

# NEOLINK GLOBAL TDM SERVICE SCHEDULE

## Liquid Telecom Offices

Mauritius (Head Office) • Botswana • DRC • Kenya • Lesotho • Rwanda • South Africa • Tanzania • Uganda • Zambia • UAE • UK

Liquid Telecom (Pty) Ltd. Registered Address: 401 Old Pretoria Main Road, Halfway House, Midrand 1685. Company Reg. No. 2004/004619/07.

## 1. APPLICABILITY

This Service Schedule is applicable only to the Customer Order Form (COF) for the purchase of Neolink Global TDM Services which has been signed by the Customer and Liquid Telecom.

## 2. DEFINITIONS

- 2.1. Terms used herein but not otherwise defined shall have the same meanings ascribed to them in the Agreement.
- 2.2. For the purposes of this Schedule, the following expressions shall have the meanings given to them hereunder:
  - 2.2.1. "CSRS" means 'Customer Site Requirements Specification', a document that specifies the requirements at a Customer Site in order to enable Liquid Telecom to deliver the Service;
  - 2.2.2. "Customer Site" means the site owned or leased by the Customer or any other site used to provide the Service, as may be set out in the COF;
  - 2.2.3. "Ethernet" means an interface conforming to The Institute of Electrical and Electronics Engineers Standards Association (IEEE 802.3- 2002, 802.1Q and 802.1D standards), as amended from time-to-time. The Ethernet TS has a limitation of being carried up to ninety (90) metres for direct Ethernet interconnections;
  - 2.2.4. "EASSy" means the Eastern Africa submarine cable system;
  - 2.2.5. "Full Circuit" shall mean a Neolink Global TDM Service provided by Liquid Telecom from one endpoint A to another endpoint Z and is available as Protected, Restored or Unprotected;
  - 2.2.6. "Half Circuit" shall apply to a Neolink Global TDM Service in which Liquid Telecom is providing only a half circuit from Endpoint A and the Customer is responsible to provide the other half to its theoretical mid-point;
  - 2.2.7. "IRU" means Indefeasible Right of Use;
  - 2.2.8. "Linear Service" means a Service that is provisioned without any network redundancy, being either route diversity or customer device redundancy;
  - 2.2.9. "Local Loop" means the 'last mile' access link that connects the Customer Site to the nearest Liquid Telecom PoP;
  - 2.2.10. "Mbps" means megabits per second;
  - 2.2.11. "Planned Maintenance" means any preventative, routine or scheduled maintenance which is performed with regard to the Service, the Network, the off-net Network or any component thereof, and which is reasonably believed to be necessary in order to prevent or remedy a defect which may affect the Customer's use of or access to the Services;
  - 2.2.12. "PoP" means Point of Presence;
  - 2.2.13. "Service Credits" means service credits due to the Customer for unscheduled Service Downtime;
  - 2.2.14. "Service Downtime" means that period of time for which the Service was unavailable to the Customer;
  - 2.2.15. "SAT-3" means the South Atlantic 3 submarine cable system;
  - 2.2.16. "SAFE" means the South Africa Far East submarine cable system;
  - 2.2.17. "SEACOM" means the SEACOM submarine cable system;

- 2.2.18. "Service Outage" means an instance when the Customer is unable to route traffic to one or more Customer Sites via the Network, which results in Service Downtime;
- 2.2.19. "STM" means Synchronous Transport Module;
- 2.2.20. "TDM" means Time Division Multiplex;
- 2.2.21. "WACS" means the West Africa submarine cable system.

