OUR FIBER FUELS GLOBAL INNOVATION

DEDICATED INTERNET ACCESS (DIA)

IP TRANSIT

Service Description

Produced by: Zayo Product Management

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Notice

DISCLAIMER: THIS DOCUMENT IS INTENDED TO PROVIDE REASONABLY ACCURATE TECHNICAL INFORMATION RELATED TO THE OFFERING SOLELY FOR YOUR (ZAYO CUSTOMER OR POTENTIAL CUSTOMER) BENEFIT AND DOES NOT IN ANY WAY CONSTITUTE AN AGREEMENT BETWEEN YOU AND ZAYO. THIS DOCUMENT IS NOT A WARRANTY, A SERVICE LEVEL AGREEMENT, OR ANY OTHER GUARANTEE OF PERFORMANCE. ANY SUCH WARRANTIES, SERVICE LEVEL AGREEMENTS, OR GUARANTEE OF PERFORMANCE ARE EXCLUSIVELY CONTAINED IN ANY WRITTEN AGREEMENT BETWEEN YOU AND ZAYO. IN THE EVENT OF ANY CONFLICT BETWEEN THIS DOCUMENT AND ANY WRITTEN AGREEMENT BETWEEN YOU AND ZAYO, THE WRITTEN AGREEMENT SHALL CONTROL.

This document provides Zayo's customers or potential customers a description of the Dedicated Internet Access ("DIA") and IP Transit service(s). Sufficient technical detail is included to enable selections of options and customer facing interfaces suitable for their application needs. Please note that this document does not provide ordering information.

Zayo reserves the right to revise or deviate from this document for any reason, including but not limited to, conformity with standards promulgated by various governmental or regulatory agencies; utilization of advances in technology; or to reflect changes in the design of equipment, techniques, or procedures described or referred to herein.

IP Configuration Form Notice

Prior to order acceptance, the Customer is required to complete the Zayo IP Configuration form (linked below) to ensure the order can be properly configured and activated. If the customer is not requesting IP addresses from Zayo and is using static routing, or if the customer is requesting less than a /24, they need to complete only the IP Configuration Details section. If the customer is running BGP with Zayo, they must complete the entire "IPv4 Config & Request" tab in accordance with our standards.

Customer input is required to capture preferred BGP route tables and IPv4/IPv6 prefixes to be announced. Optionally, transitive BGP attributes may be altered by the customer on the "AS6461.Communities" tab.

Link to Zayo IP Configuration Form

Table of Contents

1. Service Description

1.1 General

This document provides Zayo customers a definition and the technical standards of Zayo's Dedicated Internet Access ("DIA") and IP Transit services. Zayo considers non-standard designs on an Individual Case Basis ("ICB"). Throughout this document, DIA and IP Transit may be referred to as "IP Products" in situations where the standards apply to both.

Zayo's IP Products, delivered over Zayo's Tier-1 Autonomous System 6461 (AS6461) are dedicated and symmetrical optical packet services that provide high capacity connectivity between:

- Zayo points of presence ("PoPs") that are on-net to Zayo's fiber network
- Customer Premises that are on net-to Zayo's fiber network
- Near-net locations that can be accessed with fiber extensions (ICB)
- Off-net locations that can be accessed using partner circuits (Type 2)

