multi-point Service Hub Connection; or,
- Two Optical SONET or Optical Wave Multi-point Service Hub Connections.

1.4.1.2 **Metro Private Line Service Optical Wave IXC POP to Customer Collocation Connection.** (Private Carriage Service) A Metro Private Line IXC POP to Customer Collocation Connection provides for a connection between an MCI Legacy Company IXC Wave circuit or Network Service to a Customer MCI Legacy Company or MCI Legacy Company designated collocation in the same building as the MCI Legacy Company IXC POP. The Metro Private Line IXC POP to Customer Collocation Connection also provides the connectivity between a MCI Legacy Company IXC Wave circuit or Network Service to a Customer provided access provider that has connectivity to the MCI Legacy Company IXC POP. Connections to other locations in the same building as the MCI Legacy Company IXC POP will be billed as Metro Private Line Service Optical Wave IXC POP to Customer Connection.

1.4.1.3 **Metro Private Line Service Optical Wave IXC POP to Carrier Hotel Connection.** (Private Carriage Service) A Metro Private Line IXC POP to Carrier Hotel (as defined below) Connection provides for a connection between an MCI Legacy Company IXC Wave circuit or Network Service at the MCI Legacy Company IXC POP to a Customer location in a building identified by Company as a Carrier Hotel building, the Metro Private Line Service Optical Wave IXC POP to Carrier Hotel Connection is available in Type 1 and Type 4a network configurations for Wave Transparent, Protocol Specific, and Channelized circuit types.

1.4.1.4 **Metro Private Line Service Optical Wave IXC POP to Customer Connection.** (Private Carriage Service) A Metro Private Line IXC POP to Customer Connection provides for a connection between an MCI Legacy Company IXC Wave circuit or Network Service at the MCI Legacy Company IXC POP to a Customer location. Private Line Service Optical Wave IXC POP to Customer Connection is available in Type 1 and Type 4a network configurations for Wave Transparent, Protocol Specific, and Channelized circuit types.

- 1.4.1.5 **Metro Private Line Optical Wave IXC POP to Customer Connection via a Metro Private Line Optical Wave Dedicated Base System.** (Private Carriage Service) A Metro Private Line Optical Wave IXC POP to Customer Connection via a Metro Private Line Optical Wave Dedicated Base System applies for a connection between an MCI Legacy Company IXC Wave circuit or Network Service, at the MCI Legacy Company IXC POP (Network Service Point), to a Customer location utilizing a Customer's Metro Private Line Optical Wave Dedicated Point to Point, Dedicated Hub, or Dedicated Multi-Point Service Base System. The Metro Private Line Optical Wave IXC POP to Customer Connection, when connecting to the Metro Private Line Optical Wave Dedicated Base System, will be based on whether the connection is at the MCI Legacy Company IXC POP where the MCI Legacy Company Wave circuit or Network Service resides (Network Service Point) or when the connection is not at the MCI Legacy Company IXC POP or Network Service location.
- 1.4.1.6 **ILEC Central Office Collocation Cross Connect.** Provides an ILEC (Incumbent Local Exchange Carrier) Central Office Collocation Cross Connect between a Metro Private Line Access Service and an ILEC Central Office where prearrangements have been made. If the connection is to another Collocation customer in the ILEC Central Office, the ILEC Central Office Cross Connect charges are doubled.
- 1.4.1.7 **ILEC Central Office Multiplexing.** Provides connection of a Metro Private Line Access Service circuit to an ILEC Central Office multiplexer.

1.4.2 Multiplexing

- 1.4.2.1 **Metro Private Line Multiplexing.** Provides stand-alone or subordinate multiplexing when the multiplexing is not included in the Metro Private Line Access Service.