### 3. SERVICE DESCRIPTION

- 3.1. Neolink Global TDM is a point-to-point service that provides dedicated high-speed connectivity between different geographical locations through optical fibre submarine cable networks, which include SAT-3, SAFE, SEACOM, WACS, EASSy and other cable systems for connectivity primarily from South Africa to UK, Europe and other international destinations.
- 3.2. Liquid Telecom shall be responsible for the delivery of the Service and shall manage all 3rd party suppliers required to provide the Service. This can be from a Liquid Telecom PoP to Liquid Telecom PoP and include local loops to the Customer's premises.
- 3.3. The foreign in-country last mile services shall be sourced from suppliers operating within the foreign country and shall form part of the Service.
- 3.4. Services are provisioned with TDM hand-offs. Ethernet hand-off is available for Customer Specific Services.
- 3.5. The Neolink Global TDM Service is available in the following fixed sizes, to the extent specified in the relevant COF:
  - 3.5.1. E1 (2 Mbps);
  - 3.5.2. DS3 (45 Mbps);
  - 3.5.3. STM-1 (155 Mbps);
  - 3.5.4. STM-4 (622 Mbps);
  - 3.5.5. STM-16 (2488 Mbps);
  - 3.5.6. STM-64 is available on request as a Customer Specific Service.
- 3.6. NeoLink Global TDM Service options:
  - 3.6.1. **Full Circuits:**
    - 3.6.1.1. A Full Circuit provides an end-to-end service, including international Local Loop (complete point-to-point service).
    - 3.6.1.2. A Full Circuit is offered utilising TDM services over one or more submarine cable systems, the determination of which shall be at Liquid Telecom's sole discretion.
  - 3.6.2. **Half Circuits:**
    - 3.6.2.1. A Half Circuit provides a half circuit to a virtual mid-point of the subsea cable and a 3rd party carrier provides the other half circuit. The corresponding 3rd party carrier is nominated and managed by the Customer.
    - 3.6.2.2. A Half Circuit is offered as a TDM service over SAT-3, SAFE, EASSy and WACS, the determination of which shall be at Liquid Telecom's sole discretion.

3.7. NeoLink Global TDM Service protection options:

3.7.1. **Protected Service (Customer Specific Service):**

3.7.1.1. The Service consists of a live path and a hot standby path between:

3.7.1.1.1. South Africa to London via a combination of any two of SEACOM, SAT-3, SAFE, WACS and EASSy; and

3.7.1.1.2. South Africa to India via SAFE and SEACOM.

3.7.1.2. Alternative routing on backup path within one (1) second.

3.7.1.3. Highest level of protection.

| Location A   | Location B | Primary Cable System              | Hot Standby Cable System             | Protection path switching | Availability SLA |
|--------------|------------|-----------------------------------|--------------------------------------|---------------------------|------------------|
| South Africa | London     | SEACOM/SAT-3/<br>SAFE/WACS/ EASSy | SEACOM/SAT-3/<br>SAFE/WACS/<br>EASSy | Less than 1 second        | 99.5%            |
| South Africa | Mumbai     | SEACOM/SAFE                       | SEACOM/SAFE                          | Less than 1 second        | 99.5%            |

3.7.2. **Restored Service:**

3.7.2.1. The primary path and backup path is defined between:

3.7.2.1.1. South Africa to London via a combination of any two of SEACOM, SAT-3, SAFE, WACS and EASSy; and

3.7.2.1.2. South Africa to India via SAFE and SEACOM.

3.7.2.2. A manual switch-over is commissioned during an outage situation.

3.7.2.3. Customer's service shall be restored within forty-eight (48) hours.

| Location A   | Location B | Primary Cable System              | Restored Cable System                | Restoration SLA | Availability SLA |
|--------------|------------|-----------------------------------|--------------------------------------|-----------------|------------------|
| South Africa | London     | SEACOM/SAT-3/<br>SAFE/WACS/ EASSy | SEACOM/SAT-3/<br>SAFE/WACS/<br>EASSy | 8 hours         | 99.0%            |
| South Africa | Mumbai     | SEACOM/SAFE                       | SEACOM/SAFE                          | 8 hours         | 99.0%            |

