PRODUCT SUPPLEMENT - DARK FIBER SERVICES to the

Master Service Agreement

This Product Supplement – Dark Fiber Services (this "Supplement") is incorporated by reference into and made a part of that certain Master Service Agreement (including all attachments and incorporated documents, the "Agreement") entered into between the Seller and the Buyer who signed the Master Service Agreement, as expressly authorized therein and shall be effective as of the Effective Date defined in the Master Service Agreement. This Supplement provides additional terms and conditions governing the Dark Fiber.

1. SERVICE DESCRIPTIONS FOR DARK FIBER SERVICES

(a) Dark Fiber Service

- (i) "Dark Fiber Service" shall mean a configuration where a Buyer obtains dedicated point-topoint optical fiber connections between two locations on Seller's Facilities without any signal or any Seller equipment used to transmit capacity over or to "light" the fibers. The Service is subject to the terms of this Supplement, the respective Service Order and the Agreement. Dark Fiber Service is subject to availability, in the sole discretion of Seller.
- (ii) "Managed Dark Fiber Service" shall mean a configuration where Buyer obtains dedicated point-to-point optical fiber connections or a ring design with access points to connect multiple locations. Seller provides the following services:
 - (aa) Procurement of optical equipment
 - (bb) Engineering and installation of optical equipment
 - (cc) Monitoring and maintenance optical equipment
 - (dd) Repairing optical equipment
 - (ee) Stocking spare optical equipment
- (b) Ownership -- The Dark Fiber Services are provided solely as a leasing service performed by Seller and does not and will not convey any legal or equitable title or property rights to or in any real or personal property other than the leasehold provided in the designated fibers subject to the terms of the Agreement. The optical fibers and all related equipment, conduit, cabling and ancillary property (the "System") on Seller's side of the demarcation point shall remain the sole property of Seller. Buyer shall not access any part of the System without the prior written consent of Seller. Until the Commencement Date and payment in full of any applicable Non-Recurring Charge by Buyer to Seller, Buyer shall have no right in or to, and shall have no right to use, all or any part of the System and/or Dark Fiber Services.
- (c) <u>Demarcation Point</u> -- Seller shall designate an installation demarcation point and a maintenance demarcation point (which may be a different point) for each interconnection of the Dark Fiber Services as necessary to safeguard and maintain Seller's control over the System. Seller shall perform all installation work on facilities on its side of the installation demarcation point and shall perform all post-installation work on facilities on its side of the maintenance demarcation point. Buyer shall connect with the Service only at the specified demarcation point and Buyer is responsible for all network, equipment and facilities on its side of the demarcation point.
- (d) <u>Interference</u> -- Buyer will not use equipment, technologies, or methods of operation that interfere in any way with or adversely affect the System or the use of the System by Seller or third parties or their respective fibers, equipment, or facilities associated therewith. Buyer will take all reasonable precautions to prevent damage to the System.
- (e) Private Use -- During the Service Term, Buyer may use the Dark Fiber Services solely for its own business purposes and may not allow any third party use of the Dark Fiber Services except through the provision of lit capacity or services by Buyer to its customers in the normal course of business. Buyer will not allow any third parties to use the Dark Fiber Services as dark or "dim" fiber, but solely for fully lit services.
- (f) <u>Buyer Provided Building Entrance Rights</u> -- Unless Seller already has the necessary rights for the locations and term ordered, Buyer will acquire and provide Seller, at Buyer's sole cost and expense, with all necessary building entrance rights and other authorizations to allow for Seller to install, construct, maintain, repair and replace a lateral including conduits, cables (with no limit on the number of fibers) and other necessary facilities from the System into the applicable building/location, and Buyer will provide an industry standard rack (or similar equipment as

