

KENYA FORESTRY RESEARCH INSTITUTE



Ref: KEFRI/AD/SD/VOL.XI (496)

5th JANUARY, 2022

TO ALL TENDERERS

Dear all,

CLARIFICATIONS No. 1

The Kenya Forestry Research Institute (KEFRI) makes the below listed clarifications to the tender advertised on MyGov, www.mygov.go.ke - Issue No. 25.2021 - 2022 which appeared on the Daily Nation Newspaper, Tuesday, 21st December, 2021.

TENDER NO: KEFRI/ONT/OO9/2021 – 2022

TENDER TITLE: SUPPLY, INSTALLATION AND COMMISSIONING OF BACKUP STORAGE AREA NETWORK (SAN) AT KEFRI DERP KITUI

CLARIFICATION NO. 1 - CLARIFICATION RECEIVED FROM INTERESTED APPLICANTS/TENDERERS THROUGH EMAIL ADDRESS: tenders@kefri.org AS AT 5th JANUARY, 2022

No.	Bidders Question	Clarification
1.	On the tender document on scope of works it has specified that the equipment's are to be installed in KEFRI DERP KITUI, But on the List of Related Services and Completion Schedule it has stated that place where services shall be performed is KEFRI HQ, Kindly specify where the delivery and installation location shall be. Also in the BOQ you have listed 24 Port Switch as	The Items will be delivered at the HQ for inspection. But later installations will be done at the site (KITUI). See Below Table 2 for Access switches specifications.

	specified but in the tender document there is no specs for the switch, kindly advise	
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Table 2: Switch Specification.

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Access Switch		
Ports - Minimum 24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports		
Forwarding Performance - Minimum 96 Mpps		
Switching Capacity - Minimum 128 Gbps/336 Gbps		
POE - Proposed switch must have POE+ capable ports		
SFP+ : 2 per switch (10G,Multi-mode Module(850nm,0.3km,LC))		
Must have Built-In AC Power		
Flexible Ethernet Networking		

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Proposed switch in addition to supporting traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), must also support Smart Ethernet Protection (SEP) or equivalent technology and the industry's latest Ethernet Ring Protection Switching (ERPS) or equivalent technology.		
Proposed switch must support Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.		
Diversified Security Control		
Proposed switch must support 802.1X authentication, MAC address authentication, and hybrid authentication on a per port basis, as well as Portal authentication on a per VLANIF interface basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.		

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Proposed switch must provide a series of mechanisms to defend against DoS attacks and user-targeted attacks. DoS attacks are targeted at switches and include SYN flood, Land, Smurf, and ICMP flood attacks. User-targeted attacks include bogus DHCP server attacks, IP/MAC address spoofing, DHCP request flood, and changing of the DHCP CHADDR value.		
Proposed switch must have a feature that prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally		
Proposed switch must have a feature which ensure that users connect only to the authorized DHCP server		
Intelligent O&M		

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Proposed switch must support a technology to collect device data in real time and send the data to network analyzer. The analyzer analyzes network data based on the intelligent fault identification algorithm, accurately displays the real-time network status, effectively demarcates and locates faults in a timely manner, and identifies network problems that affect user experience, accurately guaranteeing user experience		
Licenses		
Proposed switch must have necessary licenses to enable the switch to send network analysis data to the analyzer		
MAC address table		
MAC address learning and aging 32896 MAC entries(MAX) Static, dynamic, and blackhole MAC address entries Packet filtering based on source MAC addresses Interface-based MAC learning limiting		
VLAN features		

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
4K VLANs Guest VLAN and voice VLAN GVRP MUX VLAN VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces 1: 1 and N: 1 VLAN mapping		
IP routing		
Static route, RIP, RIPng, OSPF, OSPFv3 Up to 4096 FIBv4 entries(MAX) Up to 1024 FIBv6 entries(MAX)		
QoS/ACL		
Rate limiting on packets sent and received by an interface Packet redirection Interface-based traffic policing and two-rate and three-color CAR Eight queues on each interface WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms Re-marking of the 802.1p priority and DSCP priority		
Fabric (SVF)		

Description	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
<p>Automatically loading the system software packages and patches of SVF clients</p> <p>Automatically delivering service configurations in a one-click manner</p> <p>Independent running of SVF clients</p>		

Late bids will be rejected.



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