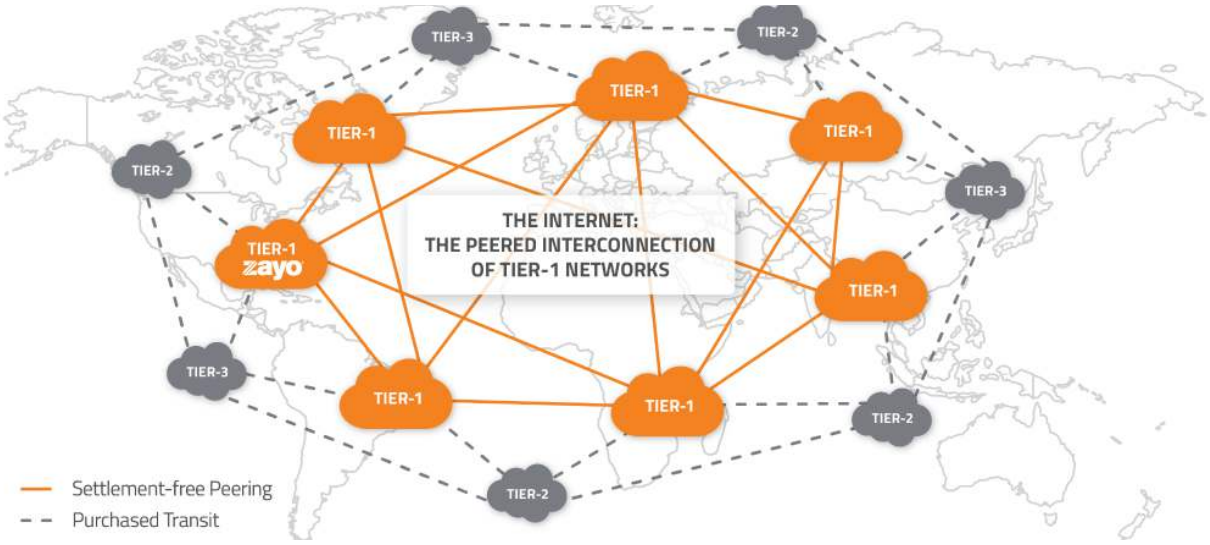

Figure 1: Tier-1 providers' peering relationships comprise the whole of the Internet.

IP Products will be deployed using a fiber tail with an ethernet handoff and in some cases, Coarse Wavelength Division Multiplexing ("CWDM") equipment. CWDM equipment is deployed

primarily in North America and in some cases, Europe. IP Products are delivered on dedicated ports. Standard protocol channels are:

- Protocol and bit-rate specific (e.g. gigabit ethernet)
- Provisioned for full-rate packet network capabilities
    - IP addressing, routing, and traffic control

1.2 Definitions

Dedicated Internet Access (DIA) is a dedicated, reliable, and fast Internet connection on Zayo's Tier-1 network. DIA features default or static routing and single-site access to the Internet.

IP Transit is a dedicated, reliable, and fast Internet connection on Zayo's Tier-1 network. IP Transit features Border Gateway Protocol ("BGP") which provides multi-homed customers access to Zayo's full route tables and robust peering relationships.

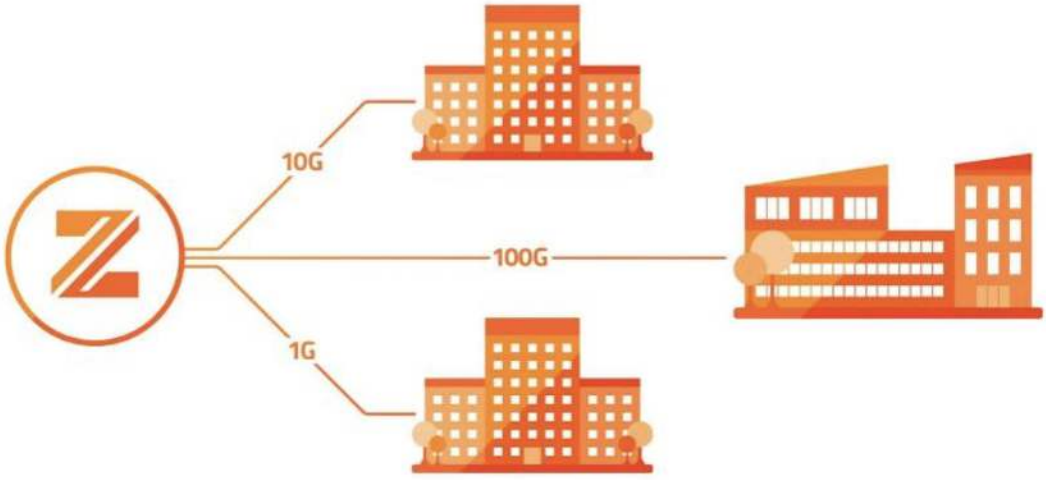

Figure 2: Dedicated IP bandwidth from Zayo to Customer sites without fiber rings (i.e. without "daisy-chaining" capacity). Applies to IP Products.

1.3 Features

DIA and IP Transit are Layer-3 services providing the following features:

- **Fiber-Optic Backbone:** IP Products leverage Zayo's owned fiber network at the foundation, extended to the edge. Zayo proactively augments core capacity to eliminate network congestion.
- **Security:** Dedicated access bandwidth, no shared uplinks with other customers.
- **Reliability:** Globally distributed peering and edge connections to ensure Internet availability starting at 99.9% with minimal network hops.
- **Support:** Global Network Operations Center ("NOC") support is available 24/7/365.
- **Scalability:** Customers can choose from bandwidth options including 100M to 100G with predictable, low latency routes.
- **IP Addresses**: Dual-Stack architecture supports IPv4 and IPv6 simultaneously.
- **Routing:** Static, default, or BGP routing options are available.

