

भारतीय प्रौद्योगिकी संस्थान मद्रास चेन्नै 600 036 INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 मंडार एवं क्रय अनुभाग STORES & PURCHASE SECTION दूरमाषः (044) 2257 8285/8290/8287/8288 फैक्स: (044) 2257 8292/2257 8082 Telephone : (044) 2257 8285/8290/8287/8288 FAX: (044) 2257 8292/2257 8082 email ID- adstores@iitm.ac.in GST IN : 33AAAAI3615G1Z6



G. Chitrapavai Deputy Registrar (Stores & Purchase)

Dated : 14.12.2018

Tender No. IITM/SPS /CC/NETWORK FIREWALL/005/2018-19

Dear Sirs,

On behalf of the Indian Institute of Technology Madras, Tenders are invited for the purchase of

"Network Firewall "

confirming to the specifications enclosed.

Tender Documents may be downloaded from Central Public Procurement Portal **https://etenders.gov.in/eprocure/app**Aspiring Bidders who have not enrolled / registered in eprocurement should enroll / register before participating through the website https://etenders.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Help for contractors". [Special Instructions to the Contractors/Bidders for the e-submission of the bids online through this eProcurement Portal"].

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://etenders.gov.in/eprocure/app as per the schedule attached.

No manual bids will be accepted. All quotation both Technical bid and Financial bid should be submitted in the E-procurement portal.

	LAST DATE for receipt of Tender	:	03.01.2019 before 02.00 p.m.
	Date & Time of opening of Tender	:	04.01.2019 at 03.00 p.m.
1	Pre bid meeting :	:	21.12.2018 @ 03.00 pm Venue : Conference Room, 2 nd floor, Admin Building
			If you need more clarification on this tender documents or specifications of the equipment, you are invited to attend the pre bid meeting.
			As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal URL: <u>https://etenders.gov.in/eprocure/app</u>
A	Submission of Tender	÷	The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
			More information useful for submitting online bids on the CPP Portal may be obtained at: https://etenders.gov.in/eprocure/app
			Both Technical Bid & Price Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved

			to ignore any tender which fails to comply with the above instructions.
			No manual bid submission is entertained.
			REGISTRATION i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal URL: https://etenders.gov.in/eprocure/app by clicking on "Online Bidder Enrollment". Enrolment on the CPP Portal is
В	Instructions for online bid submission	:	free of charge. ii. As part of the enrolment process, the bidders will be required to choose a unique username and assign a
			password for their accounts.
			 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
			 iv. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.)
			v. <u>https://etenders.gov.in/eprocure/app?component=%24Dire</u> <u>ctLink&page=DSCInfo&service=direct&session=T</u> with their profile.
			vi. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
			vii. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
	Gu	vide	lines, Terms and Conditions of Tender
с	Searching for tender documents	:	i. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
			ii. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective "My Tender" folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
			iii. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
			i. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
D	Preparation of bids	:	ii. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any

			deviations from these may lead to rejection of the bid.
		111.	Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option.
		iv.	To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use " My Documents " area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
		v .	All the technical related documents need to be uploaded in Technical bids for evaluation purpose.
		i.	Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues.
E	Submission of bids	: ^{ii.}	The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
		111.	Bidder has to select the payment option as "Off-line" to pay the EMD as applicable. The original EMD DD has to reach IIT Madras on or before the closure date and time of the tender. If the DD is not received before the closure date and time the tender will be summarily rejected. The EMD document submitted physically to IIT Madras and the scanned copies furnished at the time of bid submission online should be the same otherwise the tender will be summarily rejected.
		iv.	A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected.
		۷.	The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
		vi.	The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
		vii.	The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
		viii.	Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
		ix.	Kindly add scanned PDF of all relevant documents in a

