

Service Schedule G – FirstLight Wavelength Services

This Service Schedule contains detailed information relating to the provisioning of Wavelength Services (“Services”) as purchased by Customer from time to time by way of a FirstLight approved Service Order.

1. **Definition.** The following additional definition shall apply to Wavelength Services if Customer purchases Encrypted Wavelength Service:
 - A. **Certificate Authority (CA)** is a trusted third-party organization or company that issues digital certificates that are used to create digital signatures and public-private key pairs.
2. **Term of Service and Pricing.** FirstLight shall provide term length and pricing for all products available in a Service Order as required. All Service Orders shall be approved in writing and signed by both parties prior to provisioning.
3. **Service Description.** Wavelength Services are optical transport circuits enabled by wavelength division multiplexing (WDM) equipment. The bandwidth for each ordered Wavelength will be stated in a Service Order. Wavelengths include, without limitation, the following types:
 - A. **Standard Wavelength:** One (1) or more optical transport circuits provisioned over a dedicated WDM infrastructure utilizing dedicated optical fibers and dedicated optical transport equipment at each Customer location. Additional configuration options may include, but are not limited to diversity requirements, route specifications, or protection as specified in the applicable Service Order. Additional fees will apply for these configuration options.
 - B. **Encrypted Wavelength:** An in-flight data encrypted solution and integrated key management system at the physical layer of a private wavelength network circuit. Encrypted Wavelength is an optional enhancement to FirstLight’s Standard Wavelength design where transmitted Customer Data is encrypted and safeguarded while in flight. Additional configuration options available on FirstLight’s Encrypted Wavelength solution may include, but are not limited to diversity requirements, route specifications, or protection as specified in the applicable Service Order. Additional fees will apply for these configuration options.
 - C. **Encrypted Wavelength Customer Responsibility and Acknowledgments:**
 - i. **Key Management System.** The MyCryptoTool solution is designed to simplify the Customer’s security key management with an integrated web-based application network tool, without impacting performance. Customer accepts the responsibility to control the security of data transmission, manage the access, and administer the end-user key management system. Customer shall hold FirstLight harmless, and indemnify them from any costs related to failures, negligence, and/or cyber security breaches, associated with the key management system.
 - ii. **Use of Certificate Authority (CA).** Customer acknowledges that CA Private Keys are required to help enable an optimal level of security versus using Public CA’s to sign either their data certificates or their user authentication certificates. Customer is informed that utilizing Public CAs would increase the risk of access to the MyCryptoTool from users outside the Customer’s control. Customer understands the following:
 - a. CA private keys are required and must be stored in a secure place to sign certificates. The CA Private Key is never used directly to sign the certificates of end-users and servers. Instead, an Intermediate CA is created, one level below of the root CA. The root CA’s private key is only used once to sign the intermediate CA’s certificate and then stored away in a secure place.
 - b. Subsequently, certificates for persons and devices can be signed by the intermediate CA with its own private key.
 - c. If the intermediate’s private key gets compromised, Customer can just discard it and create a new intermediate CA, without losing the configuration, as it would be the case if this happened with the root CA key.
 - d. A secure root self-signed CA certificate is created initially. Then an Intermediate CA certificate is created which is signed by the initial Root CA Certificate. The Intermediate CA is then used to sign the data encryption, web-access, and user certificates.
 - iii. **Certificate Allowed Access List.** The MyCryptoTool user authentication is based on a valid client certificate from the configured certificate chain. Customer acknowledges that any end-user with a certificate signed by the same certificate authority will have access to the encryption cards via the MyCryptoTool. Customer agrees to full responsibility for the CA structure, setup, maintenance, and the limited set of end-users to have access to the MyCryptoTool.
 - iv. **Customer Monitoring.** Customer acknowledges they will proactively monitor and manage the status of their certificates and/or the health of their link by logging into the MyCryptoTool for maintenance. Customer will review and be responsible for certificate errors, expirations, and any other proactive measures to maintain the uninterrupted operation of their encrypted traffic.
 - v. **Restoration.** Customer acknowledges in the event of a hardware failure that requires a spare card(s) to be deployed that traffic will not be restored until Customer reinstalls their certificates and reconfigures the encryption settings of the card(s). FirstLight will not have access and should not have access to the data required to bring the card(s) back into operation.
 - vi. **Battery Replacement.** Customer acknowledges the circuit pack on the encrypted cards will require an on-board type of battery that is used to protect sensitive material. The battery must be changed every 24 months for maintenance. Customer agrees to a scheduled maintenance with FirstLight to replace the battery so there is no interruption in service. Customer agrees to comply with FirstLight’s “Encryption and FIPS Security Policy Overview and Procedures” for “Changing the Battery”. Customer acknowledges this procedure must be followed, otherwise the circuit pack will become non-functional.