reasonably requested by Seller), with power if applicable, for Seller to place a Fiber Distribution Panel ("FDP"), or similar equipment, in Buyer's space in such building into which the cable in such lateral will be connected, both on a prompt and timely basis. It is understood that Seller will retain exclusive ownership and control over such FDPs or similar equipment at such location(s). The rights and racks to be provided by Buyer pursuant to this Section shall be referred to as the "Buyer Provided Building Entrance Rights." Buyer shall maintain the Buyer Provided Building Entrance Rights at its sole cost during the applicable Service Term. Notwithstanding any provision in this Supplement to the contrary, Seller shall have the right to terminate the respective Dark Fiber Services if 1) Buyer has not secured and made available to Seller the Buyer Provided Building Entrance Rights for any applicable locations by the date which is thirty (30) days after the date on which the Parties have executed the applicable service order for the Dark Fiber Services, or 2) Buyer fails to maintain the Buyer Provided Building Entrance Rights during the Service Term. In such event, Buyer's failure to obtain or maintain such rights will constitute a breach of the Agreement and, for purposes of early termination liability, such termination will be treated as a termination of the Service by Buyer for purposes of the Agreement. For any of Seller's cabling, equipment or other facilities which are utilizing Buyer Provided Building Entrance Rights, Seller may in its discretion, with notice to Buyer, grant and assign title of such facilities to Buyer either during or after the relevant Service Term, in such event, Buyer agrees it will assume and accept such title upon receipt of notice without any further action required by either party.

2. PROVISIONING INTERVALS FOR FACILITIES.

- 2.1 <u>Provisioning Intervals</u>. The Provisioning Intervals for the Dark Fiber Services will be provided by Seller on an individual case basis ("ICB") and agreed upon in the applicable Service Order FOC.
- 2.2 Remedies. If the Commencement Date does not occur prior to the Scheduled Service Date with regard to Services provided on Seller's Facilities in accordance with Section 2.1 of this Product Supplement and such delay in the Commencement Date is not due to a Force Majeure Event or an act or omission of Buyer (including any breach by Buyer), Buyer's Users or their respective representatives, then the following remedies shall apply:
- (a) <u>Delay of Recurring Charge</u>. Buyer shall not be obligated to pay the Recurring Charges until such time as the Service commences.
- (b) <u>Termination of Service</u>. If the Commencement Date does not occur on or before ninety (90) days following the applicable Scheduled Service Date, then Buyer shall have the right to terminate the applicable Service by providing written notice to Seller to the extent that such notice is provided prior to the Commencement Date. In such event, unless otherwise provided in the Service Order, Buyer shall not be obligated to pay, and shall receive reimbursement for any amounts previously paid with regard to, any Recurring Charges or Non-Recurring Charges associated with such Service.
- (c) <u>SOLE AND EXCLUSIVE REMEDIES</u>. THE PARTIES ACKNOWLEDGE THAT THE REMEDIES IN THIS SECTION 2 SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF BUYER AND THE SOLE AND EXCLUSIVE LIABILITY OF SELLER FOR THE FAILURE OF THE COMMENCEMENT DATE TO OCCUR PRIOR TO THE SCHEDULED SERVICE DATE OR ANY OTHER DELAY IN PROVIDING THE SERVICE.
- 2.3 Supp or Deferral Rights With respect to any Services provided entirely on Seller's Facilities, Buyer shall have the right to request up to three (3) deferrals of the Scheduled Service Date; provided that, unless otherwise agreed by Seller, in no event may Buyer request a deferral of more than thirty (30) days in aggregate from the Scheduled Service Date set forth in the initial FOC for the Service. The Supp Charges applicable to any such deferrals of the Scheduled Service Date are set forth in Buyer's Miscellaneous Price Schedule. With respect to any Services provided in whole or in part on Third Party Facilities, any rights of Buyer to defer the Scheduled Service Date and any associated charges shall be determined by Seller on an individual case basis.

3. TESTING PROCEDURES FOR FACILITIES.

3.1 <u>Testing Standards</u>. Tests of each Service provided on Seller's Facilities shall be made to determine whether the Service complies with the following specifications ("Fiber Performance Criteria"):

An end to end test shall be performed on each fiber in a span at 1310 nm (where applicable) and 1550 nm with an industry standard light source and power meter (the "Power Meter Test") to determine the actual light/power loss between the two ends (the "Actual Span Loss"). The Power Meter Test must (i) show that the Actual Span Loss is equal to or less than both (a) the Acceptable Span Loss (as defined below) and (b) 0.6 dB/km at 1310 nm and 0.4 dB/km at 1550 nm; and (ii) prove there is a one-to-one correspondence of all fibers.

