TENDER DOCUMENT for RENOVATION / RESTORATION OF NDDB OFFICE

AT SAFDARJUNG ENCLAVE, NEW DELHI

TENDER

FOR

IT WORKS

NDS/ADMIN/HO/ITWORK/2024-25/FEB/01

Issued By:

NDS SAFDARJUNG NEW DLEHI

National Dairy SERVICES

NDDB HOUSE OPP KAMAL CINEMA SAFDARJUNG ENCLAVE DELHI 110029
Phone Nos. 01149883000, 49883088

National Dairy services (NDS) invites "Online E-Tender" from reputed eligible bidders

for the following works:

Work	Bid Ref Number	EMD	Bid Submission End Date
Supply of IT Items	NDS/ADMIN/HO/ITWORK/2024-25/FEB/01 NCDFI Bid Number: 104	Rs 90,000	9 March 2025

Earnest Money Deposit (EMD)

All bids must be accompanied by EMD and the same should be in the form of Demand Draft or NEFT/RTGS.
The EMD, shall be in the form of NEFT/RTGS at:
• Beneficiary Name: National Co-operative Dairy Federation of India Ltd.
• Bank Name: Union Bank
• Branch Address: Anand Branch (Amul Dairy Road), Anand: 388001
• Account Number: 520141000774940, IFSC Code: UBIN0905208
As the bidding is processed through the NCDFI Portal, transaction fees and TDS will be adjusted from the deposited EMD amount:
Transaction Fee: 0.40% of the contract value (+ applicable GST) for successful bidder

TDS u/s 194/O: 0.10% of the contract value.

Any adjustments in transaction fees and TDS based on the final contract value must be paid promptly to the same NCDFI account:

Important instructions for E-procurement (NDDB)

a) The bid document will be available in the website at www.nddbdairyservices.com, & https://www.ncdfiemarket.com/index.php/auctions-2/ and can be downloaded and used as tender document for uploading the offer.

b) The interested vendors are required to send an email at etenders@ncdfiemarket.com by providing the following detail/information prior to 2 days before the bid end date:

- ➢ Name of the organization:
- ➢ Name of the contact person:
- ➢ Contact No:
- ➢ E-Mail:
- ➢ Status of Registration with NCDFI (Yes/No):

Registration/bidding guidance will be provided by NCDFI team to interested bidders

c) It is hereby brought to the notice of all bidders that if any change/ additions/ deletions/ alterations are found to be made by them in the tender and the same is subsequently noticed at any stage, even after award of the contract, the bidders are liable for all consequences thereof and NDS shall be free to take suitable action as deemed necessary

For further details or for downloading the bid documents, please visit web site www.nddbdairyservices.com https:/ncdfiemarket.com/ http://www.nddbdairyservices.com; or contact Purchase, NDS, New Delhi (Email: samar.rehman@nddbdairyservices.com amol.jadhav@nddbdairyservices.com on any working day. The intending bidders are required to submit their offer electronically through e-tendering portal. No physical tender is acceptable by NDDB DS.