3.7.3. **Unprotected Service:**

3.7.3.1. A Linear Service provisioned over any of the SAT-3, SAFE, SEACOM, WACS or EASSy submarine cable systems.

3.7.3.2. No alternative fail-over route in the event of a cable break.

3.7.3.3. Liquid Telecom shall use reasonable endeavours to restore the Customer's Service within six (6) to eight (8) weeks, subject to the severity of the submarine cable break in question.

| Location A   | Location B | Primary Cable System         | Restored Cable System | Restoration SLA | Availability SLA |
|--------------|------------|------------------------------|-----------------------|-----------------|------------------|
| South Africa | London     | SEACOM/SAT-3/SAFE/WACS/EASSy | None                  | None            | 99.0%            |
| South Africa | Mumbai     | SEACOM/SAFE                  | None                  | None            | 99.0%            |

3.8. The Neolink Global TDM Service is offered on Contract Terms of one (1) to five (5) years with an NRC and MRC as set out in the relevant COF. Indefeasible Right of Use (IRU) Contract Terms of up to twenty years may be made available as a Customer Specific Service.

#### 4. SERVICE LEVELS

##### 4.1. Service Availability

- 4.1.1. Service availability is measured on the Liquid Telecom Network by the Liquid Telecom incident and problem management system.
- 4.1.2. For each service, a timer is implemented that accumulates the total time to restore all breaks recorded for the specific Service for each day over a period of a month. All the faults that occur on the Service during the month shall be considered finalised at the time the Service is handed back to the Customer. The timer shall be restarted at the beginning of each month.
- 4.1.3. Liquid Telecom shall calculate, on a monthly basis, the amount of time the Service was unavailable. The duration of such Service Downtime shall be used to determine any Service Credits that the Customer shall be entitled to.

##### 4.2. Service Credits

- 4.2.1. Service Credits shall be calculated on the MRC for the month in question as calculated on the invoice exclusive of any applicable taxes charged to the Customer or collected by Liquid Telecom.
- 4.2.2. Service Credit Calculation:  $\text{Service Availability \% per service} = \frac{\text{TLU} - \text{RSD}}{\text{TLU}} \times 100 \%$

TLU

where TLU = Total Service uptime per month per Service (minutes) = Number of days in month the Service was provided x 24 x 60 and RSD = Reconciled Service Downtime per month per Service (minutes).

4.2.3. Service Credits applicable to the Protected Service:

| Service Availability %          | Service Credit (Percentage of MRC) |
|---------------------------------|------------------------------------|
| 99.50%                          | 0%                                 |
| < 99.5% - 98.5%                 | 5%                                 |
| < 98.5% - 97.5%                 | 10%                                |
| < 97.5% - 96.5%                 | 15%                                |
| For each subsequent 3% decrease | 3%                                 |

4.2.4. Service Credits applicable to the Restored Service:

| Service Availability % | Service Credit (Percentage of MRC) |
|------------------------|------------------------------------|
| 99.00%                 | 0%                                 |
| < 99.0% - 98.0%        | 5%                                 |
| < 98.0% - 97.0%        | 10%                                |
| < 97.0%                | 15%                                |

4.2.5. Service Credits applicable to the Unprotected Service:

| Service Availability % | Service Credit (Percentage of MRC) |
|------------------------|------------------------------------|
| 99.00%                 | 0%                                 |
| < 99.0% - 98.0%        | 2%                                 |
| < 98.0% - 97.0%        | 5%                                 |
| < 97.0%                | 10%                                |

4.2.6. In those instances where Liquid Telecom fails to meet the committed Service Level and a trouble ticket was opened with respect to the Service Downtime, the Customer shall be eligible for Service Credits as described in the table above. The Service Credits shall be given in the form of a credit against the MRC reflected on the Customer invoice.