2. AVAILABLE VERSIONS

2.1 Digital Metro Private Line Access Service. Digital MPLA is available as follows:

- 2.1.1 **Voice Grade Service.** Voice grade service provides frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated utilizing two-wire or four-wire circuits. Voice grade service can carry both analog and digital data. Effective August 12, 2014, Voice Grade Service is grandfathered and is no longer available to new Metro Private Line Customers. Existing Metro Private Line Access Service Customers may add, move, change, and disconnect Voice Grade Services, with the understanding that renewals of Voice Grade Service will not be permitted.
- 2.1.2 **Digital Data Service.** Digital data service provides the duplex four-wire transmission of synchronous serial data at rates ranging from 2.4 to 64 kbps (DS0). Effective August 12, 2014, Digital Data Service is grandfathered and is no longer available to new Metro Private Line Customers. Existing Metro Private Line Access Service Customers may add, move, change, and disconnect Digital Data Services, with the understanding that renewals of Digital Data Services will not be permitted.
- 2.1.3 **High Capacity Service (DS-1).** High capacity service provides transmission of synchronous serial data at speeds of 1.544 or 2.048 Mbps. Transmission of intermediate bit rate channels in multiple increments of either 56 or 64 kbps up to 1.544 Mbps is also available.
- 2.1.4 **Very High Capacity Service (DS-3).** Very high capacity service provides transmission of synchronous serial data at speeds of 44.736 Mbps or faster.

- 2.2 **Metro Private Line Optical SONET Service.** (Private Carriage Services) Metro Private Line Optical SONET Service provides transmission of data at speeds of 155 Mbps or higher through an optical signal on the Synchronous Optical Network (SONET). OC3 (155.52 Mbps) and OC12 (622.08 Mbps) speeds are available in either concatenated or channelized configurations. OC48 (2.488 Gbps) and OC192 (9.953 Gbps) are available for Type 1 and Type 4a access network configurations in either concatenated or channelized form. Optical SONET Dedicated Multi-point Service is only available in

Type 1 network configurations. Optical SONET Dedicated Multi-point Service with Type 1 network configurations ordered prior to August 31, 2010 in areas that are now designated as Type 4, will remain as Type 1. Customers may add Premises or Hub Connections and Appearances to such Type 1 network configurations.

- Each Metro Private Line Optical SONET Service circuit connection requires a SONET or Ethernet Interface. An Interface is the connection of Metro Private Line Optical SONET to a Customer Premises or hub. There are two interfaces per circuit. SONET Interfaces are available at the following speeds: (i) 1.544 Mbps (DS-1) and 44.736 Mbps (DS-3) on a digital signal basis; and (ii) 51.84 Mbps (STS-1), 155.52 Mbps (OC3 and OC3c), 622.08 Mbps (OC12 and OC12c), 2.488 Gbps (OC48 and OC48c), and 9.953 Gbps (OC192) on an optical signal (SONET) basis. Where it is technically feasible, differing SONET Interfaces may be used on a circuit.
- Ethernet Interfaces are available in a 10/100 electrical or 1 Gbps optical connection. Monitoring is provided for Ethernet Interfaces outages 24 hours per day.
- Metro Private Line Optical SONET Service, except for Optical SONET Dedicated Multi-point Service and Type 4 network configurations, is provided over the MCI Legacy Company's shared optical local network. Optical SONET Dedicated Multi-point Service is provided using equipment and optical facilities that are dedicated to Customer's service arrangement. Type 4 network configurations are provided via MCI Legacy Company Facilities, Verizon Telecom Company or Verizon Telecom Company-affiliate facilities.

