PSeGS invites bids on GeM portal from interested bidders for supply, installation and commissioning of Server Load Balancer 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. 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 prerequisite 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 and training 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. 2 days 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.	RAM (GB)	128		
2.	Concurrent sessions support (million)	60		
3.	SSL Transaction (TPS)	40K (2K), 25K (ECDSA P256)		
4.	Link Failover Detection Time (Seconds)	0.1		

- 15. The proposed products should have the following facilities:
 - a) Dedicated ADC solution (Independent Appliance), not a part of Firewall or UTM solution.
 - b) SFPs should be fully loaded from day 1.
 - c) Traffic ports: 8 x 10GbE SFP+ and 4 x 40GbE QSFP+ ports
 - d) Layer 4 Minimum connections per second: 2.0 Million
 - e) Layer 7 Minimum requests per second: 3.5 Million
 - f) TLS 1.1,1.2 &1.3 supported
 - g) Virtualization feature that virtualises the device resources including CPU, memory, network, operating system and acceleration resources.
 - h) Each virtual ADC instance contains a complete and separated environment of the following:
 - i. Resources

- ii. Configurations
- iii. Management
- iv. Operating System
- i) 10 virtual instances from day 1.
- j) The virtual instances management should have two management roles:
 - The Global Administrator creates, initially configures, and monitors Virtual Instances. The Global Administrator should be able to dynamically allocate CPU and throughput resources by assigning capacity units and adjusting throughput limits to a Virtual Instances.
 - ii. The Virtual Instances Administrator is responsible for the day-to-day configuration and maintenance of virtual instances using the same tasks as with traditional ADCs, except for those Virtual Instances tasks that only the Global Administrator performs.
- k) Should support Web Performance acceleration feature that should employ different acceleration treatments for different application and browser scenarios.
- I) Application Performance Monitoring feature should support the following:
 - i. Real user monitoring for any client with no agent software.
 - ii. Centralized monitoring of performance across Local and Datacenter.
 - iii. Measurement of real users and their actual transactions including errors eliminating manual scripting of synthetic transactions.
 - iv. Breaking down the measurements by specific application, location or transaction.
 - v. SLA is user-defined allowing full control over application.
- m) Appliance should support Local Application Switching, Server load Balancing, HTTP, TCP Multiplexing, Compression, Caching, TCP Optimization, Filter-based Load Balancing, Content-based Load Balancing, Persistency, HTTP Content Modifications.
- n) DNSSEC based Global Load Balancing.
- o) Support proximity that enables to determine which the fastest path available.
- p) DNS capability
- q) Support standard VRRP (RFC 2338) or Equivalent .
- r) Accessible through the below mediums:
 - i. Using the CLI
 - ii. Using SNMP
 - iii. REST API
 - iv. Using the Web Based Management
 - v. Dedicated Management Port

ATC document for Server Load Balancer at SDC Mohali dated 07.04.2020

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 14.04.2020 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 14.04.2020.