## 5. EXCHANGE RATE FLUCTUATIONS

- 5.1. For Charges for any element of the Service that is based on a foreign currency, the exchange rate to be used to determine a variation shall be the South African Rand / US Dollar exchange rate set out in the relevant COF. In the event that the COF does not stipulate the exchange rate, then the exchange rate as downloaded by Liquid Telecom from Reuters on the morning of the date of signature by the Customer of the COF relevant COF shall be used.
- 5.2. Liquid Telecom shall be entitled to adjust the MRC in question in the event that the variance, when the exchange rate referred to in 5.1 above is compared against the exchange rate as downloaded by

Liquid Telecom from Reuters on the morning of the relevant invoice generation date, is greater than 5% (5 percent).

## 6. EXCLUSIONS

6.1. The Customer shall not be entitled to:

- 6.1.1. receive any Credits pursuant to the Customer Site unavailability, or
- 6.1.2. exercise any right of termination for anything which is caused or is associated with, in whole or in part, the exclusions set out below:
  - 6.1.2.1. Construction of additional facilities which are required in order to connect the Customer Site to the Network and/or the Local Loop(s);
  - 6.1.2.2. Anything which is associated with or caused by Planned Maintenance events or cable cuts on the Network which are not otherwise due to the fault or negligence of Liquid Telecom;
  - 6.1.2.3. Anything attributable to circuits comprising a part of the Service that are provided by a third party, including Local Loops and local access facilities, provided that Liquid Telecom shall pass through to the Customer any Service Level Credits that it receives from the third party;
  - 6.1.2.4. Anything which is due to the Customer's use of bandwidth in excess of the committed bandwidth.

6.2. Service Downtime shall not include any unavailability resulting from:

- 6.2.1. scheduled downtime for Planned Maintenance;
- 6.2.2. interruptions or delays resulting from any third party services;
- 6.2.3. any supplies, power, equipment or local access facilities provided by the Customer or their suppliers, which is required in the provision of the Services;
- 6.2.4. any incident that affects the availability during any period when the Customer elects not to allow Planned Maintenance on the Service at the request of Liquid Telecom, acting reasonably;
- 6.2.5. the Customer's applications, equipment, or facilities;
- 6.2.6. interruptions due to the failure of equipment provided by the Customer or other third party on behalf of the Customer;
- 6.2.7. acts or omissions of the Customer, its agents, contractors or vendors (including the provision of inaccurate information knowingly or unknowingly), or user of the Service or Customer-caused outages or disruptions;
- 6.2.8. suspensions due to non-payment of any amount payable by the Customer to Liquid Telecom under this Schedule; or
- 6.2.9. force majeure.

## 7. FAULT REPORTING

7.1. The Customer shall raise an outage trouble ticket with Liquid Telecom in the event of any Service outage detected at the Customer Site.

7.2. The logging of calls, queries and/or complaints shall be directed to the Enterprise Service Desk using any of the following:

| TELEPHONE NO.                             | E-MAIL  |
|---|---|
| +27 11 585 0652 (outside of South Africa) | <u>EnterpriseService@Liquid Telecom.co.za</u> |
| 080 11 11 636 (within South Africa only)  |   |

7.3. Should a call logged in accordance with clause 7.2 not be handled to the reasonable satisfaction of the Customer, the Customer shall be entitled to direct their concerns to service.management@Liquid Telecom.co.za, which is managed during Business Hours.

7.4. In addition, the Customer shall be entitled to approach an assigned Liquid Telecom account manager if the feedback or progress on the outage resolution is not satisfactory.

