

DARK FIBER SERVICE ATTACHMENT

1. APPLICABILITY OF SERVICE ATTACHMENT.

This Dark Fiber Service Attachment sets forth the terms and conditions of Lightpath's Dark Fiber service (the "**Service Attachment**"), whereby Lightpath will design, construct, install and provide certain fiber optic filaments in a Cable for use solely by Customer (the "**Service**"). The term "**Cable**" means fiber optic cable with fiber optic filaments contained in any suitable jacketing or sheath that is already in place, or is yet to be installed, and to which Lightpath will have access by ownership, lease, license, right to use, or otherwise. Unless otherwise defined herein, all capitalized terms in this Service Attachment will have the same meaning as defined in the Standard Service Agreement. By signing the Service Order, Customer agrees to the terms of this Service Attachment.

2. USE OF SERVICE.

2.1 Grant of License. Lightpath hereby grants to Customer a license to use certain fiber optic filaments contained within the Cable designated as "Customer Fibers", and the location of the number, identity, type, and location of the Customer Fibers will be as set forth in the Service Order executed by the Parties, subject to the terms herein. Customer will only have the right to use the fibers within the Cable designated as Customer Fibers, and the remaining fibers within the Cable will be designated as "Lightpath Fibers". Nothing herein will be construed as limiting or restricting Lightpath or its Affiliates in any manner from using its own cables, fibers, or any other facilities, easements and / or rights of way for the installation of additional fiber optic cables, for use as telecommunications facilities, or for any other purpose. The term "**Customer Fibers**" means the fiber optic filaments in the Cable that are being licensed to Customer under a Service Order. The term "**Lightpath Fibers**" means all fibers in the Cable in which Lightpath retains ownership and / or the right to use, other than those specifically licensed for use by Customer herein.

2.2 License Subordination. Customer understands and agrees that Lightpath's ability to grant Customer the license to use the Customer Fibers, and to attach, install, construct, operate, and maintain the Service Network and Customer Fibers, is at all times subject to, and limited by, the Underlying Rights (as such term is defined below, Authorizations, and all applicable laws, rules, ordinances, codes, and regulations. Customer will only have a license to use the Customer Fibers or related facilities, expressly granted herein, and, in no event, will such license be construed to be greater than the Underlying Rights of Lightpath to use such Customer Fibers. Lightpath will not be liable for any acts or omissions by Lightpath, its employees or Affiliates that interfere with or otherwise affect Customer's use of the Customer Fibers to the extent such acts or omissions are required by the Underlying Rights and / or Authorizations, including, without limitation acts or omissions that deny the use of, alter or remove the Cable and Cable Accessories. Customer acknowledges and agrees that Lightpath may lease, license, or acquire a right to use fibers and Cable from a third party together with the right to sub-lease or sub-license such fibers and Cable in order to provide such dark fiber Service to Customer herein. The term "**Underlying Rights**" means all agreements, licenses, easements, leases, access rights, rights-of-way, franchises, permits, governmental approvals, waivers, and consents that are necessary to provide, construct, install, test, operate, maintain, inspect, repair, and replace the Service Network and provide the Service. The term "**Authorizations**" means all applicable governmental and regulatory approvals, permits, authorizations, orders and/or consents required to provide the Service. The term "**Cable Accessories**" means the attachment and suspension hardware, splice closures and other components necessary for the placement of the Cable either underground or overhead or for the continuity of the fibers.

2.3 Lightpath Ownership and Rights. The Service Network and Service Equipment will remain the sole and exclusive property of Lightpath, and nothing contained herein will grant or convey to Customer any right, title or interest in the Service Network or Service Equipment, nor will anything herein constitute, create or vest in Customer any easement or any other property right. The Service Network and Service Equipment will at all times remain the personal property of Lightpath notwithstanding that it may be or become attached or affixed to real property. Customer will not tamper with, remove or conceal such identifying plates, tags or labels. Nothing herein will prevent Lightpath from using the Service Network and Service Equipment to provide service to other customers. For a reasonable period of time following the expiration or termination of the Service Order, Lightpath will grant Customer access to its premises as necessary to enable Customer to remove the Customer Equipment. Customer will take no action that directly or indirectly impairs Lightpath's title to the Service Network or Service Equipment, or exposes Lightpath to any claim, lien, encumbrance or legal process. If by virtue of any action or omission by Customer any property of Lightpath becomes encumbered by any lien, claim or other encumbrance as a result of any act or omission of Customer, Customer will, to the fullest extent permitted by law and at Customer's expense, take all actions necessary to remove such encumbrances(s) from Lightpath's property within ten (10) days after notice by Lightpath to Customer; provided, however, that if any such lien, claim or encumbrance is not so discharged and released within ten (10) days after notice by Lightpath to Customer, then Lightpath may, at its option: (i) pay or secure the release or discharge thereof and Customer will indemnify Lightpath and its Affiliates, officers, directors and employees against all costs and expenses (including reasonable attorneys' fees) incurred in discharging and releasing such lien or encumbrance; or (ii) terminate the applicable dark fiber Service Order(s) effective upon written notice to the Customer and seek recovery of any and all damages from Customer as a result of Customer's breach of its obligation hereunder.