				single PDF file of compliance sheet.
			i.	Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
F	Assistance to bidders	:	ii.	Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120- 4001005]
G	General Instructions to the Bidders	•	i.	The tenders will be received online through portal <u>https://etenders.gov.in/eprocure/app</u> . In the Technical Bids, the bidders are required to upload all the documents in pdf format.
			ii.	Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <u>https://etenders.gov.in/eprocure/app</u>
			iii.	Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <u>https://etenders.gov.in/eprocure/app</u> under the "Information about DSC".
H	Opening of the tender	:		The online bid will be opened by a committee duly constituted for this purpose. Online bids (complete in all respect) received along with scanned copy of EMD (if any) will be opened as mentioned at "Annexure: Schedule". Bid received without EMD (if present) will be rejected straight way. The technical bid will be opened online first and it will be examined by a technical committee (as per the eligibility criteria, specification and requirement). The financial offer/bid will be opened only for the offer/bid which technically meets all requirements as per the specification.
1	Earnest Money Deposit (EMD)	:	i.	EMD for Rs. 3,00,000/-has to be paid by means of DD only. The scanned copy of DD to be uploaded in the online portal and the original DD should reach us on or before the due date and time.
			ii.	The original EMD DD should be sent either by REGISTERED POST ACKNOWLEDGEMENT DUE OR THROUGH MESSENGER. If the original EMD DD is sent through Messenger, the same has to be dropped in the TENDER BOX marked Stores & Purchase kept for this purpose in the REGISTRAR'S OFFICE (1 st Floor of Administrative Building) on or before due date 02.01.2019 before 02.00 p.m.
			iii.	If it is by post (Registered Post or Speed post only) the same should reach on or before due date 02.01.2019 before 02.00 p.m. otherwise it will be summarily rejected even if the scanned copy of the DD is enclosed in e-bid.
			iv.	Demand Draft may be drawn in favour of " The Registrar, II T Madras " payable at Chennai.
				The original EMD should be sent to: The Registrar INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI-600 036
			۷.	5% Performance Guarantee of the order value has to be submitted by way of DD/Bank Guarantee by the successful bidder only.

			vi.	Non submission of original EMD DD on or before the due date and time will result in rejection of the e-bid even if the proof of the DD attached in the e-bids submitted by the vendor.	
			vii.	The EMD will be returned to unsuccessful tenderer only after the tenders are finalized. In case of successful tenderer, Performance Guarantee will be retained till the installation and completion of warranty period.	
J	Marking on Technical Bid	:	i.	The technical Specification for this tender is given here under. The tenderer shall go through the specification and submit the technical bid.	
			ii.	The Technical bid should be submitted in the proforma given as per <u>Annexure A</u> in pdf format only through online (e- tender). No manual submission of bid is entertained.	
			iii.	All technical bid should have the page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.	
			iv.	The technical bid should consist of all technical details along with catalogue/brochureand other technical, commercial terms and conditions.	
К	Marking on Price Bid	:	i.	Price bid should be submitted in the prescribed proforma Annexure – B as per BOQ in PDF format through e-tender only. No manual submission of bid is entertained.	
			ii.	Price bid should indicate item-wise price <u>for all the items</u> mentioned in the technical bid.	
			iii.	Total value in the price bid should be indicated in figures & words clearly.	
L	For all the imported components	:	Quote	should be in US dollars	
2	Preparation of Tender:				
	 a) You should quote your product as per our specification requirements by mentioning our requirements and your offer side by side and the rate should be in total as per our requirements. We will not make any calculation if you have mentioned the rates of items separately. b) The offer/bids should be submitted through online only in two bid system i.e. Technical Bid and Price Bid separately. 				
	The online technical bid will be first opened and evaluated. In the screening, the Vendor Eligibility Criteria and technical evaluations as per ANNEXURE – A will be evaluated. The Price bid of only those bidders whosevendor eligibility criteria and technical compliance are found to be adequate by the Committee will be opened.				
3	Signing of Tender:				
	The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Specific attention is drawn to the delivery dates and terms and conditions enclosed herewith. Each page of the technical bid required to be signed and bears the official seal of the tenderers.				
	If the application is made by a firm in partnership, it shall be signed (with seal)by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed along with current addresses of all the partners of the firm shall also accompany the application.				
	If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The applicant shall also furnish a copy of the Memorandum of Articles of association duly attested by a Public notary.				
4	Period for which the offer will remain open:i. Firms tendering should note the period for which it is desired that their offers should remain				
	i. Firms tendering sho	buid	note the	period for which it is desired that their offers should remain	

