



**Liquid Telecommunications South Africa (Pty) Ltd**  
401 Old Pretoria Main Road  
Halfway House, Midrand 1685  
South Africa

T +27 11 585 0000

## **MANAGED CPE SERVICE SCHEDULE**

### **Liquid Telecom Offices**

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

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

## 1 APPLICABILITY

- 1.1 This Service Schedule is applicable only to the COF for the purchase of Managed CPE 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 **“Business Hours”** means 08:00-17:00 Mondays to Fridays excluding weekends and South African public holidays;
- 2.2.2 **“CPU”** means the central processing unit;
- 2.2.3 **“CSRS”** means ‘Customer Site Requirements Specification’, a document that specifies the requirements at a Customer Site which enable Liquid Telecom to deliver the Service;
- 2.2.4 **“Customer Premises Equipment”** or **“CPE”** means the Customer Device provided and managed by Liquid Telecom, located at the Customer Site, used in conjunction with the Network in order to receive Services;
- 2.2.5 **“Customer Site”** means the site owned or leased by the Customer or any other site used to provide the Service, which is directly connected to a PoP managed by Liquid Telecom, as set out in the COF;
- 2.2.6 **“IP”** means ‘Internet Protocol’;
- 2.2.7 **“Mean Time To Respond”** or **“MTTR”** means the total time taken to respond to a fault for a particular event;
- 2.2.8 **“Liquid Telecom IP Services”** means the Ethernet/IP Based services offered by Liquid Telecom including but not limited to NeoOne VPN, NeoOne Layer 2 Metro, Layer 2 Metro NLD & NeoInternet; Global VPN.
- 2.2.9 **“Planned Maintenance”** means any preventative, routine or scheduled maintenance which is performed with regard to the Managed CPE Service, the Network, the off-net Network or any

component thereof, reasonably believed to be necessary in order increase capacity or to prevent or remedy a defect which may affect the Customer's use of, or access to, the Services;

- 2.2.10 “**PoP**” in the context of this Service Schedule, means a Point of Presence specifically relating to the Liquid Telecom Network;
- 2.2.11 “**Service Credits**” means the credits due to the Customer for unscheduled Service Downtime and calculated in accordance with clause 5.3;
- 2.2.12 “**Service Downtime**” means the amount of time the Service was unavailable to the Customer;
- 2.2.13 “**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;
- 2.2.14 “**SLA**” means “Service Level Agreement”;
- 2.2.15 “**SNMP**” means ‘Simple Network Management Protocol’;
- 2.2.16 “**SOC**” means the Liquid Telecom service operations centre; and
- 2.2.17 “**VPN**” means ‘Virtual Private Network’, a network that uses shared infrastructure to provide secure connectivity between Customer Sites.

### 3 SERVICE DESCRIPTION

#### 3.1 *General*

- 3.1.1 Liquid Telecom provides a managed Customer Premises Equipment (CPE) monitoring and performance Service in order to further enhance the quality and reliability of the relevant Liquid Telecom IP Services.
- 3.1.2 The Managed CPE Service includes a CPE, relevant operating software, maintenance, on-site support, management and monitoring as more fully set out below and as reflected in the relevant COF.
- 3.1.3 Liquid Telecom shall provide SNMP configuration for the Managed CPE Service.
- 3.1.4 This Service shall be offered with any of Liquid Telecom’s IP Services.
- 3.1.5 Service cover period shall be 24x7x365.
- 3.1.6 MTTR shall be four (4) hours, eight (8) hours or next Business Day.

### 3.2 *Purchase or lease model option*

3.2.1 The Customer may elect to either purchase or lease the CPE(s) from Liquid Telecom:

3.2.1.1 The Customer may lease the CPE(s) for a period from one (1) year to five (5) years;

3.2.1.2 The lease option is amortised over the Contract Term of the Managed CPE Service, with a view to the Customer either extending the Managed CPE Service or upgrading at the end of the Contract Term thereof.

3.2.2 The Service includes Network design, CPE specification, configuration and installation of the CPE.

3.2.3 Management and monitoring shall be done on the following elements:

3.2.3.1 Availability of the CPE

3.2.3.2 Configuration changes and backups

3.2.3.3 Patch updates

3.2.3.4 CPU utilisation

3.2.3.5 IP SLA statistics

3.2.4 Liquid Telecom shall provide twenty four (24) hour, single point of contact via the Liquid Telecom SOC.

### 3.3 *Customer-provided CPE option*

3.3.1 Liquid Telecom shall make a recommendation to the Customer as to specification requirements for the Customer-provided CPE.

3.3.2 The Customer shall configure and install the CPE.

3.3.3 Management and monitoring shall be done on the following elements:

3.3.3.1 Availability of the CPE

3.3.3.2 Configuration changes and backups

3.3.3.3 Patch updates

3.3.3.4 CPU utilisation

3.3.3.5 IP SLA statistics.

#### 4 CPE EQUIPMENT PROVISIONS

4.1 Liquid Telecom shall supply the CPE on either of the following bases, as specified in the COF:

4.1.1 The Customer purchases the CPE from Liquid Telecom on the terms set out in the COF (“**Purchase Model**”) or;

4.1.2 The Customer leases the CPE from Liquid Telecom on the terms set out in the COF (“**Lease Model**”).

4.2 Further to the provisions relating to the Customer Devices contained in the Agreement, the Parties agree as follows:

4.2.1 Risk in the CPE passes to the Customer upon delivery of the CPE to the Customer Site; (i.e. the Customer is responsible to ensure the device for fire, theft and malicious damage)