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2.4 Access to Service Network and Customer Fibers. Customer has no right whatsoever to physically access the Service Network or the Customer Fibers, or to maintain, splice, adjust, align, cut, repair, or replace the Customer Fibers or Service Network, or attempt to do any of the foregoing. All work with respect to the Customer Fibers and the Service Network will be solely performed by Lightpath.

2.5 Customer Equipment. Customer will, at its sole cost and expense, acquire, install, operate and maintain all electronic and optronic equipment necessary for Customer to use the Service.

2.6 Relocation Requested By Customer. Customer may request relocation, replacement, or rebuild of the Customer Fibers, subject to the execution of a Service Order, and Customer's payment to Lightpath of all costs and expenses associated with any such relocation, replacement or rebuild, including overhead costs and markups. No relocation or replacement of the Cable, Cable Accessories or related facilities will be performed without the prior written agreement of Lightpath.

2.7 Required Relocation. In the event that Lightpath is required by any underlying service provider, public authority, or lawful order or decree of a regulatory agency or court or any other reason beyond Lightpath's control, to relocate or modify any or all Cable on the Route upon which the Customer Fibers are located, Lightpath's costs for any such work will be shared on a pro rata basis with Customer. Lightpath will not be responsible for the costs of, nor will it be liable for, the removal, relocation or replacement of any Customer Equipment or other Customer property on the Premises Side of the Point of Demarcation. If the relocation or replacement of the Cable is requested or caused by a third party, Lightpath will attempt to obtain reimbursement of Lightpath's costs from said third party. Notice to Customer will be provided as soon as reasonably practicable. Neither Lightpath nor any of its Affiliates or agents will incur liability for any Service Outage (as such term is defined below), disruption, degradation, interference, or interruption in connection with any such removal or relocation. Lightpath and Customer will cooperate in performing such relocation or modifications so as to minimize any interference with the use of the Customer Fibers and the Cable and to avoid conflicting physically or otherwise interfering with joint users of the Cable, Cable Accessories or any other property impacted by the installation, construction, maintenance or use of the Cable, to the extent reasonably possible. Any such relocation will be accomplished consistently with the technical specifications detailed in Section 3 below. The term "**Point of Demarcation**" means the point of interconnection between Lightpath's communication facilities and terminal equipment, protective apparatus or wiring at Customer's premises, which delineates where responsibility for the Parties' respective networks, equipment and / or maintenance obligations begin and end. The term "**Premises Side**" means the side of the Point of Demarcation on which the Customer Equipment and / or a third party's equipment is located after the termination of the Cable, for which Customer is responsible.

2.8 Return of Removed Equipment. In the event Lightpath must remove any Customer Equipment or other property of Customer, Lightpath will deliver to Customer the Customer Equipment or property so removed upon payment by Customer of the costs for removal, storage and delivery, and all other amounts due Lightpath. Lightpath will use reasonable care when removing, storing and delivering such Customer Equipment, but will not be liable for any damage so long as such reasonable care is used.

2.9 Resale Restrictions. Customer is not permitted to resell, charge, loan, transfer, sublease, or otherwise dispose of the Service (or any part thereof) to any third party without the prior written consent of Lightpath.

2.10 Annual Adjustments. Beginning after the first Service Acceptance Date anniversary, the MRC for the Service will be increased by four percent (4.0%) on the first of January of each calendar year. In addition, in the event that amounts charged to Lightpath under any Underlying Rights are increased or Lightpath's costs or expenses are increased to provide the Service, Lightpath will have the right to charge Customer for its pro rata share of such increases.

