Nepal Rastra Bank
Assets and Service Management Department

Clarification Notice

Project Name: The Supply, Delivery and Installation of Firewall System for DC and Firewall System for DR
Invitation for Bids No.: NRB/ASMD/IT/GOODS/NCB/01/2082/83

1. Bid Queries on Minimum Technical Specification for Firewall System for DC-1set

	Queries from Bidders				
SN	**Item**	**Bank's requirement**	**Amendment/Clarification Request**	**Remarks for the Amendment /clarification**	**Final Clarification**
1	**Interfaces**	Shall have minimum 4-port 10-Gigabit SFP+, with 1 pair of 10-Gigabit single mode, single fiber transceiver module, compatible with atleast Juniper and Cisco switches, and the proposed device.	Shall have minimum 4 - port 10-Gigabit SFP+ in **default without expansion module,** with 1 pair of 10-Gigabit single mode, single fiber transceiver module, compatible with atleast Juniper and Cisco switches, and the proposed device.	As NRB IT team can use the additional expansion module, if they require the additional port in the future	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78 Explanation: The bidder must provide minimum 4 - port 10-Gigabit SFP+ which means to provide the required ports in default without expansion module.
2	**Firewall Performance**	Shall support at least 900K concurrent HTTP sessions or at least 2 million concurrent TCP sessions.	Shall support at least 900K concurrent HTTP sessions or at least 1.5 million concurrent TCP sessions.	The revised TCP session requirement reflects realistic mapping between HTTP and TCP concurrency in modern networks. Supporting 900K concurrent HTTP sessions inherently requires substantial TCP capacity; 1.5 million TCP sessions provide adequate headroom without unnecessary over-specification.	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78
3			Shall support at least 900K concurrent HTTP sessions or at least 1.5 million concurrent TCP sessions.	modifying the TCP session requirement to 1.5 million aligns with the supported performance of available firewall models enabling the recommendation of the most cost effective and appropriate solution without over specifying capacity. This is a very minor things that's requested	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78

SN	Item	Bank's requirement	Amendment/Clarification Request	Remarks for the Amendment /clarification	Final Clarification
4	**Firewall Performance**	Shall support at least 100K new HTTP sessions per second or at least 250K new TCP sessions per second.	Shall support at least 100K new HTTP sessions per second or at least 90K new TCP sessions per second	To handle the performance of deep packet inspection (DPI), App-ID, threat prevention, SSL decryption and other L7 services, parallel architecture i.e, all the packets are scanned simultaneously in a single pass with lower number than stated in RFP. To complete the same tasks, vendor employing proxy technology require significantly more connection sessions. Additionally, they are restricted by file size limits for malware scanning, a limitation not present in parallel processing technologies	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78
5			Shall support at least 100K new HTTP sessions per second or at least 190K new TCP sessions per second.	Basic amendment of this clause enables OEM and vendors to offer cost effective devices to handle NRB's requirement without changing any of the other specifications as published this enables cost effective solutions to be delivered while matching and outperforming the requirements your organization	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78
6			Shall support at least 90K new HTTP sessions per second or at least 90K new TCP sessions per second.	Modifying the HTTP session requirement to 90K and TCP to 90K aligns with the supported performance of available firewall model enabling the recommendation of the most cost effective and appropriate solution without overspecifying capacity. This is a very minor things that's requested	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 78
7	**High-Availability Features**	Shall support Active/Active and Active/Passive configurations.	Shall support Active/Active or Active/Passive Stateful configurations (Failover should be automatic without any intervention from the user and without any session loss)	Active-Passive stateful HA in case of hardware failure failover is automatic seamless, zero session loss without requiring any manual intervention	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 79
8			Shall support Active/Passive configurations.		Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 79

SN	Item	Bank's requirement	Amendment/Clarification Request	Remarks for the Amendment /clarification	Final Clarification
9	**Next Generation IPS Features**	Shall allow to create Custom IPS signature.	Shall allow to create Custom or automatic IPS signature	For any unknown malware few OEM has their architecture is such which creates the signatures automatically	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 79
10		Shall support IP reputation intelligence feeds from third party and custom lists of IP addresses including a global blacklist.	Shall support IP reputation intelligence feeds from third party or own and custom lists of IP addresses including a global blacklist	Relying on own threat intelligence feed is the industry's best practice for IPS, as it reduces reliance on external sources. We are not dependent on third party feed for IPS like some OEMs who is not having their own feeds. We have our own feed which is from our more than 1 million sensors spread across the globe.	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 79
11	**Management, Reporting & Alerting**	Shall support SIEM integration.	If you can kindly share what SIEM tool you are using		Shall integrate with SIEM system being used in NRB **(IBM QRadar).**
2.	**Bid Queries on Minimum Technical Specification for Firewall System for DR-2 sets**				
1	**Interfaces**	Shall have minimum 4-port 10-Gigabit SFP+, with 1 pair of 10-Gigabit single mode, single fiber transceiver module, compatible with atleast Juniper and Cisco switches, and the proposed device.	Shall have minimum 4 - port 10-Gigabit SFP+ in **default without expansion module,** with 1 pair of 10-Gigabit single mode, single fiber transceiver module, compatible with atleast Juniper and Cisco switches, and the proposed device.	As NRB IT team can use the additional expansion module, if they require the additional port in the future	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81 Explanation: The bidder must provide minimum 4 - port 10-Gigabit SFP+ which means to provide the required ports in default without expansion module.

