



SiteConnect
Intranet MPLS VPN
TECHNICAL SERVICES
AGREEMENT



**TECHNICAL SERVICES AGREEMENT for
SiteConnect INTRANET MPLS VPN SERVICES**

This SiteConnect Intranet MPLS VPN Services AGREEMENT (“Agreement”), is entered into by and between the following parties:

Parties:

Customer Name - _____ Eritrea Telecommunications Corporation Sh. Co.

Referred to as ‘the customer’ Referred to as ‘Eritel’

OFFICE ADDRESS:

OFFICE ADDRESS:

Eritrea Telecommunications Corp
Semaetat Street No.11
Harnet Avenue
Asmara, Eritrea

WITNESSETH:

WHEREAS, Eritel provides access to the MPLS VPN services through Eritel’s robust backbone network and customer desires to purchase such services from Eritel.

Eritel, either directly or through its affiliates, will agree to provide MPLS VPN (Layer 2 or Layer 3) services via an access circuit form Eritel’s Access Node(s). The capacity, facilities, and technical specifications of the Service are set forth in Eritel’s Technical Service Agreement. The Service shall be offered on a 24-hour per day basis, 7 days a week.

1. SITECONNECT™- FACILITIES

Subject to the availability of capacity, Eritel will provision Layer 2 or Layer 3 MPLS VPN connectivity through the domestic network of Eritel’.

2. Service date: _____



3. SiteConnect Intranet MPLS VPN Deployment Charges
 Eritel levies a standard one-time Service charge for the Deployment of the MPLS Services for every customer. **This charge is NRC One-time Payment of 15000 NKF irrespective of the number of sites planned in the customers' Intranet MPLS VPN network.**

4. SiteConnect Intranet MPLS VPN Pricing Plan - Please select from the details below: -

Number of Sites - _____

Site Details - Intranet Package Selection

Site Number	Location	Bandwidth Tier
1		Please specify _____ Kbps Up/ _____ Down
2		Please specify _____ Kbps Up/ _____ Down
3		Please specify _____ Kbps Up/ _____ Down
4		Please specify _____ Kbps Up/ _____ Down
5		Please specify _____ Kbps Up/ _____ Down
6		Please specify _____ Kbps Up/ _____ Down
7		Please specify _____ Kbps Up/ _____ Down
8		Please specify _____ Kbps Up/ _____ Down
9		Please specify _____ Kbps Up/ _____ Down



**TECHNICAL SERVICE AGREEMENT
ERITEL SITECONNECT™: MPLS VPN SERVICES**

1. Network Monitoring

Eritel has a 24x7-support central helpdesk at Asmara, (Eritel response time details are defined in Annexure 1) which will provide round-the-clock monitoring, fault reporting and maintenance action of the Eritel Network. The helpdesk can be reached by any one of the following modes:

Telephone	
E-mail	

2. Availability

The Availability between any two-backbone routers across Eritel’s network, **(excluding unavailability due to scheduled maintenance)** will be defined as-

$$\text{Availability (in \%)} = \frac{(\text{Total no of Hours in a Quarter} - \text{Total Outage Hours in a Quarter})}{(\text{Total No of Hours in a billing quarter})} \times 100\%$$

Service Availability is defined as the uptime of the service provisioning ports of Eritel POPs involved in the customers VPN configuration over a billing cycle period.

3. Packet Loss

3.1 Eritel’s target objective for packet loss across the domestic network of Eritel is measured on an average of 5-minute samples of ten (10) ICMP probes of hundred (100) bytes each,

Packet Loss measurement is calculated as an average round-trip packet loss for transmissions between any two-customer provisioned ports on the domestic network of Eritel over a billing quarter that will not exceed the committed values

3.2 Eritel-confirmed packet loss is the measurement of packet loss attributable to the domestic network of Eritel, i.e., from the backbone router of the specified Eritel PoP in Eritrea to the other specified Eritel PoP in Eritrea on Eritel’s domestic network. **Eritel will not be responsible for packet loss due to congestion on the customer access link.**

