1) IBER AFRICA

a) Perimeter Firewalls

No.	Minimum Boguiromonto	Tenderer Requirement
	Requirements	
1	DA 460 Sorios	The Proposed Firewall Must support throughput (HTTP/appmix) of 4.4/4.4 Chas
T	Performance and	The Proposed Firewall Must support a Threat Prevention throughput
	Capacities	(HTTP/ appmix) of 1.9/2.4 Gbps
		The Proposed Firewall Must support IPsec VPN throughput of 3 Gbps
		The Proposed Firewall Must support 400,000 Max concurrent sessions
		The Proposed Firewall Must support 67,000 New sessions per second
		The Proposed Firewall Must support 1/5 Virtual systems (base/max)
2	PA-460 Series	The Proposed Firewall Must support Interface Modes of
	Networking	L2, L3, tap, virtual wire (transparent mode)
	realures	
		The Proposed Firewall Must support the following Pouting protocols
		OSPEv2/v3 with graceful restart BGP with graceful restart RIP static routing
		Policy-based forwarding
		Point-to-Point Protocol over Ethernet (PPPoE)
		Multicast: PIM-SM, PIM-SSM, IGMP v1, v2, and v3
		The Proposed Firewall Must support SD-WAN:
		Path quality measurement (jitter, packet loss, latency)
		Initial path selection (PBF)
		Dynamic path change
		12 13 tan virtual wire (transparent mode)
		Features: App-ID, User-ID, Content-ID, WildFire, and SSI decryption
		SLAAC
		The Proposed Firewall Must support IPsec VPN:
		Key exchange: manual key, IKEv1 and IKEv2 (pre-shared key, certificate-based
		authentication)
		Encryption: 3des, AES (128-bit, 192-bit, 256-bit)
		Authentication: MD5, SHA-1, SHA-256, SHA-384, SHA-512
		110 Proposed Filewall Must support vLANS. 802 10 VI ANI tags per device/per interface: 4 094/4 094
		Aggregate interfaces (802.3ad), LACP
3	PA-460 Series	The Proposed Firewall Must support I/O: 1G RJ45 (8)
	Hardware	
	Specifications	

The Proposed Firewall Must support Management I/O:
10/100/1000 out-of-band management port (1), RJ45 console port (1), USB port
(2), Micro USB
console port (1)
The Proposed Firewall Must have a Storage Capacity of 128 GB eMMC
The Proposed Firewall Must support Power Supply (Avg/Max Power Consumption)
of 33/41 W
The Proposed Firewall Must support May BTU/br of 1/1
The Proposed Thewait Plast support Plax DTO/Th OF 141
The Proposed Firewall Must support an Input Voltage (Input Frequency) of 100-240
VAC (50–60 Hz)
The Proposed Firewall Must support Max Current Consumption of 3.4 A @ 12 VDC
The Proposed Firewall Must support Max Inrush Current of 4.2 A
The Proposed Firewall Must have the following Dimensions: 1 74" H x 8 83" D x
The Dreneged Firewall Must have a Weight (Standalane Device (As Chinaed) of E.O.
The Proposed Firewall Must have a weight (Standalone Device/As Shipped) of 5.0
The Proposed Firewall Must support Safety: cTUVus, CB
The Proposed Firewall Must support EMI: FCC Class B, CE Class B, VCCI Class B
The Proposed Firewall Must support Environment: Operating temperature of 32°F
to 104°F, 0°C to 40°C
Nonoperating temperature: -4°F to 158°F, -20°C to 70°C Passive cooling