PROJECT REQUIREMENT COMPLIANCE - ICT	Compliance (Yes/No)
NDS Dairy Services (NDS) is in a process of setting up complete networking infrastructure with latest technological standards with complete protection and coverage of cyber security controls, considering this objective NDS is expecting a convereged security enabled netoworking infrastructure as Security driven networking.	
The NDS office is expecting complete solution on network which should include Firewall and wired network devices that comprise the local-area network (LAN) edge along with a true secure office networking solution that would provides tight integration to ensure NDS can achieve full visibility and control across entire environment, creating access policies once, and confidently enforcing them.	
Security driven Networking should include below key components:- 1. Next-generation firewall (NGFW) which provides consolidated comprehesive critical security capabilities such as intrusion prevention system (IPS), web filtering, and automated threat protection with high- performance connectivity and networking. 2. Local-area network (LAN) edge to ensure all the users and devices can easily get connected. This comprised of:- i. Wired switches- Core and Aceess Switches ii.Wireless APs- indoor 3. Central network analysis and AAA solution, this should ensure tight integration of entire ecosystems and to enable and maintain visibility and control.	
Solution must facilitate complete integrated and orchestrated network access layer to drive simplicity. It must provide automation functionalities such as automated provisioning of the access layer with complete visibility and control centrally to create policies once and confidently enforce them through your LAN edge with centralized architecture and control.	
Solution must have simplified and central management which consolidates visibility and control to enable IT teams to maintain consistency across firewalls, switches, and wireless access points (APs). To achive this all the mentioned components should be preferably from single OEM however bidders can propose multiple solutions with required intgreations and usecases to be achieved from day-1.	
Solution must provide automated threat intelligence, to ensures of having the latest information and protections automatically applied and enforced across firewall, switches and AP's	
Proposed solution must have its own threat intelligence analysis center and should use the global footprint of security deployments for more comprehensive protection, threats feeds must get integrated with firewall, switches and AP for NDS.	
Proposed SDN must preferably have same central OS at all layers to manage and provide complete centralized control over office networking. Solution must have facility to have security grid with automation capability to create key stiches using inetgrations out of the box for firewalls, Switches and AP's which should be monitored basis regular triggers to provide automated action capability.	
Proposed SDN Solution must have capability to provide security grid topologies of all connected ecosystems: 1. The Physical Topology which should shows the physical structure of network, including all connected devices and the connections between them. 2. The Logical Topology which must shows information about the interfaces that connect devices to the Security grid.	
Proposed SDN Solution should support in-built network access control feature to bounce all the devices by default in onboarding VLAN and based on the devices matching with the specified criteria devices should be assigned to a specific VLAN.Criteria: a.MAC address, b. hardware vendor, c. device family, d. device type, e. device operating system and user group. In case, above mentioned functionality is not in-built in the switch bidder can provide additional required hardware and software resources of same OEM whose switches are proposed to meet the mentioned functionality.	
Proposed SDN Solution allow switch administrators to use MAC addresses to quarantine hosts and users connected to a Switch unit. Quarantined MAC addresses should isolated from the rest of the network and LAN.	
Proposed SDN Solution must support to block intra-VLAN traffic to prevent the direct client-to-client traffic visibility at the layer-2 VLAN layer. The switch management system should inspect north-south and east-west traffic from same VLAN or different VLAN	
Proposed SDN Solution should be in the Leaders' Quadrant of the latest Gartner Magic Quadrant for Firewall, wired and wireless segment	
Proposed SDN Solution should support TLS 1.3.	
Proposed SDN Solution support a guest VLAN assignment for unauthorized users. and it should have option to specify Quarantine VLAN for users whose authentication was unsuccessful.	

Solution must provide dedicated logging and correlation capability to provide centralized security analytics, end-to-end security posture awareness and control of deployment, it should provide detailed data capture for forensic purposes to comply with policies regarding privacy and disclosure of information security breaches. Proposed network analytics solution must provide dedicated Network Event Correlation which must allow IT administrators to more quickly identify and react to network security threats across the network. The solution should provide centralized security event analysis, forensic research, reporting, content archiving, data mining and malicious fendpoint quarantining.	

General Terms & Conditions

1. Single Quotation:

- Each bidder shall submit only one quotation.
- Bidders must not contact other bidders regarding this RFQ.

2. Eligibility Criteria:

- The bidder, in the same name & style, should be in business for at least three years at the time of bid opening. In case of a name change due to merger/acquisition/status change, eligibility will be considered based on documentary evidence.
- The bidder must have valid registration under applicable Acts, including but not limited to:
  - Income Tax
  - Companies Act
  - Goods & Service Tax (GST)
  - Building and Other Construction Workers' Welfare Cess Act
  - Employee State Insurance
  - Contract Labour
  - Provident Fund
- The bidder's financial turnover in the same name & style for each of the last three financial years should be at least 60% of the estimated cost.
- The bidder should have a positive net worth for at least the last two financial years.
- The bidder should have a positive cash flow in at least one financial year out of the last three.
- The bidder should have successfully executed/completed contracts of a similar nature within the last five years, meeting at least one of the following criteria:
  - One contract/work of similar nature costing at least 80% of the estimated cost.
  - Two contracts/works of similar nature each costing at least 50% of the estimated cost.
  - Three contracts/works of similar nature each costing at least 40% of the estimated cost.

3. Validity of Quotation:

- The quotation must remain valid for at least 60 days from the submission deadline.

4. Evaluation Criteria:

- The bidding process follows a two-step evaluation system:
  1. **Technical Bid Evaluation** – Ensures compliance with required specifications and criteria.
  2. **Financial Bid Evaluation** – Only for technically qualified bidders.
- The Purchase Committee will evaluate quotations based on:

- o   Compliance with terms, conditions, and specifications & Eligibility Criteria
- o   Inclusion of GST, packing, forwarding, freight, and insurance charges.
- Evaluation will be on an overall basis.
- The decision of NDDB DS will be final and binding.

5. Award of Contract:

- The contract will be awarded to the bidder offering the lowest price while meeting technical requirements.
- NDDB DS reserves the right to accept or reject any quotation or cancel the bidding process without prior notice.
- The successful bidder will be notified before the expiration of the quotation validity period.