2.3 **Metro Private Line Optical Wave Service.** (Private Carriage Service) Metro Private Line Optical Wave Service provides transmission of data speeds of 1 Gbps to 100 Gbps over the Company's optical fiber network using Dense Wave Division Multiplexing (DWDM). Metro Private Line Optical Wave Service is provided as Transparent (Transparent Synchronous Frame) Channel in 2.5 Gbps, 10 Gbps and 40 Gbps bandwidths; Protocol Specific in 1 Gbps, 2 Gbps, 4 Gbps, 10 Gbps, 40 Gbps, 100 Gbps and SONET Concatenated OC768c bandwidths; and Channelized in 10 Gbps and 40 Gbps bandwidth. The Protocol Specific options are Fibre Channel, FICON, Ethernet and SONET (OC768c). 10 Gbps Channelized arrangements require one or more protocol specific appearances for each circuit type added to the 10 Gbps Channelized arrangement. Metro Private Line Optical Wave Service, except for Optical Wave Dedicated base systems, are only available in Type 1 and Type 4a network configurations. Optical Wave Dedicated base systems are only available in Type 1 network configurations. Optical Wave Dedicated Multi-point Services with Type 1 network arrangements ordered prior to August 31, 2010 in areas that are now designated as Type 4, will remain as Type 1. Customers may add Premises or Hub Connections and Appearances to such Type 1 network configurations. ESCON and ISC Protocol Specific options are no longer available as of November 1, 2011 to new Customers and existing Customers may no longer add circuits with these options.

- Metro Private Line Optical Wave Service is available as stand-alone circuit arrangements or as Dedicated base system arrangements. The Dedicated base system arrangements support multiple appearance options which apply on a per circuit basis and such appearances are available as SONET (Transparent Synchronous Frame), Fibre Channel, Ethernet. ESCON and ISC Protocol Specific appearances are no longer available as of November 1, 2011 to new Customers and existing Customers may no longer add circuits with these options.
- The Metro Private Line Optical Wave Service, except for the Dedicated base systems and Type 4a network configurations, are provided using the Company's shared optical local network. The Dedicated Base Systems are provided using equipment and optical facilities that are dedicated to Customer's service arrangement. Dedicated base system arrangements are provided only in Type 1 network configurations. Dedicated base systems requested with equipment not normally used by MCI Legacy Company to support the Metro Private Line Optical Wave Dedicated base system service will be offered on an individual case basis. Type 4a network configurations are provided via MCI Legacy Company Facilities, Verizon Telecom Company or Verizon Telecom Company-affiliate facilities.



2.4 **Metro Storage Transport Service.** Metro Storage Transport Service is no longer available as of February 29, 2008 to new Customers and existing Customers may no longer add Metro Storage Transport circuits.

- Metro Storage Transport Service (formerly, Metro Private Line Storage Service) offers high bandwidth access, where facilities are available. Metro Storage Transport Service connects a Customer's resources via a point-to-point, dedicated service that provides two types of customer termination handoff: Fiber Channel and FICON. Effective November 1, 2004, service is available at speeds of 1 Gbps. Storage Area Network (SAN) is the established standard used for bulk data transfer over network connections between computer systems and storage elements/data bases. Metro Storage Transport Service provides the transport between physical customer locations or storage service providers.
- Metro Storage Transport Service is available in select metropolitan areas at designated MCI Legacy Company lit buildings: (1) that are connected to Metro Private Line Access Service via Company facilities; and, (2) in which the MCI Legacy Company provides and maintains the necessary storage network equipment. The Customer is responsible for the configuration, operation, and maintenance of its local area network (LAN) which will be connected to Metro Storage Transport Service. Service is not available to locations not served by Company owned facilities.

3. **Customer Responsibilities**

3.1 **Installation.** Unless otherwise provided by Verizon under a separate Service Attachment, Customer will provide the following to support installation activities such as site surveys, testing and activation:

- Space and power for Verizon terminating equipment if required to deliver service.
- All facilities and internal cabling to connect Customer's Site to the Demarcation of MPL
- Notice to Verizon of the existence and location of wiring or any other risk factors on the Customer's Site which may affect Verizon's installation of the MPL.

3.2 **Entry to Customer Site.** Where Verizon requires entry to a Customer Site in order to provide MPL (including, but not limited to, physical changes to MPL facilities), Customer shall (a) 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 (b) 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.

4. **SUPPLEMENTAL TERMS.** In addition to the Master Terms of this Agreement, the following Terms apply.

4.1 **Private Carriage.** Metro Private Line Optical SONET Service and Metro Private Line Optical Wave Service are provided on a private carriage basis.