		open for acceptance. If the firms are unable to keep their offers open for the specified period they shouldspecifically state the period for which their offers are being provided, however, the day up to which theoffer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, theoffer shall remain open for acceptance till the next working day.
	ii.	Quotations qualified by such vague and indefinite expressions such as 'subject to immediate acceptance', 'subject to prior sale' will not be considered.
	iii.	The Tender shall remain open for acceptance/validity till:120 days from the date of opening of the tender
5	Prices:	
	i.	The prices quoted must be nett. per unit as per the technical specification mentioned in Annexure B and must include all Shipping, Handling, etc The prices quoted by the Tenderer should be inclusive of GST and other statutory levies (and should be clearly stated to be so) which will be paid by the Purchaser/if legally leviable at the rate ruling on the date of supply as specified in the Acceptance of Tender. The percentage of tax etc. included in the price should be indicated in clear terms. If the inclusive price is not given, we will treat your offered rate as inclusive rate and comparison be made with others. If at the time of comparison of your offer without taxes etc. is happen to be lowest, you are bound to supply as per the offered rate, i.e. without taxes etc.
	ii.	Concessional GST :IIT Madras is eligible for concessional GST $@.5\%$ on IGST and $@.2.5\%$ for CGST and SGST as per Notification No. $45/2017$ – Central Tax (Rate) Dated 14th November 2017 & Notification No. $47/2017$ – Integrated Tax (Rate) Dated 14th November 2017, for procurement of Equipments and Consumables for research purpose. At the time of Invoicing, please state the concessional GST accordingly. During the supply of item, a certificate to this effect will be issued to your firm.
	III.	"In case of CIF/CIP shipments, kindly provide the shipment information at least 2 days in advance before landing the shipment along with the documents i.e. invoice, packing list, forwarder Name, address, contact No. in India to save penalty/demurrage charges (imposed by Indian Customs). Otherwise these charges will be recovered from the supplier/Indian Agent."
	iv.	Hence you are requested to be careful while quoting for tender. The price should be without customs duty since IIT Madras is eligible for payment of concessional customs duty against submission of Essentiality Certificate. The customs duty will be payable / reimbursable by us at the time of clearance on production of necessary proof. Hence these duties need not be included in the price while quoting. Necessary document will be provided at appropriate time. No price revision, changes in the specification already given or changes in the terms and conditions etc. during the period is acceptable.
6	V.	Discount, if any, should be indicated prominently.
	of the e paid in incase o to the In	Commission: Agency commission if any will be paid to the Indian agent in Rupees on receipt quipment and after satisfactory installation and commissioning. Agency Commission will not be foreign currency under any circumstances. The details should be explicitly shown in Tender even if Nil commission. The tenderer should indicate the percentage of agency commission to be paid dian agent. Percentage of agency commission should be clearly mentioned in the price bid.
7	after su vendor	nt: No Advance Payment will be made for Indigenous purchase. Payment will be made only apply and satisfactory installation and also technical clearance form Computer Centre, IITM. The must supply soft copy & Hardcopy of wiring diagram after completion of the work.
	90% p satisfac deducte any am Hence,	Payment: Normally for more than USD 2001, payment will be made by Letter of Credit only. ayment will be made initially by Letter of Credit and balance 10% will be paid only after tory installation and commissioning on the same LC. Demurrage charges (if any) will be ed from the balance 10% . Initial opening of Letter of Credit charges will be borne by us. If the the term of the charges for the amendment will be borne by the supplier only. care should be taken in all respects before opening of Letter of Credit.
8	Failure	and conditions : to comply with any of the instructions stated in this document or offering unsatisfactory ations for non compliance will likely to lead to rejection of offers.
9	Right o	f Acceptance:
		DRAS reserves the right to reject the whole or any part of the Tender without assigning any
10		or to accept them in part or full.
10		unication of Acceptance:
	Accepto	ance by the Purchaser will be communicated by Post, if required, and the Company's