6. Terms of Payment:

- Payment will be made within 30 days after the successful rollout of the setup.

7. Inspection and Testing:

- NDDB DS or its appointed agency may conduct stage-wise and pre-dispatch inspections to ensure compliance with technical specifications.

8. Supplier Performance and Delays:

- The supplier must adhere to the delivery schedule specified in the Purchase Order.
- Any delay must be communicated in writing, including the cause and expected duration.
- NDDB DS may extend the delivery timeline at its discretion, with or without penalties, through an amendment to the Purchase Order.

9. Liquidated Damages:

- A penalty of 0.5% of the delayed goods' price per week will be levied, up to a maximum of 10% of the total order value.
- Beyond this limit, NDDB DS may terminate the contract.

10. Taxes and Duties:

- The supplier will bear all applicable taxes and duties until the goods are delivered.

Price Schedule

S.No	Item Description	Base Prcie	GST	Total Prcie
1	Structure Cabling System - Passive OFC Backbone + Racks			
2	Active Components - Switches, WIFI, UTM/Firwall, **AAA/MFA,** WiFi Controller, IP PDU, Temperature Humidity Monitoring Device			
3	Server Room - Access Control System			
GRAND PROJECT TOTAL (INR)				

BOQ

S.No.	Item	Part Code	UOM	Quantity	UNIT RATES (INR)	TOTAL AMOUNT (INR)	Considered Make / Model
	ACCESS CONTROL SYSTEM FOR 1st Floor Server Room						
1	Access Control Device, **with 3 Years OEM Warranty**	RBH/LENEL/HID/BOSCH/eSSL/BEL	Nos.	1			eSSL F22 (Fingerprint + Card (MiFare) + PIN)
2	Exit Push Button, **with 3 Years OEM Warranty**	RBH/LENEL/HID/BOSCH/eSSL/BEL	Nos.	1			eSSL Push-9-RC
3	Electromangnetic Lock, **with 3 Years OEM Warranty**	RBH/LENEL/HID/BOSCH/eSSL/BEL	Nos.	1			eSSL EML600-10-2
4	Magnetic Contact Sensor / Door Position Sensor, **with 3 Years OEM Warranty**	RBH/LENEL/HID/BOSCH/eSSL/BEL	Nos.	2			BEL EMC-1008-B
5	Emergency Door Release / Glass Break Unit, **with 3 Years OEM Warranty**	RBH/LENEL/HID/BOSCH/eSSL/BEL	Nos.	1			BEL E-108 DPDT
6	Contact less Mifare card	RBH/LENEL/HID/BOSCH/eSSL/BEL/NXP	Nos.	5			NXP
7	2/4/8 Core Cables, Connectors, Brackets & other accessories as required for complete installation of the System	SKYTONE/ BELDEN/BOSCH/eSSL/RBH/LENEL/HID	Lot	1			SKYTONE / BELDEN
8	Installation, Termination, Configuration, Testing, Commissioning & Handover	Services	Lot	1			Services
PRE TAX TOTAL (INR) - SUPPLY + INSTALLATION							
Tax @ 18%							
GRAND TOTAL							

