

PSeGS invites bids on GeM portal from interested bidders for supply, installation and commissioning of DDoS equipment with 5 years 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.
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. During the warranty period the bidder 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 pre-requisite for processing of yearly payments.
8. 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.
9. Installation, commissioning & demonstration of the solution will be done by the OEM. (Document: letter from OEM).

10. The selected bidder would be required to setup the proposed solution in HA mode.
11. 1 week onsite training needs to be provided for the proposed solution. (Document: letter from OEM).
12. 97.5% payment will be made after delivery, installation and commissioning 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).
13. 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.
14. The specifications mentioned in the bid are amended as under:-

SN	Specification Name	Bid Requirement (Allowed Values)
1.	Request per second per web traffic HTTP / HTTPS	24 M
2.	No. of days training provided at site	5
3.	Number of years upto which support is available from OEM / franchise online	5
4.	Maximum bandwidth supported	15 Gbps
5.	No. of ports supported	8 x 1GE SFP+ ports and 12 x 10GE SFP+

15. The proposed product should have the following facilities:
 - a) DDoS mitigation solution should be a dedicated appliance (not a part of Router or Application Delivery Controller or Proxy based architecture or Stateful Device).
 - b) Latency should be less than 100 microseconds
 - c) Mitigation capacity 60 Gbps
 - d) Fully loaded SFP from day 1.
 - e) Support of handling Minimum 80,000 CPS-RSA for 2k key.
 - f) Behavioral analysis using behavioral algorithms and automation to defend against threats, including Mirai DNS Water Torture, Burst and Randomized attacks.
 - g) Advanced behavior-analysis technologies to separate malicious threats from legitimate traffic.

- h) Zero day attack protection should be provided by behavior-based protection with automatic signature creation against within few seconds of unknown, zero-day DDoS attacks.
- i) Custom hardware must be proposed using dedicated DoS Mitigation platform which off-loads high volume attacks, inspecting without impacting user experience.
- j) Behavioral DoS Protection should defend against zero-day network-flood attacks, detect traffic anomalies and prevent zero-day, unknown, flood attacks by identifying the footprint of the anomalous traffic.
- k) Network-flood protection should include:
 - i. TCP floods - which include SYN Flood, TCP Fin + ACK Flood, TCP Reset Flood, TCP SYN + ACK Flood, and TCP Fragmentation Flood
 - ii. UDP flood
 - iii. ICMP flood
 - iv. IGMP flood
- l) Support for the following:
 - i. Server-based vulnerabilities:
 - ii. Web vulnerabilities
 - iii. Mail server vulnerabilities
 - iv. FTP server vulnerabilities
 - v. SQL server vulnerabilities
 - vi. DNS server vulnerabilities
 - vii. SIP server vulnerabilities
 - viii. Worms and viruses
 - ix. Trojans and backdoors
 - x. Client-side vulnerabilities
 - xi. IRC bots
 - xii. Spyware
 - xiii. Phishing
- m) The OEM should have provision for specialized security experts who provide 24x7, real time professional services for the network facing DoS attack in order to restore network and service operational status:
 - i. 24/7 monitoring of the customer's service
 - ii. Real-time response to any threat detected
 - iii. Direct "hot-line" access
 - iv. Diverting the traffic when encountering a volumetric attack
 - v. Sending the customer a summary of each real-time attack case

ATC document for DDoS equipment at SDC Mohali dated 07.04.2020

- vi. Sending the customer a monthly report containing all threats
- vii. Periodically reviewing the network-security configuration
- n) Centralized Monitoring and Reporting solution should be provided from day 1 and with 5 years support.

16. The bidders requiring any clarification on the bid document may submit their queries via email to smanager.dgr@punjab.gov.in and saroj.semt@punjab.gov.in by 2:30 PM on 15.04.2020 in the following format in a spreadsheet file:

SN	Tender / ATC Clause No.	Page No.	Tender / ATC Clause detail	Amendment Suggestion	Sought /	Justification

17. Date and time of pre-bid meeting: 3:00 PM on 15.04.2020.