	acceptance communicated to us formally in writing.
11	Warranty : Warranty should be 5 years. Indicate price change (if any) for extra year warranty.
	Service : 8 X 5 X NBD
12	Delivery Period: Items should be delivered within 4 to 6 weeks from the date of P.O./Award of Contract (AOC)Please indicate the actual delivery period clearly. No further extension of time will be allowed.
	Non delivery of items will lead to cancellation of Purchase Order without any notice. In addition, action may be taken for removing them from our mailing list.
13	In terms of Rule 173 (iv) of General Financial Rules, 2017 the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of its bid.
14	Conditions of contract:
	Tenderer should quote on the basis of the conditions referred to in Para of the invitation to tender and tender papers. In case these terms and conditions are not acceptable to the tenderer, he should specifically state the deviation(s) there from in the body of the tender.
15	Transit Insurance: The Purchaser will not pay separately for Transit Insurance.
16	Tenderer shall submit along with his Tender:
	Name and full address of the Banker and their swift code and PAN No. and GSTIN number.
17	Guarantee:
	The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications. Tenderer should indicate the period for which the said goods/articles would continue to confirm to the specifications.
18	Jurisdiction:
	All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued.
19	Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
	 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
	 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by theForce Majeure event.
20	Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause
21	For Technical Related Queries Contact :
	Mr. V. Selvaraju, B.E., M.E.,
	Assistant Systems Engineer
	Computer Centre
	IIT Madras
	Chennai - 600 036.
	Phone No: 044- 2257 4988

Yours Faithfully

-sd/-Deputy Registrar (Stores & Purchase Section)

ACKNOWLEDGEMENT

It is hereby acknowledged that I/We have gone through all the points listed under "Specification, Guidelines, Terms and Conditions" of tender document. I/We totally understand the terms and conditions and agree to abide by the same.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

DECLARATION

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

S. No.	Firewall Appliances specifications
I VEND	OR ELIGIBILITY CRITERIA:
1	The Vendor should have office at Chennai with experts / specialists to handle Installation, Configuration and solving all types of issues in time. [Self Declaration]
2	MAF - Manufacturer Authorization Form to be attached for the quoted specification [MAF to be attached for Firewall and Tranceiver modules]
II TECH	NICAL REQUIREMENT
	Specify the proposed solution Brand name, Model no., Supporting software packages details
1	The Proposed solution should be leaders in the latest (2018) gartnermagic quadrant for enterprise firewall. [Gartner Certificate to be attached]
2	Should be recommended in NSS Labs, NGFW 2017 / 2018 [NSS Certificate to be attached]
3	Should have exploit block rate of above 95% in NSS Labs NGFW 2018 [NSS Certificate to be attached]
4	Should be passed in NSS labs ngfw 2017/2018 evasion testing and it Should be blocked all 190 out of 190 evasions [NSS Certificate to be attached]
5	The appliance-based security platform should be capable of providing firewall, application visibility, IPS, Antivirus / Zero-day protection, Antibot, Antispam, Web filtering, DLP (Data Leak Protection), IPSEC VPN and SSL VPN.
6	The appliance should have dual power supply unit for redundancy
7	Appliance should have minimum power Consumption and power consumption value should be mentioned in the data sheet.
8	Appliance should support UTP, SFP, SFP+, QSFP28
9	The appliance should have at least 4 x 1G UTP, 6 x 10G Fiber port compatible to 10 G SFP+, 4×40 G QSFP28 Interfaces.
10	The appliance should support 15,000 users and 35,000 devices