4. **Service Level Criteria.** The types of circuits listed below are offered as services by FirstLight.

Service	Availability	MTTR	Bit Error Rate
Encrypted Wavelength (Single Path)	99.50%	8	1 x 10 ⁻⁹
Encrypted Wavelength (Protected Path)	99.99%	4	1 x 10 ⁻⁹
Wavelength (Single Path)	99.50%	8	1 x 10 ⁻⁹
Wavelength (Protected Path)	99.99%	4	1 x 10 ⁻⁹

Availability is measured as a percent monthly.

MTTR is the mean time to repair and shall begin when FirstLight can safely access the Service facilities.

Error Free Seconds are measured over a twenty-four (24) hour period.

5. **Network Availability Guarantee.** The FirstLight Wavelength Service is guaranteed to be available and capable of passing packets of data at the specified percentage of time as listed within Table 1 On-Net Service Level Criteria, measured as a percent monthly. The FirstLight Network Availability guarantee does not include outages caused by Customer equipment (router or switch) or Local Area Network ("LAN") owned by Customer, scheduled maintenance events, Customer-caused outages or disruptions and Force Majeure events.
6. **Network Availability.** For purposes of this Section, "unavailable" or "unavailability" means the duration of a failure of FirstLight to pass traffic to a Customer location for reasons other than issues found to be caused by CPE (router or switch) or Local Area Network ("LAN") owned by Customer, scheduled maintenance events, Customer-caused outages or disruptions and Force Majeure events.
7. **Credit Schedule.** Should FirstLight Network Availability guarantee not be met in a calendar month, Customer will receive a credit (as outlined in the schedule provided in this section) of the monthly recurring charges ("MRC") for the impacted port and local loop. Limits on the credit and the reporting procedures are detailed below. If any FirstLight Protected or Non-Protected Wavelength Service becomes unavailable as a result of FirstLight's fault, errors or omissions, and for reasons other than an Excused Outage, Customer will be entitled to a service credit off the monthly recurring charges as designated in the associated credit schedule below. In no event shall the total amount of credits issued to Customer per month exceed the monthly recurring charges invoiced to Customer for the affected Service for that month.

FirstLight Wavelength Service:

**Cumulative Unavailability
(in hrs:mins:secs)**

Service Level Credit

00:05:00– 00:45:00	5%
00:45:01– 04:00:00	10%
04:00:01 – 08:00:00	20%
08:00:01 –12:00:00	30%
12:00:01 –16:00:00	40%
16:00:01 – 24:00:00	50%
24:00:01 or greater	100%

8. **Performance Claim.** Total credits under the Service Level Agreement ("SLA") are limited to the monthly recurring charge for the affected service for the month in which the service does not meet the guarantees. The service credits provided under SLAs are Customer's sole remedy when FirstLight fails to meet an SLA. Customer must make a Performance Claim in writing no more than 14 days after the end of the outage event for which Customer claims that FirstLight failed to meet an SLA, or Customer waives its right to make a Performance Claim for that period. For purpose of the SLA, a "Performance Claim" is a written notice sent to the designated representative of FirstLight advising of the perceived violation of the SLA. Only one SLA parameter violation may be claimed per event. Customer must be in good standing with FirstLight regarding account receivables in order to submit a performance claim.