4.1.1 **Third Party Provider(s).** Notwithstanding anything to the contrary in the Agreement, MPLA may be provided to a location not on the Verizon network through a third party provider. Third party provided MPLA is limited to the following service configurations: i) Metro Private Line Service Optical Wave IXC POP to Customer Connection or ii) Metro Private Line Optical Wave Stand-Alone Point to Point. When MPL Access Service is provided in part through a third party provider, the MPLA will be considered as Type 1 or Type 4a for purposes of the MPL Optical Wave Service Level Agreement, notwithstanding any contrary description of Type 1 or Type 4a in such Optical Wave Service Level Agreement. The Metro Private Line Optical Wave Service Level Agreement will not apply when MPL Access Service is provided as service configuration Metro Private Line Service Optical Wave IXC POP to Customer Connection, but will apply when MPLA is provided as service configuration Metro Private Line Optical Wave Stand-Alone Point to Point.

4.1.2 **Third Party Vendor Charges for Cross-Connection and Extended Wiring.** Section above requires Customer to provide all facilities and internal cabling to connect Customer's site to the Demarcation of the Access circuit. In some instances Customer's 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's 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's 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. Customer is responsible for any Verizon or third party early termination charges associated with any moves, adds, changes, disconnections or cancellation of the cross-connects. The specific Cross-Connection type selected by Customer and associated fees will be specified on Customer's Amendment to the Service Attachment.

4.1.3 Special Routing. The option to contract and provision for special routing, where the circuit path for one or two circuits is specified at the POP to POP level of granularity. The routing of the outside plant fiber for each circuit with special routing (a single Mandatory Route or a Diverse Mated Pair) is provided as designed by Verizon and to which the customer accepts and contracts for the routing per the POP to POP string in the design and contract amendment. With level 2 NDA, the customer may also examine street level maps of their proposed or provisioned circuit as part of their due diligence. Verizon will periodically check the circuit routing throughout the circuit term to verify whether the 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.

5. TERM and TERMINATION

5.1.1 Term/Minimum Term. Customer commits to pay the charges for any circuit for a minimum of one year.

5.1.2 Early Termination. If Customer terminates a Service Order or terminates services before the completion of the term for any reason whatsoever other than for Cause, Customer agrees to pay to Verizon termination charges, which are defined below. These charges shall become due and owing as of the effective date of the cancellation or termination.

5.1.3 Early Termination Charges. If Customer terminates any services before the end of any period for which Customer has committed to pay for the applicable circuit, except for Termination for Cause as provided in Customer's agreement with Verizon, such termination shall not be effective until 60 days after Verizon receives written notice of termination and Customer may be required to pay, within 30 days after such date; (a) all accrued but unpaid charges for the applicable circuit incurred through the effective date of termination plus (b) an amount equal to the total of the remaining charges in the first year of the applicable circuit commitment period, if any, plus (c) an amount equal to 75% of the monthly recurring charges for the balance of any such commitment period; provided that, in no event shall Customer's total termination liability exceed the full contract value of the terminated services.

5.1.4 End User Fees. Customer is solely responsible for interacting with end users regarding any administration, processes, and/or issues arising from any use of MPLA by end users.

5.1.5 Interstate Certification. MPLA is offered only on a jurisdictionally interstate basis. With respect to its use of MPLA, Customer warrants and represents that more than 10 percent of the traffic transported over the MPLA is interstate in nature.

5.1.6 Notification of Service-Affecting Activities. Verizon will provide the Customer reasonable notification of service-affecting activities that may occur in normal operation of its business. Such activities may include, but are not limited to, equipment or facilities additions, removals or rearrangements and routine preventative maintenance. Generally, such activities are not specific to



an individual Customer but affect many Customers' services. No specific advance notification period is applicable to all service activities. Verizon will work cooperatively with the Customer to determine the reasonable notification requirements. With some emergency or unplanned service-affecting conditions, such as an outage resulting from cable damage, notification to the Customer may not be possible.