(A * L) + (SL * N) + (0.5 dB * C) = Acceptable Span Loss

- A = Attenuation per KM at 1310 nm and 1550 nm (insert 0.40 dB/km @1310 nm and 0.25 dB/km @ 1550 nm)
- L = Optical length of cable measured in kilometers (from OTDR Trace)
- SL Loss per splice allowed (insert .30 loss @ 1310 nm and .25 loss @ 1550 nm)
- N = Number of splices in a span
- C = Number of Connectors in the span. A "Connector" connects two endpoints of fiber at certain points of presence (the definition of Connector shall also include any pigtail connectors/splices used for the test)
- 3.2 <u>Testing Periods</u>. Seller shall use a reasonable duration for the tests for Dark Fiber Services provided on Seller's Facilities.

4. PERFORMANCE AND OPERATING STANDARDS FOR FACILITIES.

- 4.1 Availability. If a Service Outage (as defined below) occurs with respect to Services provided entirely on Seller's Facilities and Seller is unable to provide the Services at the Availability Factors (as defined below), then Seller will credit Buyer's invoice for the applicable period with an amount equal to the Service Outage Credit (as defined below) in the month following the request by Buyer and determination of the applicable Service Outage Credit pursuant to the provisions set forth below; provided that Buyer must request such Service Outage Credit and such request must be made within thirty (30) days of the applicable Service Outage. If a Chronic Service Outage (as defined below) occurs for any Service, then Buyer shall have the right to terminate the applicable Service consistent with paragraph (e) of Section 4.2.
- 4.2 (a) <u>Service Outage</u>. A "Service Outage" shall mean that Dark Fiber Services are unavailable during the relevant period either because (i) the Service experiences a complete loss of continuity or (ii) the Service experiences a Transmission Problem. A Transmission Problem shall mean the Dark Fiber Services are not meeting the Fiber Performance Criteria.
- (b) A Service Outage shall begin (except with regard to a Transmission Problem, for which, see the next-to-last sentence of this paragraph) upon the earlier of Seller's actual knowledge of the Service Outage or Seller's receipt of notice from Buyer of the Service Outage and shall end upon the correction of the loss of service or the correction of the Transmission Problems as set forth above. In order to determine whether a Transmission Problem exists, Buyer shall be required to request and authorize an intrusive test to be taken of the applicable fiber facility; provided an intrusive test shall not be required to the extent that Seller has installed equipment that is capable of monitoring such Transmission Problems on an ongoing basis without the need for an intrusive test. The Parties will cooperate on the timing and manner in which any such intrusive test is conducted, taking into consideration the need to minimize the interruption of Buyer's or other customers' services. In the case of a Transmission Problem, the Service Outage shall be deemed to have commenced upon Buyer's request for an intrusive test to the extent such test determines that a Transmission Problem has occurred. Notwithstanding the above, a Service Outage shall not be deemed to have occurred and no Service Outage Credits will apply:
 - (i) during periods (A) of less than ten (10) minutes, (B) in which Seller is not given access to its Facilities or equipment that are required to provide the Services or to remedy any Service Outage, (C) in which planned or scheduled maintenance or repair activities are occurring, (D) in which Buyer or its User continues to use the Services on an impaired basis, or (E) that are not reported to Seller within thirty (30) days of the date the Service was affected:
 - (ii) for interruptions that are caused by or due to (A) acts or omissions of Buyer, its User or another third party, including without limitation an interruption on the Third Party Facilities that may provide a portion of the Services, if applicable, (B) the failure or malfunction of facilities or equipment not owned or operated by Seller, including without limitation the failure of the power supply, or (C) a Force Majeure Event or (D) disconnections by Seller for non-payment or other contract default or breaches by Buyer; and
 - (iii) for Services utilizing in whole or in part Third Party Facilities.
- (c) <u>Availability Factor</u>. The Availability Factor for Dark Fiber Services which are provided entirely on Seller's Facilities shall be 99.0%. The Availability Factor shall be measured during each calendar quarter and is a measurement of the percent of total time that Service is operative and deemed available to Buyer in accordance with the above specifications when measured over such period.
- (d) <u>Service Outage Credit</u>. With respect to any Service Outages in excess of the Availability Factors, the Service Outage Credit shall be equal to an amount equal to (a) the Recurring Charge applicable to the affected Service during the calendar quarter in which the Service Outage occurred multiplied by (b) the number of hours or fractions