4.2.2 Where the Purchase Model applies, title and ownership in the CPE passes to the Customer upon full payment by the Customer and receipt by Liquid Telecom of the full purchase price;

4.2.3 Where the Purchase Model applies, Liquid Telecom shall pass through to the Customer all standard warranties provided by the CPE manufacturer in relation to the CPE, which warranties are available on request. Liquid Telecom gives no further warranties in relation to such CPE;

4.2.4 where the Lease Model applies, upon the termination of the Service, the CPE must be returned to Liquid Telecom within twenty one (21) days of such termination, failing which, the Customer shall be liable to pay the full retail value of same/or similar replacement equipment as is currently available in the market;

4.2.5 The Customer shall provide a suitable Customer Site for the CPE, in line with the following requirements:

4.2.5.1 Standard 19” rack with firm base;

4.2.5.2 An air-conditioned and dust free atmosphere; and

4.2.5.3 Stable power as per requirement.

4.2.6 Where applicable and to the extent notified by Liquid Telecom, to enable interface with the Service, the Customer must procure and maintain, at its sole cost and expense, any additional equipment which is technically compatible to the Service.

## 5 SERVICE LEVELS

### 5.1 *MTTR*

Liquid Telecom offers Service Levels on the following basis:

#### 5.1.1 4 hour MTTR:

5.1.1.1 Service hours for this option are 24x7x365.

5.1.1.2 MTTR shall be four (4) Business Hours.

#### 5.1.2 8 hour MTTR:

5.1.2.1 Service hours for this option are 24x7x365.

5.1.2.2 MTTR shall be eight (8) Business Hours.

#### 5.1.3 Next Business Day:

5.1.3.1 Service hours for this option are 24x7x365.

5.1.3.2 MTTR shall be by 17h00 the next Business Day.

### 5.2 *Service Availability*

5.2.1 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.

5.2.2 service availability shall be measured as a percentage of the availability of the Service for a Site in a given month.

5.2.3 service Credit calculation:  $\text{Service Availability \%} = \frac{\text{Service Period} - \text{Service Downtime}}{\text{Service Period}}$

### 5.3 *Service Credits*

5.3.1 Service Credit with an Economy Service Level

SERVICE AVAILABILITY	SERVICE CREDIT (PERCENTAGE OF MRC)
99.0%	0%
< 99.0% - 98.0%	5%
< 98.0% - 97.0%	10%
< 97.0% - 96.0%	15%
< 96.0% - 95.0%	20%
< 95.0%	25%

5.3.2 Service Credit with a Business Service Level

SERVICE AVAILABILITY	SERVICE CREDIT (PERCENTAGE OF MRC)
99.5%	0%
< 99.5% - 98.5%	5%
< 98.5% - 97.5%	10%
< 97.5% - 96.5%	15%
< 96.5% - 95.5%	20%
< 95.5 %	25%

5.4 In those instances where Liquid Telecom fails to meet the committed Service availability target 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.

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;  
or

- 6.1.2.4 anything which is due to the Customer's use of bandwidth in excess of the committed bandwidth.
  
- 6.2 The Customer shall not be entitled to exercise any right of termination for anything which is caused or is associated with, in whole or in part, the exclusions set out below:
  - 6.2.1 construction of additional facilities which are required in order to connect the Customer Site to the Network and/or the Local Loop(s);
  - 6.2.2 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;
  - 6.2.3 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; or
  - 6.2.4 anything which is due to the Customer's use of bandwidth in excess of the committed bandwidth.
  
- 6.3 Service Downtime shall not include any unavailability resulting from:
  - 6.3.1 inability of Liquid Telecom to access the Customer Site for reasons beyond the reasonable control of Liquid Telecom;
  - 6.3.2 scheduled downtime for Planned Maintenance;
  - 6.3.3 interruptions or delays resulting from any third party services;
  - 6.3.4 any applications, supplies, power; equipment or local access facilities provided by the Customer or their suppliers, which is required in the provision of the Services;
  - 6.3.5 any incident that affects the availability during any period when the Customer elects not to allow Scheduled Maintenance on the Service at the request of Liquid Telecom, acting reasonably;
  - 6.3.6 interruptions due to the failure of equipment provided by the Customer or other third party on behalf of the Customer;
  - 6.3.7 acts or omissions of the Customer (including the provision of inaccurate information, knowingly or unknowingly), its suppliers, contractors or end-user of the Service or Customer-caused outages or disruptions;



- 6.3.8 suspensions due to non-payment of any amount payable by the Customer to Liquid Telecom under this Schedule; or
- 6.3.9 force majeure.
- 6.4 For maintenance on linear Services of non-redundant CPE, the outage times shall be negotiated.
- 6.5 In the case of Customer's with dual CPE's, Services provisioned with protection shall be switched to the protection path prior to maintenance. Any outage as a result of this maintenance shall be included in the Service Downtime.
- 6.6 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. The timer shall be restarted at the beginning of each month.

**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) 080 11 11 636 (within South Africa only)	<b>EnterpriseService@liquidtelecom.co.za</b>

- 7.2.1 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@liquidtelecom.co.za, which is managed during Business Hours.
- 7.2.2 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.
- 7.2.3 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	

7.3 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, space, including mast space, ducting and other facilities as may be 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.