PSeGS invites bids on GeM portal from interested bidders for supply, installation and commissioning of NGFW equipment with comprehensive onsite warranty to be installed in the State Data Center of Punjab situated at Mohali.

Additional terms and conditions:

- 1. All bidders including MSEs and startups are required to submit EMD / PBG.
- 2. The solution being proposed must be current and based on latest technology. The bidder must submit Product Life Cycle certificate from OEM for atleast 7 years. Further, the OEM shall ensure the availability of spares during this period. (Document: letter from OEM).
- 3. The bidder must submit data sheet of the proposed products proposed in the solution.
- 4. The bidders would be required to provide Proof of Concept (PoC) for the solution being proposed. In the PoC, the technical specifications of the solution would be checked practically. The generation of required network traffic for the PoC would be the responsibility of the OEM.
- 5. The bidder must submit signed and stamped copy of this ATC document along with technical bid.
- 6. Hardware equipment should be covered under 5 years onsite comprehensive warranty from OEM. (Document: letter from OEM)
- 7. The OEM should have supplied at least 3 NGFW equipment to Government entities in India. (Document: relevant documents from OEM)
- 8. Installation, commissioning and migration activities from the existing to the proposed solution will be done by the OEM. (Document: letter from OEM).
- 9. 1 week onsite training needs to be provided for the proposed solution. (Document: letter from OEM).
- 10. During the warranty period the OEM will carry out Preventive Maintenance (PM) of the equipment at least once in six months or as and when required. Half yearly PM reports should be submitted to PSeGS in January and July of each year. This shall be a prerequisite for processing of yearly payments.

- 11. The OEM must ensure 24 * 7 * 365 service support during warranty period. (Document: letter from OEM). The complaints must be resolved (including the cases where the equipment is required to be replaced) within 6 hours of lodging of complaint. In case of non-compliance, a penalty @ Rs. 1,000 per hour of delay beyond 6 hours (or part thereof) shall be applicable. This rate of penalty shall be doubled after every 24 hours incase the equipment is not made functional. These penalties shall be recovered from the pending payment (if any) or from the PBG.
- 12. The selected bidder would be required to setup the proposed solution in HA mode.
- 13. 97.5% payment will be made after delivery, installation, commissioning and migration activities of the equipment. Remaining 2.5% payment will be made on annual basis spread over five years (i.e. 0.5% payment after completion of each year from the date of commissioning).
- 14. The bidder should not have offered lesser price for any of the line items to any government / semi-government organization of Centre or any State (of same specification as in tender). If such a case is discovered for any line item then the lesser price offered to the other organization shall be automatically applicable for those line items in this tender.

15. The specifications of the NGFW are as under:-

SN	Specification Name	Bid Requirement (Allowed Values)						
1.	Туре	NGFW						
2.	Form Factor (RU)	Any value						
3.	3. Features Layer 3-Layer 4 NAT, V							
		Visibility and Control (AVC), User Identify, Next						
		Generation Intrusion Prevention System (IPS),						
		Zero Day Protection / Advance Malware						
		Protection, Web Security Essentials / URL						
		filtering						
4.	Traffic Handled	HTTP/TCP						
5.	Packet Size (KB)	1,024 or higher						
6.	Throughput with all features enabled	30,000 or higher						
	(Under Test Condition) (Mbps)							
7.	Throughput (Real World/Prod	30,000 or higher						
	Performance) (Under Test Condition							
	(Mbps)							