b) NetApp Storage

Item No.	Minimum Requirements	Tenderer Requirement
1	Solution	The proposed Storage must be from NetApp and should be two (for
	Infrastructure	Production and DR sites).
2	Solution Architecture	Controllers should work in active-active mode. LUNs do not belong to any controller. Service loads are balanced
		among two or more controllers on a scale-out model of different architecture
		(i.e., All-Flash, hybrid, Software defined and cloud storage) to be managed as a single pane of glass.
3	Cloud-ready for	. Should integrate natively at storage layer with Software-defined or cloud-based storage from Same OEM and with no additional third-party tools
		. Must support integration with AWS, Azure and GCP (proof must be provided from
		both OEM and hyperscaler)
4	Controller	Two controllers should be configured. The controllers must use multi-core
	Configuration	processors, inter Broadweil-DE 12-core processor per controller.
F	Controllor	Lich anod multi controller (all controllere) interconnection prohitecture chould be
S	Interconnection	used. All controllers must support multiprotocol FC, NVMe/TCP, iSCSI, CIFS/SMB,
		NFS, PNFS and S3 with no additional license costs.
6	Capacity	Minimum of 16 TiB SSD usable . Must show computation and validated report of
		usable capacity and efficiency calculation from OEM. Must be All Flash Storage.
7	System Upgrade	Non-disruptiveupgrade should be supported.
8	Host ports	The storage should support 16 Gbit/s Fibre Channel and 1/10GE Ethernet.
		Requirement is for 1G Copper (4) and 10G Copper (4)
9	Unified Storage	Unified Storage Architecture for SAN and NAS Active-Active Solution
10	RAID Support	The storage should support RAID DP, RAID 4, RAID TEC
11	Spanshot	1 Should have point in time spanshot technology
11	Technology	 Snapshot must integrate with orchestration data management solutions
		(specifically Veeam, Commvault, Veritas, Cleondris, Cloud Backup Service) natively on the OS and must integrate natively to the snapshot technology.
		3. Supports at least 1023 snapshots per Volume, at least 1 million snapshots per
		 node and at least 2 million snapshots per HA Pair. 4. Technology should offer flexible cloning for Testing backups. Deploying
		Test/Dev environments and guick restore in case of disaster with no front-end

		 impact to storage space. 5. Snapshots should have ability to be archived to another platform (outside the existing Primary and Secondary storage to disk-based appliance or Cloud based object storage from AWS, AZURE and GCP without adding additional third-party tool 6. Snapshots should have immutable capabilities. 7. Snapshots should be efficient to present save savings (ability to be deduplicated)
12	Management	Solution must offer management platform that can manager software defined storage, on-premises, and cloud storage from one single pane of glass with no extra tools or third-party OEMs (must be from the same vendor. Proposal from any alliance vendor with similar capabilities will not be allowed)
13	Replication	 Synchronous and asynchronous replications should be supported. Fibre Channel and IP link replication should be supported. Asynchronous replication should support link compression, saving transmission bandwidth. Ability to support VMware vSphere Metro Storage Cluster (detail the integration to provide RPO of close to 0) Replication should be secured by encryption technology from same OEM
14	Efficiency Guarantee	OEM must offer efficiency guaranty of minimum 2.5:1 for the ALL-FLASH with a plan and commitment of remediation in case the solution does not meet the efficiency required. This must be in writing, addressed directly from OEM to Iber Africa.
15	Support	Must offer 36 months SupportEdge Advisor with actionable intelligence, self-healing capabilities, ease of management monitoring. Provide full documented process on support from OEM. Must supply cloud-based and phone app to monitor storage system. OEM should also provide on-premises version of support module to monitor both storage and VMware and storage solution.
16	Gartner	Storage solution must be leader on the Gartner quadrant for primary storage 2023
17	QOS	Bidder must explain the storage QoS and QoS levels
18	Ransomware	Storage must provide native ransomware on storage OS and integrate to known SIEM/SOC or security solutions to offer end-to-end cyber resiliency.

2) THIKA POWER

Server

Name : Windows Server Version: 2012 R2 size - 4 TB back-up - 3.5TB server backup done access speed – CPU 1.17 GHZ Memory 8GB Ethernet Full Duplex Availability zones – 1 Zone TPLSERVER Zone

Local Firewall

Local Firewall: Sophos Firewall Version : XG125 number of users - 16 to 30 users threat prevention throughput – 900mbps maximum sessions – 5,000,000 new sessions per second – 69,900