Customer shall be responsible for the payment of service charges as set forth herein for visits by Verizon's agents or employees to the Customer Premises when the service difficulty or trouble report results from the use of equipment or facilities provided by any party other than Verizon, including but not limited to the Customer.

5.1.7 Prohibited Uses. Verizon may require applicants for service who intend to use the Company's offerings for resale and/or for shared use to file a letter with Verizon confirming that their use of the Company's offerings complies with relevant laws.

5.1.8 Cancellation of Application for Service for Special Cancellation of Application

5.1.9 Applications for service are non-cancellable unless Verizon otherwise agrees. Where Verizon permits Customer to cancel an application for service prior to the start or completion of any special construction, no charges will be imposed except for those specified in Section 4.2, below, and any applicable incidental non-recurring charges for Ethernet Access.

5.1.10 Where Verizon incurs any expense in connection with special construction, or where special arrangements of facilities or equipment have begun, before Verizon receives a cancellation notice, a charge equal to the costs incurred, less net salvage, applies. In such cases, the charge will be based on such elements as the cost of the equipment, facilities, and material, the cost of installation, engineering, labor, and supervision, general and administrative expense, other disbursements, depreciation, maintenance, taxes and provisioning for return on investment, cost from third-party providers, and any other costs associated with the special construction or arrangements.

5.1.11 Changes in Service Requested. If the Customer makes or requests material changes in circuit engineering, equipment specifications, service parameters, Customer Premises, or otherwise materially modifies any provision of the application for service, the Customer's installation fee shall be adjusted accordingly.

5.1.12 Allowances for Interruptions in Service. Interruptions in service, which are not due to the negligence of, or noncompliance with the provisions of this tariff by the Customer or the operation or malfunction of the facilities, power or equipment provided by the Customer, will be credited to the Customer as set forth in Section 3.10.1, below, for the part of the service that the interruption affects.

5.1.13 Credit for Interruptions

- A credit allowance will be made when an interruption occurs because of a failure of any component furnished by Verizon under these Product-Specific Terms and Conditions. An interruption period begins when the Customer reports a service, facility or circuit to be interrupted and releases it for testing and repair. An interruption period ends when the service, facility or circuit is operative. If the Customer reports a service, facility or circuit to be inoperative but declines to release it for testing and repair, it is considered to be impaired, but not interrupted.
- For calculating credit allowances, every month is considered to have 30 days. A credit allowance is applied on a pro rata basis against the rates specified hereunder and is dependent upon the length of the interruption. Only those facilities on the interrupted portion of the circuit will receive a credit.
- A credit allowance will be given for interruptions of 30 minutes or more. Credit allowances shall be calculated as follows:



Length of Interruption	Interruption Period To Be Credited
Less than 30 minutes	None
30 minutes up to 24 hours, inclusive	2 X outage duration
Over 24 hours	4 X outage duration
Two or more interruptions of 30 minutes or more, during any period up to but not including three hours, shall be considered as one interruption.	

For all other services, a credit allowance will be given for interruptions of 15 minutes or more. Credit allowances shall be calculated as follows:

Length of Interruption	Interruption Period To Be Credited
Interruptions of 24 Hours or Less	
Less than 15 minutes	None
15 minutes up to but not including 3 hours	1/10 Day
3 hours up to but not including 6 hours	1/5 Day
6 hours up to but not including 9 hours	2/5 Day
9 hours up to but not including 12 hours	3/5 Day
12 hours up to but not including 15 hours	4/5 Day
15 hours up to but not including 24 hours	One Day
Two or more interruptions of 15 minutes or more during any one 24-hour period shall be considered as one interruption.	
Interruptions Greater Than 24 Hours	
Interruptions over 24 hours and less than 72 Hours.	1/5 day for each 3-hour period or fraction thereof. No more than one full day's credit will be allowed for any period of 24 hours.
Interruptions over 72 hours.	2 days for each full 24-hour period. No more than 30 days credit will be allowed for any one month period.

