

**CLARIFICATIONS FOR SUPPLY AND INSTALLATION OF A FIREWALL SECURITY SOLUTION - BOU/NCONS/21-22/00072**

Procurement Reference Number			
Code of Procuring and Disposing Entity	Supplies/Works/Non-consultancy services	Financial year	Sequence number
BOU	NCONS	21-22	00072

The following clarifications were sought regarding the requirements for the Firewall Solution and the following responses are hereby provided.

Clarification Sought	Response
Which entity requires the Firewall?	<p>The Bank of Uganda is simply procuring this Firewall Solution on behalf of behalf of The Deposit Protection Fund of Uganda.</p> <p>This Firewall shall be installed, tested, and commissioned at The Deposit Protection Fund of Uganda.</p>
<p><i>NGFW-REQ-2: The proposed solution should not be proprietary ASIC based in nature and should be open architecture based on multi-core CPUs to protect and scale against dynamic latest security threats.</i> (Page 36 of the Bidding Document)</p> <p><i>The Providers inquired</i> on why the bank is not open to receiving offers for ASIC-based hardware, yet it is commonly known that ASICs are used to accelerate network traffic inspection throughput in NGFWs, WAFs, Load Balancers, Anti-DDoS, et al?</p> <p>Providers further indicated that Independent performance test reports have shown results where special ASIC chips for security inspection offer better performance than multi-core CPUs especially when it comes to SSL Inspection.</p>	<p>An open architecture is preferred based on multi-core CPUs. Traditionally, ASICs are mainly closed platforms with fixed, integrated software. If a vendor needed to introduce new network protocol support, it needed to build new ASICs.</p>
<p><i>NGFW-REQ-4: The proposed solution must deliver threat prevention throughput of minimum 150 Mbps at the primary and secondary sites. Threat prevention throughput must include L7 Firewall + Application Visibility + User Visibility + IPS + Antivirus + Antispyware + with logging enabled with all signatures turned ON (no exception).</i> (Page 37 of the Bidding Document)</p>	<p>The requirement in <i>NGFW-REQ-4</i> is hereby changed from 150Mbps to 9Gbps</p> <p>For both these requirements, the Bank requires a minimum of 9 Gbps. Providers shall therefore use 9 Gbps for both these requirements.</p>

<p><b>NGFW-REQ-146:</b> <i>The Vendor shall supply, install, and configure a firewall with a minimum of 9 Gbps Enterprise/Production Threat Protection Throughput.</i></p> <p>(Page 62 of the Bidding Document)</p> <p><i>The providers inquired</i> on whether their proposals should be based on NGFW-REQ-146 and discard NGFW-REQ-4? NGFW-REQ-146 (9Gbps) looks more realistic based on the size of the organization and infrastructure to be protected.</p>	
<p><b>NGFW-REQ-55:</b> <i>The Vendor shall supply, install, and configure a firewall solution that support Preconfigured for common Microsoft applications; Exchange, SharePoint, OWA.</i></p> <p>(Page 46 of the Bidding Document)</p> <p><b>NGFW-REQ-56:</b> <i>The Vendor shall supply, install, and configure a firewall solution that supports predefined security policies for Drupal and WordPress applications.</i></p> <p><b>NGFW-REQ-60:</b> <i>The Vendor shall supply, install, and configure a firewall solution that support CAPTCHA and Real Browser Enforcement (RBE).</i></p> <p>(Page 47 of the Bidding Document)</p> <p><b>The providers inquired on the following.</b></p> <ol style="list-style-type: none"> <li>1. Whether the DPF has Drupal and WordPress applications?</li> <li>2. Whether the NGFW shall be used as a Web Application Firewall (WAF) or there is an existing WAF for protecting Web Application Layer 7 attacks?</li> <li>3. What the required throughput for WAF is, and if it shall serve as a Web Application Firewall?</li> <li>4. Whether a dedicated WAF appliance should be proposed for more comprehensive Web Application security as compared to WAF capabilities in an NGFW appliance</li> </ol>	<p>Affirmative. DPF has Drupal and WordPress applications.</p> <p>The solution required should ably cover Web Application, Perimeter, and Malware Protection.</p> <p>The required throughput for WAF [Web Application Firewall] is 9Gbps</p> <p>The vendor shall propose a solution they can supply, and support provided it meets the Requirements covered in this tender.</p>
<p><b>NGFW-REQ-79:</b> <i>The Vendor shall supply, install, and configure a firewall solution offer Off-network detection-Detect potentially</i></p>	<p>Agents shall be required to support this architecture Agents shall be installed on all endpoints</p>