1.4 Common Uses

DIA is ideally suited for enterprise customers of all sizes requiring Internet solutions and network protection for the following key applications:

- To connect and protect a corporate network with access to the public Internet by utilizing connected IPv4 and/or IPv6 address space.
- Improve business to business ("B2B") or business to consumer ("B2C") traffic load by transforming your website or marketing approaches into fully interactive platforms
- Securely and seamlessly connect your in-office employees and remote teams
- Build a Zayo access facility over which additional future services may be delivered.

IP Transit is ideally suited for:

- Large enterprises in multihomed environments.
- Content delivery networks forwarding high volumes of Internet traffic.
- Regional carriers to provide carrier-grade quality Internet services to their end-users.

Zayo's robust peering relationships and customizable BGP communities will provide optimal network performance and routing configurations.

2. Technical Descriptions

2.1 General

DIA features single-site access to the public Internet with either static routing or default routing. Configuration options include standard and burstable Internet connections from a Zayo point of presence (PoP) or data center facility to one or more On-Net customer locations. DIA services are provisioned over Zayo's high capacity, globally interconnected network with a single autonomous system (AS6461).

IP Transit features BGP routing which provides multi-homed customers access to full route tables and minimal hops on the public Internet via Zayo's robust Tier-1 peering relationships. Configuration options include standard or burstable Internet connections from a Zayo point of presence or data center facility to one or more On-Net customer locations. Zayo provides IP Transit from designated Zayo IP PoPs with bandwidth options up to 100Gbps, requiring a minimum 10% Committed Information Rate ("CIR"). The customer provides the cross-connection(s) within the PoP. Zayo installs IP Transit services over Zayo's high capacity, globally interconnected network with a single autonomous system (AS6461).

2.2 Handoff Options

Protocol channels will conform to the specifications listed in Section 2.2.1 for rate, format, and physical interfaces. Customer equipment is required to generate the appropriate digital optical signal(s) for transmission to Zayo for transport over the access facilities in conjunction with the ordered protocol channel.

The following customer handoff types are available over IP products:

2.2.1 Synchronous Internet over Ethernet

- Gigabit Ethernet at 1Gbps
  - 10BaseT (copper)
  - 100BaseT (copper)
  - 1000baseT (copper)

    - 1000baseT (copper)
    - 1000baseLX, 1G-LX (singlemode)
    - 1000baseSX, 1G-SX (multimode)
- 10 Gigabit Ethernet at 10Gbps
    - 10GbaseSX, 10G-SX (multimode)
    - 10GbaseLX, 10G-LX (singlemode)
- 100 Gigabit Ethernet at 100Gbps
    - 100GbaseLR4 (singlemode)
    - 100GbaseER4 (singlemode)

2.3 Handoff Specifications (Provider Edge to Network Interface Device)

Table 1 presents the standard protocols and handoffs between the Zayo Provider Edge ("PE") and the Network Interface Device ("NID").

Protocol Channel	Speed	Line Rate	Maximum Reach	Standard	Handoff
10BASE-T	10Mb	10Mb	100m	IEEE 802.3i	Copper
100BASE-TX	100Mb	100Mb	100m	IEEE 802.3u	Copper
1000BASE-T	1G	1G	100m	IEEE 802.3ab	Copper
1000BASE-SX	1G	1G	550m	IEEE 802.3z	MMF
1000BASE-LX	1G	1G	10km	IEEE 802.3z	SMF
10GBASE-SR	10G	10G	Varies by Media (OM1-OM4)	IEEE 802.3ae	MMF
10GBASE-LR	10G	10G	80km	IEEE 802.3ae	SMF
100GBASE-LR4	100G	100G	8km	IEEE 802.3ba	SMF
100GBASE-ER4	100G	100G	28km	IEEE 802.3ba	SMF

Table 1: Standard Handoff Specifications from the Zayo PE to the NID

3. Implementation Standards

3.1 General

Estimated install intervals vary by PoP status and are determined by the level of network augmentation required to reach the customer building. The outline of building status definitions and estimated install intervals are presented in Section 3.2 below.

3.2 Standard Intervals

3.2.1 Firm Order Commitment ("FOC")

Within five (5) business days of Service Order Acceptance for On-Net Services, Zayo will notify the Customer of the Firm Order Commitment date ("FOC Date") by which Zayo intends to activate the Service and turn it over for the Customer's use.