11	Proposed platform should have future scalability and capability to deliver minimum of 100 Gbps Threat Protection throughput.
12	The Appliance should support firewall throughput (FW+AVC+AV / Zero- day protection +IPS) of 50 Gbps or more. (or)The Appliance should support SSL Inspection Throughput (IPS, HTTP) : 90 Gbps or moreThe Appliance should support Application control throughput (HTTP 64K) : 150 Gbps or moreThe Appliance should support NGFW throughput : 90 Gbps or more The Appliance should support Threat Protection throughput : 50 Gbps or more The Appliance should support IPS throughput of 110 Gbps
13	The Appliance should support Concurrent sessions (TCP) : 30 millions or more
14	The Appliance should support New sessions per sec (TCP) : 300 K or more
15	The Appliance should support IPSEC VPN throughput : 15 Gbps or more
16	Device should support at least 1000 VLANs
17	Appliance should support 20,000 or more concurrent ssl VPN users
18	Appliance should support 15,000 client to site and site to site VPN
19	Appliance should have 1 TB or more internal storage
20	The appliance should have network cards and processing cards for better availability and performance
21	Device should support creating access rules with IPv4 & IPv6 objects simultaneously from day 1
22	Should support Static, RIP, OSPF, OSPFv3 and BGP
23	Appliance should support manual NAT
24	The appliance should support DHCPv6
25	The appliance should support Multicast protocols like IGMP, PIM, etc.
26	The system should supports SNMP Versions 1, 2c and 3
27	The appliance should support security policies based on group names in source or destination fields or both
28	The appliance should support capability to limit bandwidth on basis of apps/groups, Networks / Geo, Ports, etc.
29	The appliance should support Stateful firewall inspection
30	Appliance should support Active/Standby and Active/Active fail over
31	Appliance should support FQDN policy based routing
32	The appliance should be capable of tuning IDS/IPS, AV, URL Filtering (ex., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.

33	The appliance Should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.
34	The appliance should be able to link Active Directory and LDAP user names to IP addresses related to suspected security events.
35	The appliance should have inbuilt anti virus detection and should be able to quarantine the IP for a defined duration and should be able to restrict access of infected host. The Solution should prevent malware based threats.
36	The solution must provide IP reputation feed that comprised of several regularly updated collections of poor reputation of IP addresses determined by the proposed security vendor
37	The appliance must support URL and DNS threat feeds to protect against threats
38	The appliance should cater to reputation and category based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies in more than 65 categories from day one
39	The appliance should support more than 2500 application layer and risk- based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.
40	The Appliance OEM must have its own threat intelligence analysis centre and should use the global footprint of security deployments for more comprehensive network protection.
41	The detection engine should have the capability of detecting and preventing a wide variety of threats (e.g., malware, network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, etc.).
42	The appliance should be able to identify attacks based on Geo-location and define policy to block on the basis of Geo-location
43	The proposed solution should support AAA solution for user authentication
44	The detection engine must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioural anomaly detection techniques. Support to Identify and explain each type of detection mechanism.
45	The device should have inbuilt antibot and should prevent clients from contacting C&C
46	The appliance should not allow clients contacting malware infected domains

47	Appliance should be able to share threat intelligence with other security components in the network natively
48	Solution should have inbuilt application control
49	Solution should support policy based routing to provide better user experience
50	Solution should support scanning the files for threats with file size starting from KB to 500 MB.
51	The appliance should support interface based polices and should have policy for multiple interfaces bundled together
52	Should have inbuilt DNS filter to provide DNS based security
53	Should have integration for Domain and IP Reputation based protection
54	Solution should be able to exchange threat intelligence with other components like WAF/NAC/SIEM etc
55	Solution should support device based / IP based restriction
56	Proposed solution should have SSL/SSH inspection
57	Should be able to download and update firmware from the firewall
58	The management must be accessible via web-based interface without any additional client software
59	The management solution must be capable of role-based administration
60	The proposed solution should have dedicated management and reporting solution / Analyzer for accessing up to 10 TB or more of syslog files
61	The analyzer / reporting solution must provide multiple report output types or formats, such as PDF, HTML, and CSV.
62	The analyzer / reporting solution must have reporting function to perform a detailed search on User Account with Downloadable format in PDF, HTML, CSV. It should support search options (User name, IP Address, Time zone)
63	The solution must support multiple mechanisms for issuing alerts (e.g., SNMP, e-mail, SYSLOG).
64	The solution must provide robust reporting capabilities, including a selection of pre-defined reports and the ability for complete customization and generation of new reports.
65	The solution must provide risk reports like advanced malware attacks
66	Appliance Should support REST/API to support API integration