7.5. Liquid Telecom shall use reasonable endeavours to provide a root cause analysis report regarding the cause of the Service Downtime and the preventive measures put in place in an effort to mitigate a reoccurrence thereof. Liquid Telecom shall use reasonable endeavours to perform the following actions and shall provide the reports (as applicable) detailed in the following table:

| FAULT MANAGEMENT AND REPORTING                        | TIME TARGETS                                   |
|---|--|
| Assignment of Customer Fault Reporting Trouble Ticket | Within 15 minutes of the notification of fault |
| Root Cause Analysis Report                            | On Request < Ten (10) business days            |
| Regular problem status update                         |  |

7.6. In the event that Liquid Telecom attends to a Service fault and/or Service outage (“Fault”) reported by the Customer, and Liquid Telecom subsequently establishes that the Fault was not due to any fault on the Liquid Telecom Network and/or Liquid Telecom infrastructure deployed in the delivery of the Service, Liquid Telecom shall have the right to charge the Customer for the time and materials and/or travel costs associated with attending to the Fault at Liquid Telecom’s current standard rates and charges at the time of the incident.

## 8. SERVICE CREDIT REQUEST AND SETTLEMENT PROCEDURES

8.1. To initiate a claim for Service Credits with respect to the parameters defined above, the Customer shall submit a request in writing within thirty days after the end of the month during which the event occurred which gave rise to the claim for Service Credit.

8.2. For purposes of calculating the Service Credit, the problem occurrence will be deemed to have commenced when the trouble ticket is lodged by the Customer with Liquid Telecom. If the Customer does not initiate a trouble ticket with Liquid Telecom, Liquid Telecom shall not be obligated to log a trouble ticket, and the Customer shall not be eligible to receive Service Credits for the non-compliance.

8.3. The duration of the Service Outage will be determined by the Parties, acting reasonably, based upon the Parties’ internal records and Liquid Telecom’s trouble ticket.

8.4. In no event shall the total amount of all Credits issued to the Customer per month exceed twenty five percent (25%) of the MRC invoiced to the Customer for the affected Service for that month.



- 8.5. Credits are calculated after the deduction of all discounts and other special pricing arrangements, and may not be applied to governmental fees, taxes, surcharges, local access charges or any other charges other than MRC.
- 8.6. Service Credits are processed quarterly and are passed as a credit against the Customer's next invoice. If Liquid Telecom approves the claim, Liquid Telecom shall notify the Customer of the value of Service Credits to which the Customer will be entitled.
- 8.7. Any Service Credits calculated on the basis of a month shall be calculated with regard to a month being deemed to begin at 12:00am S.A. Time on the first day of a calendar month, and ending at 11:59pm S.A. Time on the last day of the applicable calendar month.
- 8.8. Liquid Telecom's failure to achieve or maintain the above service objectives set out in this Service Schedule is not a breach of the Agreement, and the award of Service Credits shall be the Customer's sole remedy and Liquid Telecom's sole liability for any such failure or corresponding degradation, interruption or loss of Service.

## **9. SERVICE PROVISIONING**

- 9.1. The Customer shall be responsible for making available, at no cost to Liquid Telecom, accommodation, power, mast space, ducting and other facilities as more fully set out in the CSRS document for each Customer Site, for the Contract Term of the applicable COF, for the purposes of housing Liquid Telecom's transmission equipment required for the provision of the Services to the Customer.
- 9.2. The Customer shall be responsible for obtaining all third party approvals and consents necessary for installation and use of the Services.
- 9.3. The Customer shall ensure that the Customer Sites at either end of a Service for which the request has been made are accessible at any reasonable time as may be required by Liquid Telecom to fulfil its obligations in terms hereof.
- 9.4. Within seventy two (72) hours of completing the installation for the applicable Service, Liquid Telecom will provide a Service Handover Form containing essential information required to configure and use the Service as well as the Service Identity Number (Service ID). The Service ID should be used in all interactions with Liquid Telecom regarding the Service.
- 9.5. The Customer shall then conduct acceptance tests on the newly provided Service for a period of two (2) Business Days following receipt of the Service Handover Form.
- 9.6. Should the Customer detect a fault on the Service during these acceptance tests, then the Customer shall notify Liquid Telecom of such fault in writing.
- 9.7. The Customer may only reject a Service on the basis that the agreed technical specifications as set forth in the Service configuration diagram in the COF for the Service have not been met. If the Customer notifies Liquid Telecom of its non-acceptance, further tests of the Service shall be conducted and a revised Service Handover Form shall be provided to the Customer.
- 9.8. The Service shall be deemed accepted by the Customer if no objection has been raised by the Customer within two (2) Business Days following receipt of the SHF.