3.2.2 Delivery

Figure 3 below depicts Zayo's standard IP Products delivery to a customer location within a multi-tenant building.

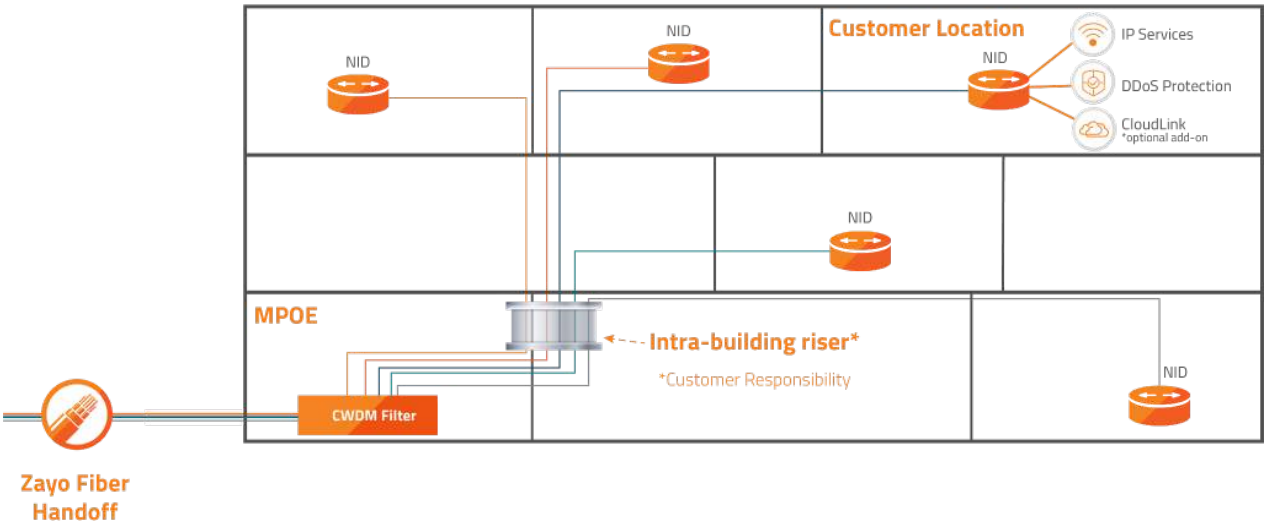

Figure 3: Zayo's Service Delivery within a Customer location

Below is a list of standard delivery intervals after order acceptance for IP Products.

3.2.2.1 On-net/Active

On-Net customer locations are defined as locations with active Zayo equipment on the customer premises and with active connections to Zayo's nearest PoP via a network facility.

- Estimated Install Interval: 30 Days

3.2.2.2 On-net Augment (Splicing Required)

An On-Net Augment location is defined as an On-Net customer location with service delivered at the location's Minimum Point of Entry ("MPOE") within a building and is connected to the nearest Serving PoP.

- Splicing, Standard: Estimated Install Interval 60 Days
- Splicing, Extended (Markets with longer intervals): Estimated Install Interval 90 Days

3.2.2.3 Near-net

A Near-Net customer location is defined as an Off-Net building within a 10km Serving Zone. These buildings do not have an active connection to Zayo's nearest Serving PoP and require OSP work or a fiber span.

- Existing buildings: Estimated Install Interval: 120-150 Days
- Planned buildings: To be evaluated on an Individual Case Basis

3.2.2.4 Off-net (Type-2)

Off-Net customer building where the last mile connectivity is provided by a partner. These buildings do not have an active connection to Zayo's nearest Serving POP.

- Off-Net: Estimated Install Interval: 120 Days

3.3 Delivery Support Standards

Figure 4 below presents the standard delivery of IP Products from the Zayo serving PoP to the Customer location, with demarcation points of responsibility shown. Please note that CWDM filters may not be installed for every Customer order.