			BILL OF QUANTITES - ACTIVE COMPONENTS				
S.NO.	**Recommended Makes**	**Part Code**	**DESCRIPTION**	**UOM**	**Q'ty**	**UNIT RATES (INR)**	**TOTAL AMOUNT (INR)**
2			**ETHERNET CORE SWITCHES**				
2.1	Alcatel-Lucent / Fortinet / Juniper	**FS-1024E or Equivalent**	**LAYER3 - 24 Port x 10G Fiber CORE Switch** SFP+ Slots Populated with **12 Nos x 10G SFP+ MM OM4** Modules Switch Includes IoS, IP Base, India 220V AC Type A Power Cable, Power Supply, Redundant Power Supply + L3 Fiber Switch with 3 Year OEM Warranty	Each	2		
3			**ETHERNET ACCESS SWITCHES**				
3.1	Alcatel-Lucent / Fortinet / Juniper	**FS-148F or Equivalent**	**LAYER2 - 48 Port x 100/1000 Mbps Ethernet NON-PoE Ports + 4 x 10G FIBER STACKABLE ACCESS Switch** SFP Slots Populated with 2 Nos x 10G SFP+ MM OM4 Modules Switch Includes IoS, IP Base, India 220V AC Type A Power Cable, Power Supply, Stacking Cable 50 CM, Stacking Return Cable 1 Mtr + L2 Stackable Switch with 3 Year OEM Warranty	Each	0		
3.2	Alcatel-Lucent / Fortinet / Juniper	**FS-124F or Equivalent**	**LAYER2 - 24 Port x 100/1000 Mbps Ethernet NON-PoE Ports + 4 x SFP+ Slots STACKABLE ACCESS Switch,** Should be having **2x10G SFP + MM OM4 Fiber modules** to connect with Layer 2 and **2xSFP+ 10GBaseT** to connect servers. Switch Includes IoS, IP Base, 220V AC Type A Power Cable, Power Supply, Stacking Cable 50 CM, Stacking Return Cable 1 Mtr + L2 Stackable Switch with 3 Year OEM Warranty	Each	2		
3.3	Alcatel-Lucent / Fortinet / Juniper	**FS-124F-FPOE or Equivalent**	**LAYER2 - 24 Port x 100/1000 Mbps Ethernet POE Ports + 2 x 10G Fiber STACKABLE ACCESS Switch** SFP Slots Populated with 2 Nos x 10G SFP+ MM OM4 Modules Switch Includes IoS, IP Base, India 220V AC Type A Power Cable, Power Supply, Stacking Cable 50 CM, Stacking Return Cable 1 Mtr + L2 Stackable Switch with 3 Year OEM Warranty - for CCTV	Each	7		
4			**WIRELESS ACCESS POINT**				
4.1	**Fortinet or Equivalent**	FAP-231G	**802.11ax Wi-Fi 6E Indoor Wireless Access Point** with Tri-Radio 2.4 GHz + 5 GHz + 5 GHz / 6 GHz / Scanning, 2x2 MU-MIMO, Internal Antenna, WAP Software Image, AP Low Profile Mounting Bracket, Indian Power Cable & Adapter, OEM Warranty for 3 Years.	Each	17		
5			**FIREWALL / UTM / MFA / AAA**				
5.1	**Fortinet**		**Firewall, Unified Threat Management Appliance with inbuilt wifi controller, SSL VPN Capable, Minimum 16 Nos. x 1Gbps Ports** MM OM4 **, 4Nos. x 10Gbps SFP+ MM OM4 Ports, 8Nos. x SFP Ports MM OM4, USB Management Port, 1 x Console (RJ45) Port,** includes Indian Power Cable & Adapter, **OEM Warranty for 5 Years.**	Each	2		
5.2	**Fortinet**		**Centralized software based Virtual Logging and Analysis Appliance, with 5 Years OEM Warranty**	Each	1		
5.3	**Fortinet**	**FTM-ELIC-100 with FAC-VM-BASE or Equivalent**	**AAA for 100 Users, VM based Forti Authenticator with Electronic FortiToken Mobile, Multi-Factor Authentication (MFA) 100 Tokens, with OEM warranrty of 5 Years**	Bundle	1		
SUPPLY ONLY TOTAL (INR)							
6			**INSTALLATION & SERVICES**				
6.1	Services		Installation & Confirguration of L3 Core Switch 24 Port Fiber Switch	Nos.	2		
6.2	Services		Installation & Confirguration of L2 48 Port Access NON-POE Switch	Nos.	0		
6.3	Services		Installation & Confirguration of L2 24 Port Access NON-POE Switch	Nos.	2		
6.4	Services		Installation & Confirguration of L2 24 Port Access POE Switch	Nos.	7		
6.4	Services		Installation & Confirguration of WIFI Access Points	Nos.	25		
6.5	Services		Installation & Confirguration of WiFi Controller	Nos.	1		
6.6	Services		Installation & Confirguration of UTM/Firewall/Analyser	Nos.	1		
6.7	Services		Installation & Confirguration of AAA Software, Integration & configuration of MFA Tokens	Nos.	1		
INSTALLATION TOTAL							
PRE TAX TOTAL (INR) - SUPPLY + INSTALLATION							
Tax @ 18%							
GRAND TOTAL							