## 10. CUSTOMER REQUESTED CHANGES AND PLANNED MAINTENANCE

- 10.1. Liquid Telecom shall use reasonable endeavours to perform any agreed change as per agreed specifications required for the Customer Site as per the below specified target timelines. The Customer must raise a change request stating the reason for the change, the type of change (Critical/Normal as defined by the Customer) and the impact on its Customer Sites. The change request shall follow the normal change management process as communicated from Liquid Telecom to the Customer from time to time and the below commitments are applicable only for Class C type changes (as defined in the following table) excluding any impact analysis:

| LEVEL OF CHANGE | DESCRIPTION OF CHANGES REQUIRED  |
|-----------------|--|
| Class A         | <ul style="list-style-type: none"> <li>• New installation of equipment</li> <li>• New link installation or shifting of circuit to new Customer Site.</li> <li>• Hardware upgrade in existing equipment</li> <li>• Link addition or termination to existing Customer Site.</li> </ul> |
| Class B         | <ul style="list-style-type: none"> <li>• Shifting of physical termination point of existing circuit, and does not require new equipment or new circuit installation.</li> <li>• Bandwidth soft up-gradation/down-gradation.</li> </ul>   |
| Class C         | <ul style="list-style-type: none"> <li>• Changes that are not specified in Class A and Class B.</li> </ul>   |

- 10.2. The Customer hereby understands and agrees that any change requests mentioned above in Class A and Class B are Service affecting in nature. Hence, the Customer understands and agrees that the Service can be unavailable for a minimum period of two (2) hours during the implementation of any such change requests. The time and date of the Service Downtime shall be discussed between the Parties. In any case, the Service Level targets set out in this Service Schedule shall not be applicable during any such change request implementation and as such, Liquid Telecom cannot be held responsible for any damages or losses which may occur during such implementation time.
- 10.3. Planned Maintenance which falls outside the scheduled maintenance window will be arranged with the Customer at least forty eight (48) hours before the Planned Maintenance commences.
- 10.4. At no time shall Planned Maintenance events which may cause a Service Outage be performed simultaneously on two (2) diverse circuit paths that carry the same Customer Service.
- 10.5. Liquid Telecom is not responsible for any breach of rights which may be related to any Customer transmitted or received content that has been carried on the Liquid Telecom Network and the Customer agrees that Liquid Telecom can view the content to identify Service related issues.

## 11. CONTENT REGULATORY COMPLIANCE

- 11.1. The Customer hereby agrees that the relevant permissions, approvals, licenses and/or related consents that may be required by the relevant government authority of the source and/or destination country/ies shall be obtained, as applicable, as per the local laws in such country and a copy of such permissions, approvals, licenses and/or related consents shall be available for inspection by Liquid Telecom prior to the commissioning of the Service.
- 11.2. In the event that the Customer is sourcing content from a third party in relation to the Service, the Customer shall be responsible for providing the permissions, approvals, licenses and/or related consents of such third party. The Customer further indemnifies Liquid Telecom from any costs, damages and/or penalties caused due to any non-compliance with this provision.
- 11.3. The Customer authorizes Liquid Telecom to monitor the Service at Liquid Telecom's Network Operating Centre facilities.

## 12. SERVICE TERMINATIONS – EARLY TERMINATION COSTS

Notwithstanding any early termination provisions set out in the Agreement, the termination fee for the Terminating Services which are specified as Customer Specific Services in the relevant COF or where the Service either originates from or terminates at an international location shall be calculated as at the Termination Date and shall be equal to 100% of the MRC for the remainder of the Contract Term thereof.