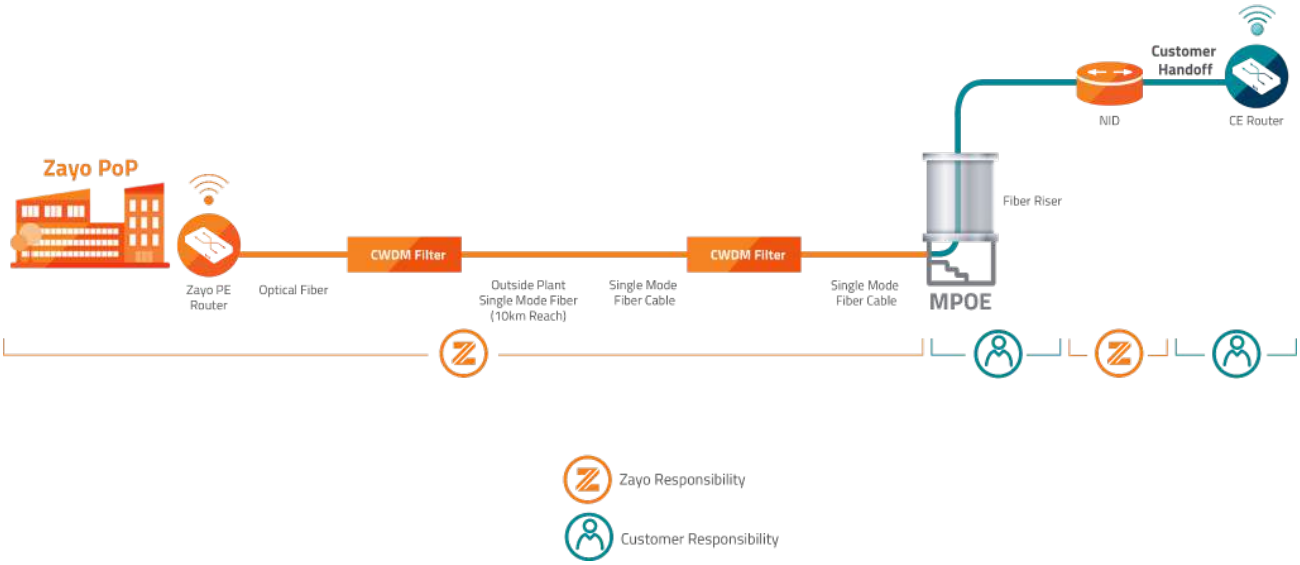

Figure 4: Zayo's Service Delivery standards for IP Products from the serving Zayo PoP

3.3.1 Supported Customer Handoffs

Handoff	Speed	Line Rate	Internal Wiring Distance
Copper 10/100/1000BaseT	1000Mb	1000Mb	100m
Multimode 850nm SX/SR	10G	10G	300m
Singlemode 1310nm LX/LR	10G	10G	10km
Singlemode 1310nm EX/ER	10G	10G	40km
Singlemode 1550nm ZX/ZR	10G	10G	80km
Singlemode 100GBASE-LR4	100G	100G	8km
Singlemode 100GBASE-ER4	100G	100G	28km

Table 2: Supported Customer Handoffs for IP Products

3.3.2 Supported Customer Interfaces

Table 3 in Section 3.4.3 below presents the interfaces supported by Zayo's NID to the Customer Premise, or to the Customer Provided Equipment ("CPE").

3.4 Network Interface Device ("NID")

For CWDM or copper customer handoffs, Zayo will install a NID at the customer location to support IP Products. The NID converts native single-mode fiber delivery to alternative media or optical wavelength(s). The customer will provide appropriate space, power source, and environment for the equipment's sound operation. Zayo will own, monitor, and maintain this equipment. Supported NID Hardware options are listed in Section 3.4.3.

3.4.1 Space Requirements

The customer will provide the rack and position details in the customer location in order to allow timely service delivery and activation. Please see Table 3 below for space requirements.

3.4.2 Power Requirements

The customer will provide a power type to support the NID, the default is single AC power with the ability to support Dual AC power upon request. Please see Table 3 below for power requirements.

3.4.3 Supported NID Interfaces

Interfaces	Space Requirements	Power Requirements (Max Voltage)
100Mb/GigE: 2 x SFP or 100Mb/GigE SFP	1RU 8.5" (W) x 8.0" (D) x 1.5" (H)	DC: -48, -/+ 36, -/+24 VDC AC: 100V, 240V AC Power Consumption: 52W Dual Power Supply
1G: 8 x SFP 10G: 4 x SFP+	1RU 17.5" (W) x 9.9" (D) x1.75" (H)	DC: -48, -/+ 36, -/+24 VDC AC: 100V, 240V AC