3. TECHNICAL SPECIFICATIONS AND CABLE CONSTRUCTION.

3.1 Type and Constitution. Single-mode fibers are made of high grade doped silica core surrounded by a silica cladding; and coated with a dual layer, UV-cured acrylic-based coating.

Properties	Units	Single Mode
<u>Glass Geometry</u>		
Mode Field Diameter at 1310 nm	(μm)	9.2 \pm 0.4
Mode Field Diameter at 1550 nm	(μm)	10.4 \pm 0.8
<u>Fiber Attenuation (Loose Tube / Ribbon)</u>		
Maximum value at 1310 nm	(dB/km)	0.35/0.40
Maximum value at 1550 nm	(dB/km)	0.25/0.30
<u>Polarization Mode Dispersion (PMD)</u>		
Max. Ind. Fiber PMD @ 1550 nm	(ps/ $\sqrt{\text{km}}$)	\leq 0.2
PMD Link Value	(ps/ $\sqrt{\text{km}}$)	\leq 0.1

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3.2 Splicing Requirements.

- (i) Bi-directional splice value (the “**Splice Value**”) ≤ 0.20 dB at 1550 nm. In exceptional cases, a Splice Value may be accepted if its value is higher than 0.20 dB at 1550 nm. An exception case is, for instance, when three (3) re-trials of a splice cannot improve the Splice Value. The Splice Value will be given by the equation:

$$\frac{(\text{Splice attenuation from A to B}) + (\text{Splice attenuation from B to A})}{2}$$

- (ii) Splice attenuation average (the “**Splice Attenuation Average**”) ≤ 0.15 dB at 1550 nm. The Splice Attenuation Average is given by:

$$\frac{\Sigma \text{ Splice Values}}{\text{Number of Splices in the Route Segment}}$$

- (iii) It is recognized by the Parties that due to the use of ribbon fiber optic cable on some of the segments, the Splice Value of individual splices may exceed 0.20 dB. However, the Splice Attenuation Average for any Route Segment as designated in (b) above will supersede all other splicing requirements in cases where Splice Values that 0.20 dB exist.

3.3 Connectors.

- (i) Maximum Unitary ODF/S Connector (1 connector + 1 adapter + 1 connector)
- (ii) Maximum Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB, comprised of 0.8 dB connector loss and 0.20 dB splice loss (pigtail to cable splice).
- (iii) Minimum connector return loss: 40dB at 1550 nm.

3.4 Cable Design and Construction. The Cable will be constructed consistent with the technical specifications set forth above. Lightpath will ensure that the Cable will: (i) be engineered, designed, constructed, installed, and maintained in compliance with applicable building, construction and safety codes; and (ii) perform in accordance with industry accepted standards and practices. Lightpath, at its sole discretion, may perform the installation and maintenance itself or through subcontractors or other third parties.

3.5 Laterals. In the event a Service Order provides for a Lateral(s), Lightpath will construct (if necessary) and install such Lateral(s), and Customer will only have the right to use the fibers in such Lateral(s) Cable designated as Customer Fibers, and the remaining Fiber optic filaments within the Lateral Cable will be designated as Lightpath Fibers. For each Lateral, Customer will pay a charge as agreed upon by Lightpath and Customer and specified in the Service Order. Lightpath will have the right to install (in addition to the Customer Fibers) any number and type of fibers on, along, or in each such Lateral for any purpose, including, without limitation, leasing or licensing such fibers to any third party or parties. Lightpath’s installation of such Lateral(s) will be subject to the receipt of any required regulatory approvals, Authorizations and Underlying Rights. The term “**Lateral**” means the fiber connecting a geographic path along which the Cable and the Customer Fibers are located (the “**Route**”) route to a building entrance through conduit or overhead drops to a point within the building agreed upon by Lightpath and Customer, provided that such building is directly off a Route.

4. SERVICE RESTRICTIONS.

4.1 Reversion of Rights. Customer’s right to use the Customer Fibers will revert to Lightpath upon termination of the Service Order, or with the termination of any Route Segment with respect to any fibers within that Route Segment. The term “**Route Segment**” means a portion of the Route between any two points, including, without limitation, a portion of the Route comprising a Lateral.