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SN	Specification Name	Bid Requirement (Allowed Values)				
8.	Concurrent Session/Concurrent	30M or higher				
	Connection					
9.	New Session/Connection per second	450K or higher				
10.	Type of interface Supported Multiselect	10G SFP+, GE Copper, GE SFP, QSFP+40 G				
11.	Number of GE Copper interface	6 or higher				
12.	Number of 10 G SFP + interface	10 or higher				
13.	Number of QSFP + 40 G interface	2 or higher				
14.	Number if GE Small Form Factor	Any value				
	Pluggable (SFP) interface					
15.	Number of QSFP28 100 G interface	Any value				
16.	Number of col/WAN Ports	Any value				
17.	Number of Ipsec VPN Peers supported	1,000 or higher				
	(Site to Site)					
18.	Number of Ipsec VPN Peers supported	2,000 or higher				
	(Client to Site)					
19.	Number of SSL VPN Peers supported	2,000 or higher				
	(Client to Site)					
20.	Type of Storage Disk	Any value				
21.	Storage Capacity (GB)	4,000 or higher				
22.	Power Supplies	Dual Dual				
23.	Hot Swappable power Supply	Yes				
24.	Redundant Fan	Yes				
25.	Hot Swappable (Redundant Fan)	Yes				
26.	Type of Processor	Any value				
27.	High Availability support	Yes				
28.	If Yes, High availability from day 1	Active-active				
29.	Interface Expansion slots supported	2				
30.	Firewall Policies License	Yes				
31.	Details of the Firewall Policies for the	Web Security Essentials/URL Filtering, IPS				
	Firewall provided with the License	License, Application Visibility License, APT				
		(Advance Persistent Threat) License (Anti				
		Malware Protection, C& C attacks, Geo IP				
		Protection, Zero Day Threat protection),				
		Gateway Anti virus, Gateway Anti spam				
32.	NGIPS Signature supported	7,000 or higher				

SN	Specification Name	Bid Requirement (Allowed Values)			
33.	Security intelligence	IP, URL, Domain, Passively detect End Point,			
		IOC intelligence			
34.	Certification	Common Criteria / NDPP / NSS			
35.	Minimum Operating Temperature	0			
	(Degree C)				
36.	Maximum Operating Temperature	50			
	(Degree C)				
37.	Minimum Operating Humidity (%RH)	5			
38.	Maximum Operating Humidity (%RH)	75			
39.	IPv6 Ready from day 1	Yes			
40.	On Site OEM Warranty (Year)	5			

16. The proposed solution should have the following facilities:

- a) NGFW throughput (real world / enterprise mix): 30 Gbps
- b) Multicore CPU architecture with 64 bit OS / ASIC.
- c) SDWAN / multi-link load balancing facility.
- d) Fully loaded SFPs from day 1.
- e) Support at least 10 virtual firewalls.
- f) Sandbox: There should be separate appliance for zero day / sandbox / ATP with minimum 4x 1 GE SFP and 4 x RJ 45, 2x2 TB storage on-appliance in RAID 1, minimum 20 VMs support, VM sandboxing throughput of minimum 1,000 file per hour and sniffer throughput of 2 Gbps and should have all Win / Linux OS (which are not out of support) and MS office licenses from day 1. In case of appliance failure, there should be provision of HA appliance for redundancy with equivalent sandboxing throughput of 1,000 files per hour.
- g) DNS sinkholing / trap / filtering / IP reputation and DNS threat feeds for malicious DNS request from inside hosts to outside bad domains / IP addresses and integrate and query third party external threat intelligence databases to block bad IP addresses, domains and URLs.
- h) Detecting and blocking IPv6 attacks.
- i) Retain logs for a minimum period of 60 days. The solution should be able to migrate the logs older than 60 days and upto 1 year to log archival systems for future reference.
- j) Automatic real-time signature generation within 5 minutes without human intervention.
- k) Centralized management solution

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- I) Support for NAT64, DHCPv6 and DNS64.
- m) Integrated Traffic shaping / Quality of Service functionality.
- n) 8 Nos of 1 GE SFP (modular).
- o) 10G SFP+ interface should also support 1 GE SFP.
- p) In addition to the storage capacity, offloading and uploading facility should be available over SAN.
- q) High availability configuration should support "active-active" / N + 1 clustering.
- r) IPS signatures should have option to configure actions like terminate a TCP session by issuing TCP Reset packets to each end of the connection or silently drop traffic.
- s) Ability to detect, log and take action against network traffic based on over 4,000 application signatures.
- 17. The bidders requiring any clarification on the bid document may submit their queries via email to smanager.dgr@punjab.gov.in, saroj.semt@punjab.gov.in and manuj.syal@punjab.gov.in by 2:30 PM on 13.03.2020 in the following format in a spreadsheet file:

SI	Tender Clause N	/ 10.	ATC	Page No.	Tender / ATC Clause detail	Clarification with reason	/	Amendment	Sought

18. Date and time of pre-bid meeting: 3:00 PM on 13.03.2020.