		Power Consumption: 90W Dual Power Supply
10G: 2 x SFP+ 100Mb/GigE	1RU 17.5" (W) x 9.9" (D) x1.75" (H)	DC: -48, -/+ 36, -/+24 VDC AC: 100V, 240V AC Power Consumption: 75-95W Dual Power Supplies *Available*
1G: 4 x SFP 10G: 4 x SFP	1RU 8.5" (W) x 9.9" (D) x 1.75" (H)	DC: -48, -/+ 36, -/+24 VDC AC: 100V, 240V AC Power Consumption: 23-30W Dual Power Supplies *Available*
1G: 4 x SFP	1RU 7.9" (W) x 6.8" (D) x 1.5" (H)	DC: -20-57 VDC AC: 120-240V AC Power Consumption: 22W Dual Power Supply, Dual DC has a centralized connection
10G NNI: 2 x SFP+ 10G UNI: 2 x SFP+ 1G: 4 x SFP	1RU 13.0" (W) x 8.9" (D) x 1.75" (H)	DC: -20-57 VDC AC: 120-240V AC Power Consumption: 90W Dual Power Supply

Table 3: Space and Power Requirements for typical NID deployments

3.5 Responsibilities

3.5.1 Required Documentation

Customers are required to provide the following documentation as part of the delivery process. Without timely responses to the forms and questions, the delivery will be delayed, resulting in a missed FOC.

- Pertinent tabs on the IPJ Form. Additional details in Section 2.1.1
- Space and Power for the NID including preface for AC or DC power. Additional details in 3.4.3

3.5.2 Demarcation Point

The Standard Zayo fiber demarcation point is at the fiber Minimum Point of Entry ("MPOE") with a CWDM handoff. The customer is responsible for in-building fiber from the MPOE to the NID.

3.5.3 Riser/In-Building Cabling

In a standard delivery, the customer is responsible for an extension past the point of the demarcation.

3.5.4 Cross-Connects

The customer is responsible for single-mode fiber cross-connect(s) to the Zayo-provided NID for standard deliveries. Zayo provides the circuit facility assignment (CFA) in a standard delivery.

4. Performance Standards

4.1 General

Zayo's global Network Operations Center ("NOC") ensures the ongoing excellent performance of Zayo's services. Zayo organizes the NOC by product, with IP Services being supported by a front-end Service Orchestration Team. The team offers 6 tiers of customer escalations.

4.2 Service Availability and NOC Processes

IP Products' service level performance targets are defined within Zayo's Service Schedules. For IP Products' service level targets, refer to the *Customer Schedule Ethernet, IP and WANs*. This document presents the full text of performance level targets, guarantees, and associated credits issued to customers in the unlikely event of missed service performance.

Following are the performance level targets for the availability of the IP Products, measured over the course of a one-month interval.

Measurement	Performance Level Target
Unprotected	99.9%
Protected*	99.95%

Table 4: IP Products Availability Targets

*Protected IP Products include a protection scheme that allows traffic to be rerouted in the event of a fiber cut or equipment failure. The protection status of a customer service must be specifically indicated on the Order Form.

The Zayo Customer handbook provides an overview of Zayo's NOC processes, including how to open a trouble ticket, the steps of each ticket opened, and contact information for Zayo's NOC staff.

4.3 Service Level Objectives (SLOs)

4.3.1 Time To Respond - Ticket Generation

Table 5 below presents Zayo's targeted time to respond to a newly-opened trouble ticket.

Configuration	Zayo Response Time Out of Service	Zayo Response Time Impaired Service
Unprotected Circuit	60 minutes	90 minutes
Protected Circuit	60 minutes	90 minutes

Table 5: IP Products Time To Respond

4.3.2 Time to Restore (TTR)

Service Restoration excludes force majeure events as defined within the IP Products' Service Schedule.

Configuration	TTR Equipment/Jumper	TTR Fiber Cut/Impaired
Unprotected	4 hours	12 hours

Table 6: IP Products Time to Restore

4.4 Incident Escalation Process

Zayo's Customer Handbook outlines the Escalation list and process. For IP Products, follow the *IP Solutions* product set.

4.5 Equipment Standards

4.5.1 Ownership

Zayo is accountable to ensure the service works as designed on Zayo-provided service elements up to the customer point of demarcation on the NID (the port, and applicable SFP optics are considered the customer demarcation point). Zayo will troubleshoot and repair as necessary any equipment or Zayo-owned connectivity up to this point. Customer-provided riser fiber, fiber, or copper connections past the customer demarcation point and power to any active electronics in the customer suite are the responsibility of the customer to supply and repair.