4.2 Termination of Route Segment. Any Route Segment may be terminated by Lightpath, without liability at any time, upon reasonable notice to Customer: (i) to the extent Lightpath is no longer authorized under the Underlying Rights or Authorizations to install, construct, maintain, operate, or convey the license to use the Cable or Cable Accessories within the Route Segment or other property to provide the Service; (ii) the Cable, Cable Accessories or other property have become damaged in that such items cannot be reasonably repaired or replaced in Lightpath’s sole discretion; or (iii) due to Customer’s improper use of the Service.

4.3 Alternate Route Segments. If a Route Segment is terminated pursuant to Section 4.2. Lightpath will make reasonable efforts to find alternate capacity or facilities owned or controlled by Lightpath to meet Customer’s needs, but, under no circumstances will Lightpath be obligated to contract for or to construct new facilities, or otherwise incur any additional cost or expenses, to replace the Cable or Customer Fibers on the Route Segments terminated under Section 4.2.

4.4 Condemnation Proceedings/Termination Rights. Upon its receipt of a formal notice of condemnation or taking, Lightpath will notify Customer of any condemnation proceeding filed against Conduit and/or the Customer Fibers. If at any time during the Service Term, all or any significant portion of the Cable is taken for any public or quasi-public purpose by any lawful power or authority by the

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exercise of the right of condemnation or eminent domain and, after exercise of the Parties' commercially prudent efforts, the Cable cannot be relocated pursuant to Section 2.7, either Party may elect to terminate the impacted Service upon giving the other thirty (30) days prior written notice. If the applicable Service is terminated in accordance with this section, the applicable Service will be deemed canceled and neither Party will have any further obligations to the other, except that both Parties will be entitled to participate in any condemnation proceedings to seek to obtain compensation via separate awards for the economic value of their respective interest in the Cable.

4.5 Property Owner Not Liable. Neither Customer nor any of Customer's end-users have any recourse against any property owner or property manager of any premises to which any Service is delivered and / or at which Lightpath's Network or Equipment is located, as a result of or in reliance upon this Service Supplement. Without limiting the foregoing, this provision will not be construed to impose any liability on Lightpath, nor will Lightpath have any liability, for or on behalf of such property owner or property manager.

5. SERVICE LEVEL AGREEMENT.

5.1 Service Outage. Subject to this Section 5 (including subsections), in the event that Lightpath fails to repair a Service Outage within twenty-four hours of notice from Customer of a Service Outage ("**Repair Window**"), Customer may request a service credit of 1/30th of the MRC applicable to the affected Service for each consecutive 24-hour period of the Service Outage after said Repair Window (the "**Service Credit**"). The term "**Service Outage**" means a complete disruption of Service, or a material degradation of Service below the technical specifications detailed in Section 3, such that Customer is unable to utilize the Service for its intended purpose as contemplated hereunder. The calculation of a Service Outage will be deemed to begin upon the earlier of: (i) Lightpath's actual knowledge of the Service Outage, or (ii) Lightpath's receipt of notice from Customer of the Service Outage, less (iii) any time Lightpath is waiting for additional information. A Service Outage will be deemed to end when the Service is operational and in material conformance with the technical specifications detailed in Section 3, as documented by Lightpath's records. Notwithstanding anything to the contrary in the Standard Service Agreement, this Service Attachment or in any Service Order, in no event with a Service Outage be deemed to be or constitute a breach by Lightpath of the Standard Service Agreement, this Service Attachment or in any Service Order.

5.2 Service Credits. The number of minutes of separate and discrete Service Outages will not be accumulated to determine the percentage of Service Credit. Service Credits hereunder are calculated as a percentage of the MRC set forth in the Service Order, and may not be applied to NRC, usage charges, government fees, taxes, or surcharges, or any third party charges passed through to Customer by Lightpath. If an incident affects the performance of the Service and results in a period or periods of Service Outage, interruption, disruption or degradation in Service, entitling Customer to one or more credits under multiple service level standards, only the single highest credit with respect to that incident will be applied, and Customer will not be entitled to credits under multiple service level standards for the same incident. Service Credits will not be issued to Customer if Customer's account with Lightpath is in arrears. In no event will the cumulative credits for any month exceed fifty percent (50%) of the MRC for the affected Service. Service Credits issued to Customer hereunder are Customer's sole and exclusive remedy at law or in equity on account of any Service Outage.