thereof that the Service Outage occurred during the applicable period divided by 2160 hours. Service Outage Credits are calculated after deduction of all discounts and other special pricing arrangements, and are not applied to governmental fees, taxes, surcharges and similar additional charges, nor are credits available for any usage based Services. OTHER THAN THE ADDITIONAL TERMINATION REMEDY SET FORTH BELOW FOR CHRONIC SERVICE OUTAGES, BUYER'S RIGHT TO RECEIVE SUCH SERVICE OUTAGE CREDIT SHALL BE BUYER'S SOLE AND EXCLUSIVE REMEDY AND THE SELLER'S SOLE AND EXCLUSIVE OBLIGATION IN THE EVENT OF A SERVICE OUTAGE OR FOR ANY OTHER CLAIM THAT SELLER FAILED TO MEET ITS OBLIGATIONS IN THE PROVIDING OF THE SERVICE.

- (e) <u>Chronic Service Outage</u>. An affected Service shall be deemed to have experienced a Chronic Service Outage to the extent that in any calendar month (i) three or more Service Outages have occurred with each such Service Outage having a duration of more than thirty (30) minutes or (ii) one Service Outage has occurred for a duration of more than forty-eight (48) hours, in each case where the applicable Service Outage has been reported by Buyer to Seller with respect to any Service within a calendar month. If a Chronic Service Outage occurs, then Buyer shall have the right to terminate the affected Dark Fiber Services upon providing written notice to Seller, without the incurrence of any Termination Charge; provided that Buyer terminates the applicable Service on or before the expiration of the calendar month following the month in which the Chronic Service Outage occurred. BUYER'S RIGHT TO TERMINATE THE AFFECTED DARK FIBER SERVICES SHALL BE THE BUYER'S SOLE AND EXCLUSIVE REMEDY AND THE SELLER'S SOLE AND EXCLUSIVE OBLIGATION IN THE EVENT OF A CHRONIC SERVICE OUTAGE.
- 4.3 Exclusion Of Warranties. EXCEPT AS SET FORTH IN THIS SUPPLEMENT, SELLER MAKES NO WARRANTY TO BUYER OR ANY OTHER ENTITY, WHETHER EXPRESS, IMPLIED OR STATUTORY, AS TO THE INSTALLATION, DESCRIPTION, QUALITY, MERCHANTABILITY, USEFUL LIFE, FUTURE ECONOMIC VIABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY FIBERS, THE SYSTEM, OR ANY GOODS OR SERVICE PROVIDED HEREUNDER OR DESCRIBED HEREIN, OR AS TO ANY OTHER MATTER, ALL OF WHICH WARRANTIES ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED.
- 4.4 Mean Time to Repair. Mean Time to Repair ("MTTR") shall be the average time required to repair a Service and restore its availability and is stated in terms of cable outages. The time is measured from the time that the Service Outage is reported by Buyer to Seller until the Service is available. With respect to Services provided on Seller's Facilities, Seller will use all commercially reasonable efforts to have the first fiber on a cable cut restored within an average of twelve (12) hours of when Seller's technical representative arrives on the applicable site where the cable cut is located, not to exceed a total of eighteen (18) hours from the time the Service Outage is reported. Such averages will be calculated over a calendar quarter basis. Seller will undertake repair efforts on fiber when Seller first becomes aware of the problem, or when notified by Buyer and Buyer has released all or part of the Service for testing, at which point a trouble ticket will be established. Notwithstanding the above, the failure of Seller to meet such standards shall not constitute a default under this Agreement and Seller shall not be liable to pay Buyer any penalties or damages or credit any portion of the Recurring Charges or Non-Recurring Charges under this Agreement as a result of such failure, other than as set forth in Section 4.1 above.
- 4.5 <u>PERFORMANCE LIQUIDATED DAMAGES</u>. FOR THIS SUPPLEMENT, THE REMEDIES OF BUYER IN SECTIONS 2.2(C), 4.2(D), AND 4.2(E) HEREOF SHALL CONSTITUTE BUYER'S PERFORMANCE LIQUIDATED DAMAGES FOR THE SERVICE OFFERED UNDER THIS SUPPLEMENT AND CONSTITUTE BUYER'S SOLE AND EXCLUSIVE REMEDIES FOR ANY PERFORMANCE FAILURE OF SELLER RELATED TO OR ARISING FROM THE SERVICE OFFERED HEREUNDER.