9. Service Requests and Delivery

- A. **Service Activation.** After FirstLight has determined that the Service conforms to the relevant Service Specifications, FirstLight will notify Customer that the Service is activated, meets the Service Specifications and is available for use by Customer ("Service Completion Notice"). The "Service Completion Date" shall be the earlier of (i) the date on which Customer begins using the Service for any purpose other than testing; or (ii) the date that FirstLight has sent the Service Completion Notice to Customer. FirstLight is providing a 2-day testing and acceptance time frame for Customer to activate their Services. Customer agrees that no response within the timeframe provided is deemed as accepted service and FirstLight billing will commence. If the Service Completion Date is delayed as a result of Customer's failure to meet its responsibilities under the Agreement, the Service Completion Date will be deemed to occur as of the Service Completion Notice or the date that FirstLight is ready to deliver the related Service, whichever is later.
- B. **Incrementally Delivered Services.** Unless otherwise specified in a Service Order, FirstLight may incrementally deliver individual Services, when ready, which may result in different Service Activation Dates for such incrementally delivered Services. For multipoint Services, FirstLight may incrementally deliver Service to each Customer location when ready. The Service Term for incrementally delivered multipoint Service shall begin on the Service Completion Date of the first location and/or circuit delivered and shall end after the period specified as the Service Term from the Service Completion Date of the last location and/or circuit delivered. FirstLight shall provide term length and pricing for all products available in a Service Order as required. All Service Orders shall be approved in writing and signed by both parties prior to provisioning.

10. Equipment and Installation.

- A. **FirstLight Equipment.** FirstLight, or its agent, may provide, install, maintain, repair, operate and control FirstLight's equipment ("FirstLight Equipment"). FirstLight's Equipment shall remain the sole and exclusive property of FirstLight, and nothing contained herein shall give or convey to Customer, or any other person, any right, title or interest whatsoever in FirstLight's Equipment, notwithstanding that it may be, or become, attached to, or embedded in, realty. Customer shall not tamper with, remove or conceal any identifying plates, tags or labels identifying FirstLight's ownership interest in FirstLight's Equipment. Customer shall not adjust, attempt to repair, relocate or remove FirstLight's Equipment, except as expressly authorized in writing by FirstLight. Customer shall be liable for any loss of or damage to FirstLight's Equipment caused by Customer's negligence, intentional acts, or unauthorized maintenance and shall reimburse FirstLight for the same, within thirty (30) days after receipt by Customer of a request for reimbursement. Customer at its sole cost and expense shall be required to obtain rack space and power to support FirstLight Equipment for the Service for the duration of the Service Term. Unless specifically specified in a Service Order, Customer shall be responsible for all third-party cross-connections to FirstLight Equipment and related costs.
- B. **Access and Customer Premise Obligations.** Customer, at its sole cost and expense, shall provide FirstLight with access to all Customer locations for purposes of installation, maintenance, repair and removal of FirstLight Equipment on Customer premises. For purposes of the preceding sentence, "access" shall include without limitation any necessary license(s) to access the building and or property for the duration of the Service Term. However, notwithstanding Customer's responsibility, if FirstLight is required by a third-party to obtain and maintain any such license to access the building or property, Customer agrees to reimburse FirstLight for its costs related to obtaining and maintaining such licenses during the Service Term. FirstLight shall provide reasonable notice to Customer prior to entering Customer's point of presence to install, maintain, repair or remove any of the FirstLight Equipment. Customer will permit FirstLight to install software revisions released by the related third-party equipment manufacturers. Customer will provide a safe place to work and comply with all applicable laws regarding the working conditions on the Customer premises.
- C. **Customer Equipment.** Customer is responsible, at its sole cost and expense, for connecting to the Point of Demarcation specified in the Service Order. Equipment and service beyond the Point of Demarcation and/or interconnection between FirstLight's facilities and terminal equipment and the wiring at the Point of Demarcation shall be the responsibility of Customer ("Customer Equipment"). Customer must procure and maintain, at its sole cost and expense, Customer Equipment which is technically compatible with the Service and the FirstLight Network. FirstLight shall have no obligation to install, maintain or repair any non-FirstLight Equipment, including any Customer Equipment. If, on responding to a Customer initiated service call, FirstLight reasonably determines that a cause of the service deficiency was a failure, malfunction or the inadequacy of equipment other than FirstLight's Equipment, Customer shall compensate FirstLight for actual time and materials expended during the service call.
- D. **Unusual Expense.** If FirstLight, with Customer's approval, incurs unusual expense in the provision of a Service, for example and without limitation, for securing rights of way or for special construction, Customer will pay for such expenses in accordance with the Terms of Service. Customer acknowledges that its refusal to incur such additional expenses may result in FirstLight being unable to provision all or part of the Services. Such inability on FirstLight's part will not amount to a breach of the Agreement by FirstLight.