<p><i>malicious activity when not connected to the corporate network.</i></p> <p>(Page 50 of the Bidding Document)</p> <p><i>The providers</i> indicated that this requirement means that an agent is needed on roaming endpoints to either point them to the on-premises firewall or a cloud-based SASE solution where filtering will be done. They inquired on whether DPF shall require agents to support this architecture, and how endpoints will require the agent?</p>	
<p><b>NGFW-REQ-81:</b> <i>The Vendor shall supply, install, and configure a firewall solution that support cloud-based SSL Inspection.</i></p> <p><b>NGFW-REQ-82:</b> <i>The Vendor shall supply, install, and configure a firewall solution that support Cloud-based DNS Security.</i></p> <p><b>NGFW-REQ-83:</b> <i>The Vendor shall supply, install, and configure a firewall solution that support Cloud-based Data Leak Prevention.</i></p> <p>(Page 50 of the Bidding Document)</p> <p><i>The providers</i> indicated that by default NGFWs support on-premises SSL Inspection, DNS Filtering/Security, and Data Leak Prevention. Cloud-based SSL Inspection, Cloud-based DNS Security, and Cloud-based Data Leak Prevention are features of SASE platforms. They inquired on whether DPF seeks for a SASE solution as well to complement the on-premises firewall? And If so, how many endpoints need to be considered.</p>	<p>The firewall solution provided should have security capabilities to fit requirements detailed in NGFW-REQ-81, NGFW-REQ-82, NGFW-REQ-83.</p> <p>DPF seeks for a SASE solution as well to complement the on-premises firewall and considering up to 100 endpoints.</p>
<p><b>NGFW-REQ-108:</b> <i>The Vendor Shall supply, install, and configure a firewall solution that inspects LTE protocols like GTP, SCTP &amp; Diameter.</i></p> <p>(Page 55 of the Bidding Document)</p> <p><i>The providers</i> indicated that LTE protocols like GTP, SCTP &amp; Diameter are used in a mobile network. They questioned whether firewall Providers are required to include licenses for inspection of LTE protocols.</p>	<p>DPF plans to interface its Depositor Payout system with mobile money service telecom companies. Therefore, the Provider shall include licenses for inspection of LTE protocols.</p>
<p><b>Table 19:</b> <i>Web Application Firewall Requirements</i></p> <p>(Page 55 of the Bidding Document)</p>	<p>The vendor shall propose a solution they can ably supply, and support based on the requirements detailed in this document.</p>

<p><i>The providers</i> asked whether a dedicated WAF appliance is required DPF as per the compliance requirements in this table?</p>	
<p><b>NGFW-REQ-332:</b> <i>The solution shall have a cloud-based management to provide security to both on-premises and remote users.</i> (Page 91 of the Bidding Document)</p> <p><i>The providers</i> noted that other earlier requirements required an on-premises management server. They requested clarification on whether DPF is looking for an on-premises management and logging and reporting or cloud-based solution?</p>	<p>DPF requires an on-premises management server configurable to provide security, logging and reporting for both on-premises and cloud-based remote users.</p>
<p><b>NGFW-REQ-341:</b> <i>The Vendor shall supply, install, and configure a firewall solution with support for anti-ransomware to protect specific files, folders, or file types on the endpoints from unauthorized changes.</i> <b>NGFW-REQ-342:</b> <i>The Vendor shall supply, install, and configure a firewall solution that has capabilities to Scan archive files, including zip, rar, and tar files, for threats. RTP exclusions list default file extensions.</i> (Page 93 of the Bidding Document)</p> <p><i>The providers</i> indicated that these two requirements refer to having an endpoint agent on the servers and desktops to achieve the objective. They requested advice on how many servers and desktops need the Endpoint Security agent?</p>	<p>12 Servers and 100 Endpoints shall need an end-point Security Agent</p>
<p><b>NGFW-REQ-357:</b> <i>The Vendor shall provide evidence of 24x7 physical security of hosting facilities encompassing all computer and network communication systems.</i> (Page 95 of the Bidding Document)</p> <p><i>The providers</i> questioned why they are required to demonstrate this capability and there is no requirement for managed hosting services-Provided that the firewalls shall be installed in DPF's premises.</p>	<p>The required solution will be hosted on-premises so there is no need for a managed hosting service from the provider.</p>
<p><b>NGFW-REQ-221:</b> <i>The Vendor shall ensure that DPF is fully licensed for the Firewall Solution Application software, as well as any other third-party software prerequisites with a one (1) year license subscription.</i></p>	<p>The License is 1 year; Warranty is 3 years.</p>

<p>(Page 75 of the Bidding Document)  <b>NGFW-REQ-383:</b> <i>The firewall Solution shall be supplied with a manufacturer’s warranty of three years, parts, and labour.</i>  (Page 100 of the Bidding Document)</p> <p><i>The providers</i> asked whether the license and warranty should be for 1 year or 3 years?</p>	
<p><i>The providers</i> inquired on the number of officers that shall need to be trained and whether the proposed training should be online or physical outside the country?</p>	<p>The provider should propose both online and outside the country training options.</p>
<p><i>The providers</i> noted a technical contradiction between the requirement number NGFW-REQ-115 on page 56 and (NGFW-REQ-142, NGFW-REQ-143, NGFW-REQ-144, NGFW-REQ-145, NGFW-REQ-146, NGFW-REQ-147) on page 62.</p> <p><b>They indicated</b> that these requirements as detailed in the tender document infer two different firewall categories: one an SMB and the other to a very large enterprise.</p>	<p>The proposed firewall solution shall also cover DPF’s Depositor Payout System which shall also be accessed by depositors of all contributing institutions.</p>