5.1.14 **Cancellation For Service Interruption.** Cancellation or termination for service interruption is permitted only if any circuit experiences a single continuous outage of 8 hours or more or cumulative service credits equaling 16 hours in a continuous 12-month period. The right to cancel service under this provision applies only to the single circuit which has been subject to the outage or cumulative service credits.

5.1.15 As of October 1, 2010, orders for new circuits as well as orders for moves, adds, changes and upgrades for the following are provided as Private Carriage Services:

- Metro Private Line Optical SONET Service
- Metro Private Line Optical Wave Service

6. **SERVICE LEVEL AGREEMENTS.** The following Service Level Agreements (SLA) are summarized in the [Metro Private Line Summary Page](#) (see https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_sla_summary_page.htm) and are fully described in the following hyperlinks:

6.1.1 **Metro Private Line Digital Service.** The Metro Private Line Digital Service SLA can be found at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_digital_sla.htm

6.1.2 **Metro Private Line Optical SONET Service.** The Metro Private Line Optical SONET SLA can be found at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_sonet_sla.htm



6.1.3 **Metro Private Line Optical Wave Service.** The Metro Private Line Optical Wave SLA can be found at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_optical_wave_sla.htm

6.1.4 **Metro Storage Transport Service.** The Metro Storage Transport SLA can be found at the following URL: https://enterprise.verizon.com/service_guide/reg/cp_access_mpls_metro_private_line_storage_sla.htm

7. **FINANCIAL TERMS.** Customer will pay the charges for Metro Private Line Access Services specified in the Agreement and at the following URL: <https://enterprise.verizon.com/service/cp-access-mpls-rates-charges.pdf>.

8. **DEFINITIONS.** The following definitions apply to Metro Private Line Access 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
Channelized	Subdividing the bandwidth of a circuit into smaller increments.
Concatenated	Joining several fibers together end-to-end resulting in full bandwidth. Concatenated circuits are noted by a "c", e.g., OC3c.
Dedicated	A facility or equipment system or subsystem set aside for the sole use of a specific Customer.
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.
Endlink	An Endlink is a remote or secondary Customer Premises location.
Full Bandwidth	A circuit that has not been Channelized.
Host	A Host is a primary or aggregation center.
ILEC	A U.S. incumbent Local Exchange Carrier.
LATA (Local Access Transport Area)	A geographic area established by law and regulation for the provision and administration of telecommunications services.
MCI Legacy Company	An Affiliate of Verizon that was an Affiliate of MCI, Inc. prior to the acquisition of MCI, Inc. by Verizon Communications Inc., including one or more of the following entities (without limitation): MCI Communications Services, Inc. d/b/a Verizon Business Services; MCImetro Access Transmission Services LLC d/b/a Verizon Access Transmission Services; MCImetro Access Transmission Services of Virginia, Inc. d/b/a Verizon Access Transmission Services of Virginia; and MCImetro Access Transmission Services of Massachusetts, Inc. d/b/a Verizon Access Transmission Services of Massachusetts, and applicable affiliated operating companies outside the United States.
Multi-Point Service	Multi-Point Service is un-switched full-time transmission service utilizing the Company's facilities to connect a customer location to two or more Customer designated locations or Company Points of Presence.
Multiplex	Multiplexing means to transmit two or more signals over a single channel. A Multiplexer is electronic equipment which allows two or more signals to pass over one communications circuit.
Network	The Company's digital fiber optics-based network.
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.



Protocol Specific	A circuit that is specific to a mainframe vendor's communication protocol.
Point to Point Service	Point to Point Service is an unswitched full time transmission service utilizing the Company's facilities to connect two or more Customer designated locations.
Retermination	The Customer-requested move of a single end of a circuit to another location the same metropolitan area. Monthly recurring charges based on actual location will apply to reterminated circuits.
Transparent Channel	A Metro Private Line Optical Wave Service of 2.5 Gbps or 10 Gbps where the full bandwidth of the circuit is available to the Customer.