5.3 Service Credit Request. Customer must submit a written request to claim a Service Credit no later than thirty (30) days following the event which gives rise to Customer's right to request the Service Credit. Failure to request a Service Credit within such period will constitute a waiver of any claim for a Service Credit.

5.4 Service Outage Exclusions. Notwithstanding the foregoing, Customer will not receive any credit for a Service Outage or delay in performing repairs, arising from or caused, in whole or in part, by the following events:

- (i) Customer's (including its Affiliates, agents, contractors and vendors) negligence, intentional act, omission, default and / or failure to cooperate with Lightpath in addressing any reported Service problems, including failing to take any remedial action in relation to a Service as recommended by Lightpath, or otherwise preventing Lightpath from doing so;
- (ii) Failure on the part of Customer Equipment, end-user equipment or Customer's vendor's equipment;
- (iii) Election by Customer, after requested by Lightpath, not to release the Service for testing and repair;
- (iv) Lightpath's inability to obtain access required to remedy a defect in Service;
- (v) Scheduled maintenance and emergency maintenance periods;
- (vi) Scheduled upgrade of Service at the request of Customer;
- (vii) Force Majeure Event;
- (viii) Disconnection or suspension of the Service by Lightpath pursuant to a right provided under the Standard Service Agreement, this Service Attachment, or Service Order;
- (ix) Lightpath's inability to repair due to utility safety restrictions; and / or
- (x) No trouble found or where the fault of the trouble is undetermined.

6. MAINTENANCE AND REPAIR.

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6.1 Lightpath Obligations. Lightpath will perform (or cause to be performed) maintenance and repair of the Lightpath Network, and Lightpath will provide, install, maintain, repair, operate and control Lightpath Equipment. Unless specified otherwise in a Service Order, Lightpath will have no obligation to install, maintain or repair Customer Equipment.

6.2 Service Issues. In the event that Customer experiences any Service-related issues, Customer may contact Lightpath through its Network Maintenance Center (“NMC”) at +1 (866) 611 - 3434, which may be amended by Lightpath from time-to-time upon written notice to Customer. Upon receipt of notice of Service problems, Lightpath will initiate diagnostic testing to determine the source and severity of any degradation of Service. If there is a Service Outage, Lightpath and Customer will cooperate to restore Service. If Lightpath dispatches a field technician to Customer Location to perform diagnostic troubleshooting and the problem resides with the Customer's Equipment or facilities or the failure is due to Customer's or end-user's acts or omissions or the acts or omissions of Customer's or end-user's invitees, licensees, customers or contractors, Customer will pay Lightpath for any and all associated time and materials at Lightpath's then-current standard rates.

6.3 Scheduled Maintenance. Lightpath will endeavor to conduct (or cause to be conducted) scheduled maintenance that is reasonably expected to interrupt Service outside of regular business hours during the maintenance window of 12:00 midnight and 6:00 a.m. local time or, upon Customer's reasonable request, at a time mutually agreed to by Customer and Lightpath. Lightpath will use commercially reasonable efforts to notify Customer of scheduled maintenance that is reasonably expected to interrupt Service via telephone or e-mail, no less than ten (10) business days prior to commencement of such maintenance activities. Customer will provide a list of Customer contacts for maintenance purposes, which will be included on the Service Order, and Customer will provide updated lists to Lightpath, as necessary.

6.4 Emergency Maintenance. Lightpath may perform emergency maintenance in its reasonable discretion, with or without prior notice to Customer, to preserve the overall integrity of the Lightpath Network. Lightpath will notify Customer as soon as reasonably practicable following any such emergency maintenance activity that impacts the Service.

6.5 Other Emergency Actions. If Lightpath determines, in its sole discretion, that an emergency action is necessary to protect the Lightpath Network as a result of Customer's transmissions, Lightpath may block any such Customer transmissions that fail to meet generally accepted telecommunications industry standards. Lightpath will have no obligation or liability to Customer for any claim, judgment or liability resulting from such blockage. Lightpath will notify Customer as soon as practicable of any such blockage. The Parties agree to mutually cooperate to resolve the underlying cause of the blocking, comply with generally accepted telecommunications industry standards and restore the transmission path as soon as reasonably possible, with a completion goal of forty-eight (48) hours.