ADDENDUM SET 2

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SECONDARY DISASTER RECOVERY CENTER AS A SOLUTION

TENDER NO. KENGENSRBS/NCB-001/2025:

THIS ADDENDUM SET 2 IS ISSUED IN RELATION TO THE TERMS OF REFERENCE REQUIREMENT NO 1.6 AND 1.7.2

Requirement 1.7.2

Switch to be proposed should be Cisco Catalyst 24 port POE switch 9300 series or Equivalent or Higher since the previous proposed switch Cisco Catalyst 24 port POE switch 3750 series has reached end of life.

Requirement 1.6 Windows Server operating system to be proposed should be 2022 and NOT 2019 since the latter reached its end of mainstream support on January 9th 2024.

Therefore, the terms of reference under Requirement 1.6 and Requirement 1.7.2 are expunged and replaced as below

1.6. Proposed physical and virtualization infrastructure setup.

1.6.1 Proposed Primary data center virtualization infrastructure after setting up.

Virtualization Server No.	Physical Server No.	Virtualization Server Name	CPU Size	Storage Size	Memory Size	Server Model	Operating System
1	4	Web Server	2 CPUs Intel Xeon Gold 6330 @2.30Ghz each	1 TB	20GB	HPE ProLiant DLE380 Gen11	Windows Server 2022 Standard
2	4	File Server	2 CPUs Intel Xeon Gold 6330 @2.30Ghz each	2 TB	12GB	HPE ProLiant DLE380 Gen11	Windows Server 2022 Standard
3	4	AD Server	4 CPUs Intel Xeon Gold 6330 @2.30Ghz each	2 TB	16GB	HPE ProLiant DLE380 Gen11	Windows Server 2022 Standard
4	4	Application Server	16 CPUs Intel Xeon Gold 6330 @2.30Ghz each	2 TB	100GB	HPE ProLiant DLE380 Gen11	Windows Server 2022 Standard
5	4	Database Server	16 CPUs Intel Xeon Gold 6330 @2.30Ghz each	5 TB	100GB	HPE ProLiant DLE380 Gen11	Windows Server 2022 Standard
6	1	Compute Server	2 CPUs Intel Xeon E5 2620 @2.00 Ghz each	2TB	32GB	HPE ProLiant DLE380 Gen8	Windows Server 2022 Standard

NB: The named physical server 4 (four) is the new server to be acquired as per scope of services.

1.6.2 Proposed Secondary data center virtualization infrastructure after setting up.

Virtualization Server No.	Physical Server No.	Virtualization Server Name	CPU Size	Storage Size	Memory Size	Server Model	Operating System
1	3	Web Server	2 CPUs Intel Xeon Gold 5218 @2.30Ghz each	1 TB	20GB	HPE ProLiant DLE380 Gen10	Windows Server 2022 Standard
2	3	File Server	2 CPUs Intel Xeon Gold 5218 @2.30Ghz each	2 TB	12GB	HPE ProLiant DLE380 Gen10	Windows Server 2022 Standard
3	3	AD Server	4 CPUs Intel Xeon Gold 5218 @2.30Ghz each	2 TB	16GB	HPE ProLiant DLE380 Gen10	Windows Server 2022 Standard
4	3	Application Server	16 CPUs Intel Xeon Gold 5218 @2.30Ghz each	2 TB	100GB	HPE ProLiant DLE380 Gen10	Windows Server 2022 Standard
5	3	Database Server	16 CPUs Intel Xeon Gold 5218 @2.30Ghz each	5 TB	100GB	HPE ProLiant DLE380 Gen10	Windows Server 2022 Standard
6	2	Compute Server	2 CPUs Intel Xeon E5 2620 @2.00 Ghz each	2TB	32GB	HPE ProLiant DLE380 Gen8	Windows Server 2022 Standard

NB: The named physical servers two (2) and three (3) are located at the primary data center site and shall be moved to secondary data center site.

1.7.2 ITEM NO. 2 Supply, delivery, installation and configuration of new POE switch at Secondary data center located at Gitaru Power Station KenGen Hydro's (Border of Embu and Machakos Counties).

ITEM NO.	MINIMUM REQUIREMENTS	TENDERER REQUIREMENT	BIDDER RESPONSE (USE OF YES/NO WILL LEAD TO DISQUALIFICATION)
General Specifications			
1	General Descriptive Requirement	Cisco Catalyst 24 port POE 9300 series enterprise-class switch with high-performance to meet campus core and aggregation switch requirements.	
2	Compliance	Should be compliant with all IEEE standards including 802.1Q, 802.1p, 802.3x, IEEE 802.3z.	
3	Network Interface	Should support 24 x 10/100/1000 Ethernet Ports (PoE/PoE) with data speeds 10/100/1000 Mbps.	
		Should support 6X 40G/100 G QSFP28 Uplink ports.	
4	Memory	Should support a RAM of at least 4 GB and Flash memory of at least 2 GB	
Technical Specifications			
5	Performance	Should have Switching capacity of at least 2.1 Tbps	
6	Operating Temperature	Should have an operating temperature range of 5°C to +45°C	
7	Relative Humidity	Should support a relative humidity within the rage of 5% to 95% (non-condensing)	
8	MAC address table	Should be IEEE 802.1d compliant supporting at least 380K MAC address entries	
9	Spanning Tree Protocol Technology	Support for Spanning Tree Protocol Technology (STP), RSTP technology and MSTP technology.	

10	IP Routing functions	Should support IP Routing protocols including Static route, RIP, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, Routing Policy and Policy-Based Routing	
11	VLAN support	Compliant with IEEE 802.1Q standards- should support at least 4000 VLANS	
		Must support VLAN stacking	
12	Power input	Should support Dual power supply units that are Hot swappable.	
		Should support DC power modules	
13	Heat dissipation	Should support dual pluggable fan modules	
14	Reliability	Should support reliability features such as Link Aggregation Control Protocol (LACP), VRRP, BFD, LLDP, E-Truck, Smart link	
15	Management and Maintenance requirements	Should support management and maintenance features such as cloud management based on Netconf, SNMP v1/v2c/v3, FTP, SSHv2.0, SSHv1.5 Telnet, RMON	
16	QoS Features	Should support QoS features such as DRR, congestion avoidance mechanisms, Traffic shaping, Traffic classification, 802.1p and CAR	
17	Security	Access Control Lists, port mirroring, Support MAC/802.1x authentication, MACSec (IEEE 802.1ae) and RADIUS authentication.	
18	EOS	Device should not be within the manufacturer's end of support period for at least six (5) years.	
Technical Support			

19	Technical Support & Warranty	Minimum 3 years on Parts, labour and software and next business day replacement for any hardware failure that may occur. In addition, the equipment MUST include the manufacturer's premier technical support services that include: Accelerated hardware replacement options, Operating system updates, Access to Manufacturer's technical assistance team, Online troubleshooting / support tools and proactive problem diagnosis services. The proposed product MUST have a manufacturer's 1-year local warranty & Support.	
20	Manufacturer's authorization	Must provide Manufacturer's authorization form.	