4.5.2 Sparing

Zayo guarantees high availability of the optical network by maintaining regional sparing and having backup equipment to maintain the network.

Zayo does not have on-site spares for customer-specific interfaces. If a service is dedicated to an individual customer, equipment sparing is not guaranteed.

4.5.3 Refresh

Zayo does not proactively replace equipment based on End of Life/End of Service (EoL/EoS) of that equipment. However, Zayo is accountable to ensure the service works to specifications for the duration of the term.

4.6 Maintenance

4.6.1 Zayo Responsibilities

Zayo will notify Customers of scheduled network grooms 14 calendar days in advance of routine maintenance that impacts availability.

4.6.2 Customer Responsibilities

Customers will provide Zayo physical access to the Customer location in order to perform routine maintenance. Customer-provided riser fiber, fiber, or copper connections past the customer demarcation point and power to any active electronics in the customer suite are the responsibility of the customer to supply and repair.

4.6.3 Maintenance Windows

The Zayo NOC will generally conduct planned routine maintenance outside of normal business hours anytime between 12:00 AM to 5:00 AM (local time), seven (7) days a week to ensure minimal impact to Customers' business operations.

5. Glossary

Glossary	Definition
AC Power	Alternating current (AC) power is the standard office or customer premise power supply type, and the default power type for Zayo premise equipment.
Autonomous Systems ("AS")	A group of connected Internet Protocol routing prefixes governed by one or more network operators. Each AS presents a clearly defined routing policy to the Internet and is assigned an Autonomous System Number (ASN) to enable the free-flow exchange of information via BGP.
Bits Per Second ("bps")	A measure of data transmission speeds, the amount of bits transferred or processed in a single second.
Border Gateway Protocol ("BGP")	The standard routing mechanism for the Internet, it is designed to exchange and forward packets among all Autonomous Systems (AS) and identifies the most optimal route from source to destination.
Coarse Wavelength Division Multiplexing (CWDM)	A WDM technology that combines multiple signals at various wavelength frequencies for simultaneous transmission over fiber.
Connecting Facility Assignment ("CFA")	Identification of a channel or frame of a high-capacity facility that will be used by a customer. The CFA will list the physical location of the point of presence (POP), as well as the bay, panel, rack, port, and slot to which your circuit is assigned. Can be owned by Zayo or a Data Center, including passive devices. This is the specific demarcation identified as part of a CFA.
Cross Connect	The ability to connect from one demarcation point to another demarcation point in the same building. An on-net cross connect is applicable where Zayo offers colocation services. Zayo will charge a cross connect fee to connect a service from the Zayo demarcation point to the rack/cage of a colo'd customer. Zayo will also charge a cross-connect fee to connect one customer colocation rack/cage to another customer's colocation rack/cage.
Customer Premise Equipment ("CPE")	Customer premises equipment, such as a NID or Router.
Customer Premises	Describes the location or building occupied by the customer.
Customer Provided Equipment (CPE)	Any customer provided terminal and associated equipment at the customer's premise which is used to connect them to Zayo's network/demarc. This includes, but is not limited to: routers, network switches, and Internet access gateways.
DC Power	Direct Current (DC) Power in the context of the Service Description this

	exclusively refers to the -48v DC Telco power standards.
Demarcation Point ("Demarc")	A point established in a building complex to separate the CPE from Zayo's distribution infrastructure, or the network interface point where Customer's Handoff occurs.
Diversity	Reduce single points of failure in a complex system by maintaining separation of paths, routes and equipment. The Customer Order for such Offering shall specifically state that such Offering is a Diverse Offering and will include the type of diversity applicable to such Offering.
Ethernet	Ethernet protocol is compliant to IEEE 802.3.
Fiber Tail	A single, tight-buffered optical fiber that has a pre-installed optical connector on one end and a length of exposed fiber at the other end. The end is stripped and fusion spliced into a single fiber of a multi-fiber trunk
Firm Order Commitment ("FOC")	The document that communicates the date by which an order will be completed.
Global Network Operations Center ("NOC")	Global Network Operations Center ("GNOC") is a team and places where Zayo teams maintain, control, and respond to network events.
Handoff	The process in which transmission is transferred from one site to another without losing connectivity.
Individual Case Basis ("ICB")	The process whereby an order is submitted for detailed review by Zayo's internal teams.
Latency	The measurement of time that it takes for some data to get to its destination across the network. Typically measured as a round trip delay - the time taken for information to get to its destination and back again. Latency is usually measured in milliseconds (ms).
Link Aggregation Group ("LAG")	A method for combining the bandwidth of multiple ports into one. Enables fail-over functions in Single or Multi-Member environments.
Maximum Reach	The longest physical distance is achieved by an optical circuit without error or degradation.
Minimum Point of Entry ("MPOE")	The closest practical point to where the cables of a telecommunications service carrier cross a property line or where its wiring enters a multi-unit building. The MPOE is the "physical" point at which the provider's lines cross into the customer's building (or sometimes across a property line). The MPOE of a multi-unit building is typically 12 inches inside the building's foundation.