3.3 Eritel will work with the customer to reduce packet loss exceeding the target objective, provided that:

- A trouble ticket is filed with Eritel
- Customer provides Eritel with applicable packet loss statistics
- Eritel can confirm that it has control over the network resources it believes are causing the packet loss.
- If insufficient information is provided, Eritel reserves the right to close the trouble ticket without further investigation



3.4 Eritel will use its best commercial efforts to resolve service problems with customer after the trouble ticket is filed with Eritel's Helpdesk within eight (8) hours after the particular incident of service degradation or service outage occurs. Eritel will examine its own packet loss data, and will provide applicable diagnostics



4. Latency

Round trip delay will be measured by computing the average round trip delay for ten (10) ICMP pings of hundred (100) bytes each (ICMP pings are only sent subsequent to an acknowledgment being received for the previous ping).

Latency measurement is calculated as an average latency between any two-backbone routers on the domestic network of Eritel over a billing quarter that will not exceed the committed values.

Eritel SLA terms for latency are defined in Annexure 1.

5. Addition of a Foreign Entity as an additional Node to the Intranet MPLS VPN Network

A Tri-partite agreement will need to be signed by the Owner of the MPLS circuit and the foreign entity which requires to connect a node to this MPLS circuit if such services are required during or after signing of this contract.

IN WITNESS WHEREOF, the Parties have caused this Agreement (including the enclosures) to be executed by a duly authorized officer in duplicate as of the date first above written.

Eritrea Telecommunications Corp.

< Customer Name >

Signature: _____

Signature: _____

Printed Name: -----

Printed Name: -----



Annexure 1a - Support & Response Times

S. No.	Customer location	Service-Level Agreement	Criticality		
			Priority 1	Priority 2	Priority 3
1	All PoP Locations	Service hours	24 x 7	24 x 7	24 x 7
		Response Time	4 hrs.	6 hrs.	8 hrs.
Definitions:					
1.	Response Time: The time within which Eritel guarantees to start the Remote troubleshooting in the event of problem(s) in customer network and the TAC being logged in.				
2.	Priority				
	Priority 1:	The entire network is down affecting all users			
	Priority 2:	A part of the network is experiencing problems affecting only limited users			
	Priority 3:	The problem has minimal impact on day-to-day work. Troubleshooting scheduled on a manually agreed timeframe			

Annexure 1b -Service Level Agreement Terms

This section details the available Service Level Agreements for a customer requesting Eritel’s SiteConnect™ MPLS VPN service across the domestic network infrastructure of Eritel. The SLA’s mentioned below are valid from Eritel’s locations where the end customer last mile access circuits will interface with Eritel’s MPLS network.

1. Service Level Agreements

Eritel guarantees its network performance for parameters of Availability, Packet Loss and Latency as defined below. The governing regime for the guaranteed network performance parameters extends from the router port at Eritel’s Point of Presence closest to the customer premise, up until the router port at Eritel’s Point of Presence in Eritrea closest to the customer premise unless explicitly mentioned. The network topology can only be point-to- point between any two given locations.

a. Service Availability

Eritel guarantees Service Availability per billing quarter across the domestic network of Eritel in accordance with the table below: -

Description	Guaranteed Availability
Service Availability excluding Local Access	90%



b. Packet Loss

Eritel guarantees average round-trip packet loss for transmissions between any two Eritel POP across the domestic network of Eritel in accordance with the parameters identified in the table below for the selected class of service.

Class of Service	Maximum Packet Loss
All	5%

Note - SLA for Packet loss is guaranteed at 5%. Packet loss commitments are valid only if the load of the last mile is less than 85%.

c. Latency

Eritel guarantees Latency for IP traffic across the domestic network of Eritel for all regions as below.

Maximum Average Latencies	
All Regions	50 msec

Annexure 1c -Service Level Agreement Inclusive of Last Miles

- 1) The SLA commitments on Service Availability mentioned below are subject to a maximum of 75% utilization on the Local Access.

Service Level Agreement including Local Loop Circuits in All PoP Locations

S.No	POP Locations	Committed Uptime
1	All	90%

Exhibit 1 – An MPLS circuit between 2 CE's for a customer.