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2	**Firewall Performance**	Shall support at least 900K concurrent HTTP sessions or at least 2 million concurrent TCP sessions.	Shall support at least 900K concurrent HTTP sessions or at least 1.5 million concurrent TCP sessions.	The revised TCP session requirement reflects realistic mapping between HTTP and TCP concurrency in modern networks. Supporting 900K concurrent HTTP sessions inherently requires substantial TCP capacity; 1.5 million TCP sessions provide adequate headroom without unnecessary over-specification.	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
3			Shall support at least 900K concurrent HTTP sessions or at least 1.5 million concurrent TCP sessions.	modifying the TCP session requirement to 1.5 million aligns with the supported performance of available firewall models enabling the recommendation of the most cost effective and appropriate solution without over specifying capacity. This is a very minor things that's requested	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
4		Shall support at least 100K new HTTP sessions per second or at least 250K new TCP sessions per second.	Shall support at least 100K new HTTP sessions per second or at least 90K new TCP sessions per second	We follow parallel architecture i.e. all the packets are scanned simultaneously in a single pass hence we do not require higher number of sessions to complete the tasks while those using proxy technology requires higher number of sessions to complete the same task limiting them with limited file size scan while parallel technology does not have file size limitation for malware scanning	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
5			Shall support at least 100K new HTTP sessions per second or at least 190K new TCP sessions per second.	Basic amendment of this clause enables OEM and vendors to offer cost effective devices to handle NRB's requirement without changing any of the other specifications as published this enables cost effective solutions to be delivered while matching and outperforming the requirements your organization	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
6			Shall support at least 90K new HTTP sessions per second or at least 90K new TCP sessions per second.	Modifying the HTTP session requirement to 90K and TCP to 90K aligns with the supported performance of available firewall model enabling the recommendation of the most cost effective and appropriate solution without overspecifying capacity. This is a very minor things that's requested	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81

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7	**High-Availability Features**	Shall support Active/Active and Active/Passive configurations.	Shall support Active/Active or Active/Passive Stateful configurations (Failover should be automatic without any intervention from the user and without any session loss)	we support Active-Passive stateful HA in case of hardware failure failover is automatic seamless, zero session loss without requiring any manual intervention	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
8			Shall support Active/Passive configurations.		Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 81
9	**Next Generation IPS Features**	Shall allow to create Custom IPS signature.	Shall allow to create Custom or automatic IPS signature	For any unknown malware few OEM has their architecture is such which creates the signatures automatically	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 82
10		Shall support IP reputation intelligence feeds from third party and custom lists of IP addresses including a global blacklist.	Shall support IP reputation intelligence feeds from third party or own and custom lists of IP addresses including a global blacklist	We are not dependent on 3rd party feed for IPS like some OEMs who is not having their own feats we are not our own we have our own feed which is from our more than 1 million sensors spread across the globe	Refer to Section V Schedule of Requirements , Point no. 4 Purchaser Requirement, Page 82
11	**Management, Reporting & Alerting**	Shall support SIEM integration.	If you can kindly share what SIEM tool you are using		Shall integrate with SIEM system being used in NRB **(IBM QRadar).**
	3. Other Clarification/ Amendment Request				
1	**Deployment Experience**		The proposed DC and firewall solution must be deployed across multiple banking and financial institutions within the Nepal region and should be in production in Edge and Core Firewall of the organization, (including DC and DR)		No further Amendments
2	**Reference Letters from Financial Institutions**		The bidder must submit reference letters in customer letterhead, or a list of such references should be provided on the OEM's letterhead for DC and DR Firewall: - Class A Commercial Banks – Minimum two (2) or more - Class B Development Banks – Minimum two (2) or more		No further Amendments

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3	**Audit & Regulatory Compliance**		The deployment must have successfully passed: • Internal IT and information security audits • Regulatory inspections • Security and compliance assessments required by financial regulators		No further Amendments
4	**Regarding MAF**		Manufacturer's Authorization Form (MAF) is sought from each OEM for the appliances being offered. Kindly clarify whether MAFs are acceptable from two vendors/bidders that provide MAF from the same OEM. For example: will the bids be acceptable if Bidder A and Bidder B both submit MAF from single OEM? Since the OEMs trust their partners and enable them to provide the products with the confidence that the partners can successfully complete these kinds of projects, and with the continued support to the partners from the OEMs, multiple MAFs from single should not be a concern. This will enable vendorsoffering same OEM product to contest and offer best prices which will eventually benefit Nepal Rastra Bank by enabling competition and saving on costs by getting the best value products		Yes, MAFs are acceptable from multiple bidders that provide MAF from the same OEM.
5			The bidder must provide a manufacturer's authorization letter MAF for both DC and DR Firewall, exclusively for the bidder, authorizing them to participate in the bidding process.The MAF should be submitted directly to NRB by OEM via email at software.asmd@nrb.org.np		No further Amendments