	Appliance should have inbuilt web management for configuring polices,
67	objects etc
68	The solution should support COA (Change of Authorization) functionality to integrate with AAA to restrict users based on data used (User based quota management).
69	The Proposed solution should have bandwidth restriction in web filtering to allocate certain bandwidth per user per day
70	Message should be displayed to the blocked user that he exceeded his daily quota of data assigned
71	The proposed solution should have AAA solution
72	 All performance numbers mentioned in the data sheet should be arrived by: 1) Enabling scan of all packets by IPS & Anti-Virus/zero-day protection 2) IPS to scan all parts of session in both direction 3) AV to scan the complete payload 4) Complete Threat Prevention signatures to be enabled.
73	Data sheet should be submitted as proof for all specifications
74	Lab. Test report of Firewall throughput should be submitted after enabling(i) SSL Inspection Throughput (IPS, AV, HTTP) : 90 Gbps(ii) Application Control Throughput (HTTP 64K) : 150 Gbps(iii) Threat Prevention Throughput : 50 Gbps[Lab Test Report to be attached]
75	Product supplied should be directly installed by OEM professionals / OEM Certified professionals.
76	Supplied products and licenses should be supported for 5 years warranty from the date of Installation completion by OEM
	Authentication, Authorization, and Accounting (AAA) Specification
1	Proposed AAA solution should be an Appliance/VM based solution. OEM should include the required software and license to install on VM. The no. of cores, Memory and storage space required should be specified.

2	Proposed solution should include AAA Solution and provide a highly powerful and flexible attribute-based access control solution that combines authentication, authorization and accounting (AAA) and profiling.	
3	The proposed solution should have Built-in user database with per device/user credential management and should also provide Seamless back end integration with Active Directory, LDAP(open LDAP). Should have capability to authenticate with open LDAP using captive portal.	
4	The appliance should support user to remove his authenticated devices / IP's.	
5	The AAA solution should have SSO integration with the NGFW	
6	The system should show the user statistics in dashboard to display the latest data on the number of different users with different statuses(Authenticated, connected, Active, Pending Approval, Rejected, suspended, Expired users)	
7	 System should provide a way to give levels of time access to different User accounts and also a level of Data Usage Data Upload - Apply a Data Usage upload restriction to user, and the usage should be determine in KB, MB or GB. Data Download - Apply a Data Usage download restriction to user and the usage should be determine in KB, MB or GB. Total Upload & Download - Apply a Total Data Usage restriction to user and the usage should be determine in KB, MB or GB. 	
8	The appliance should able to run a report on successful or failed LDAP Authentications	

<u>SCHEDULE</u>

Name of Organization	Indian Institute of Technology Madras
Tender Type	OPEN
(Open/Limited/EOI/Auction/Single)	
Tender Category (Services/Goods/works)	Goods/Services
Type/Form of Contract (Work/Supply/	Supply
Auction/ Service/ Buy/ Empanelment/ Sell)	
Product Category (Civil Works/Electrical	Network Firewall
Works/Fleet Management/ Computer	
Systems)	
Source of Fund (Institute/Project)	IIT Madras
Is Multi Currency Allowed	No
Date of Issue/Publishing	14.12.2018
Pre- bid Meeting Date and time	21.12.2018 @ 03.00 pm
Document Download/Sale Start Date	14.12.2018
Document Download/Sale End Date	03.01.2019
Last Date and Time for Uploading of Bids	03.01.2019 before 02.00 p.m.
Date and Time of Opening of Technical Bid	04.01.2019 at 03.00 p.m.
EMD	Rs. 3,00,000/-
No. of Covers (1/2/3/4)	2
Bid Validity days (180/120/90/60/30)	120 Days
Address for Communication	The Deputy Registrar
	Stores & Purchase Section
	IIT Madras
	Chennai – 600 036
Contact No.	<u>Technical Related Queries:</u> Mr. V. Selvaraju,B.E.,M.E., Assistant Systems Engineer Computer Centre IIT Madras Chennai - 600 036.
	Phone No: 044- 2257 4988
Email Address	E-mail id : selva@iitm.ac.in adstores@iitm.ac.in
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