Network Interface Device (NID)	Network Interface Device which serves as the demarcation point between Zayo's MPOE and the customer's premise. Hardware utilized depends on engineering design and required functionality. NIDs are always required if the handoff is either Copper or MMF. 1. Accedian (1g, 10g); designed for the FTT market. They have protocols specific to voice-over-ethernet and circuit emulation. They cannot support learning bridge functions (i.e. L2-Switches) 2. Ciena (1g, 10g, 100g) is preferred when a local bridge domain is needed. These are considered L2 switches.
Non-PoP	PoP qualification if Zayo has DF into the building, but no active equipment and it requires a BH to an active Zayo POP.
Off-Net	A location or portion of service that is not on the Zayo network.
OM / MMF	Optical Multimode Fiber, there are four types with varying core sizes, bandwidth and distance supported.
OM1	OM1 has a core size of 62.5 µm and can support up to 10G at lengths of 33 meters.
OM2	OM2 has a core size of 50 µm and can support up to 10G at lengths of 82 meters.
OM3	OM3 has a core size of 50 µm and can support up to 10G to 300 meters, or 100G to 100 meters.
OM4	OM4 is backwards compatible with OM3 fiber and supports 10G to 550m, or 100G to 150 meters.
On-Net	Any Offering which connects two locations to which Zayo is already providing the same type of Offering at the time of the Customer Order and which is provisioned entirely on Zayo facilities and does not include any Third Party Offerings (as defined herein) or special construction.
OSP/Fiber Span	Outside Plant; a physical fiber optic cable owned and maintained by Zayo within the public right of way.
Point of Presence ("POP")	A building that is equipped with a Core Router, Edge Router, or Aggregation Switch, fiber panel, or other demarcation point that interfaces between communicating entities.
Power	The customer provided power type to support the Zayo NID, the default is single Alternating Current ("AC").

Protected Circuit	Protection by using the same chassis (99.95% availability).
Protection	A mechanism to automatically recover from failures within complex systems including equipment failure, fiber cuts, and systemic or logical errors.
Protection (Equipment)	Includes a protection scheme that allows traffic to be rerouted in the event of a fiber cut or equipment failure.
Protocol	The rules for the transmission of data which must be followed if communication is to be affected; the complete interaction of all possible series of messages across an interface.
Provider Edge	The Provider Edge router (PE router) is the router between Zayo's network and the end-user's serving area.
Provisioning	The act of acquiring a service from the submission of the requirement through the activation of service. Provisioning includes all associated transmission, wiring, and equipment.
Riser	The part of the telecom network contained within a building or colocation, serviced by inside plant technicians who specialize in this part of the network. All network and equipment inside buildings (e.g. intrabuilding riser fiber).
Service Level Agreement ("SLA")	Defines a set of specific services tuned to the needs of a given customer, along with quality parameters that can be technical (for example, measured service availability) or organizational (such as reaction time or notification time).
Small form-factor pluggable (“SFP”)	Small form-factor pluggable ("SFP") is a compact media transceiver that interfaces between networking equipment (switch, router, line card) and the fiber/copper handoff.
Single Mode Fiber ("SMF")	Zayo's default fiber type, a single-mode optical fiber, is an optical fiber with a core diameter of 9µm. The core size is critical, as it is designed to carry only a single mode of light which reduces packet loss and is optimal for long distance transmission - the transverse mode.
Splice	A method of joining two fiber optic cables together; utilized for building fiber networks, near-net services and/or to restore cables that have been severed.
Static Routing	A manual routing entry configured by a network administrator. Static routes are fixed and do not change unless the path is manually reconfigured.
Type II	Last-mile connectivity is provided by another vendor who is on-net at the customer site and is responsible for delivering the circuit. Traffic still flows on Zayo's network, allowing monitoring and utilization reporting.

Typical Reach	The typical physical distance achieved by an optical circuit without error or degradation.