			BILL OF QUANTITES - PASSIVE COMPONENTS & RACKS				

S.NO.	Recommended Makes	Part Code	DESCRIPTION	UOM	Q'ty	UNIT RATES (INR)	TOTAL AMOUNT (INR)
A			Structured Cabling System - OPTICAL FIBER BACKBONE				
A.1	Systimax / Siemon / Panduit		12 Core MM OM4 Indoor/Outdoor OFC Cable x 2 runs - From 1st Floor Server Room to Each Floor ICT Rack Location, (Primary & Secondary).	Mtrs	1080		
A.2	Systimax / Siemon / Panduit		96 Core (48 Duplex Port) OM4 MM LC Duplex Retractable Type Fiber Patch Panel, Rack Mountable, 1U/2U, Fully Loaded with LC Duplex Coupler panels / Cassettes, Blank Panel & 96 Nos MM OM4 Single Core Pigtails, 1M, etc complete in all respects	Nos.	2		
A.2	Systimax / Siemon / Panduit		24 Core (12 Duplex Port) OM4 MM LC Duplex Retractable Type Fiber Patch Panel, Rack Mountable, 1U/2U, Fully Loaded with LC Duplex Coupler panels / Cassettes, Blank Panel & 24 Nos LC MM OM4 Single Core Pigtails, 1M, etc complete in all respects	Nos.	2		
A.4	Systimax / Siemon / Panduit		LC - LC OM4 MM 2 Core Duplex Fiber Patch Cord, 3 Mtrs	Nos.	30		
A	SCS - OFC BACKBONE TOTAL (INR)						
B			TWO POST FLOOR STANDING NETWORK RACK for 1st Floor SERVER ROOM & BASEMENT FLOOR				
B.1	MTS / President / Rittal/ VAL Rack		45 U Two Post Open Frame Network Rack, & earthling kit	Each	2		
B.2	MTS / President / Rittal/ VAL Rack		1 Mtr Ladder Tray for Open Frame Rack	Each	4		
B.3	MTS / President / Rittal/ VAL Rack		45U Full Height Double-Sided Vertical Cable manager Finger Duct, 6" Wide	Each	4		
B.4	MTS / President / Rittal/ VAL Rack		19" Rack Mountable 1U PVC Cable Manager Finger Duct with Cover	Each	20		
B.5	MTS / President / Rittal/ VAL Rack		19" Rack Mountable 2U PVC Cable Manager Finger Duct with Cover	Each	6		
B.6	MTS / President / Rittal/ VAL Rack		19" Rack Mountable Horizontal AC Distribution Box with Fuse & Power Indicator, 6/16 Universal Type PDU	Each	4		
B.7	MTS / President / Rittal/ VAL Rack		Captive Mounting Hardware	Pk of 20	5		
C			FOUR POST FLOOR STANDING SWITCH / SERVER RACK for 1st Floor Server Room				
C.1	MTS / President / Rittal/ VAL Rack		42 U (600 Wx600 D) Network Rack Includes - FAN Tray on top with 4 Fans, - 1 Set (Pk of 20) Captive Mounting Hardware - 5 Pks 42U - Vertical AC Distribution Box with Fuse & Power Indicator, 12 Port 6/16 Universal Type PDU _01 Nos, Castor wheels with brakes - 4 Nos., Lockable Front Glass door- 1 No., Lockable Rear Perforated Steel Door (Double Leaf) - 1 Pair., Metal Perforated Side Panels - 2 Nos, Stationary shelf - 1 No. & Earthling kit - 1 Set	Each	1		
C.2	Rittal or Equivalent		IPU PDU (20 nos. C13 Socket & 4 nos. C19 Socket) - Single Phase, for Monitoring & Control through web browser & E-mail alert Capable of provide information and monitoring for Temperature, Humidity, Power within Rack		1		
C.3	Rittal or Equivalent		Temperature & Humidity Combo Sensor		1		
D			FOUR POST FLOOR STANDING NETWORK RACK for Ground Floor, 2nd Floor, 3rd Floor, 4th Floor, 5th Floor, 6th Floor				
D.1	MTS / President / Rittal/ VAL Rack		24 U (800 Wx600 D) Network Rack Includes - FAN Tray on top with 4 Fans, - 1 Set (Pk of 20) Captive Mounting Hardware - 5 Pks 24U - Vertical AC Distribution Box with Fuse & Power Indicator, 12 Port 6/16 Universal Type PDU _02 Nos, Castor wheels with brakes - 4 Nos., Lockable Front Glass door- 1 No., Lockable Rear Perforated Steel Door (Double Leaf) - 1 Pair., Metal Perforated Side Panels - 2 Nos, Stationary shelf - 1 No. & Earthling kit - 1 Set	Each	6		
RACKS SUPPLY ONLY TOTAL (INR) = B+C+D							
E			INSTALLATION & SERVICES				
E.1	Services		Laying of 12 Core OFC Cable	Mtrs	1080		
E.2	Services		INSTALLATION of 24 Core / 96 Core Fiber Patch Panels	Nos.	4		
E.3	Services		Splicing of Pigtails & Connectorization	Nos.	336		
E.4	Services		Installation of Two Post Open Frame Rack & Ladders	Nos.	2		
E.5	Services		Installation of Four Post Closed Rack	Nos.	7		
E	INSTALLATION TOTAL						

PRE TAX TOTAL (INR) - SUPPLY + INSTALLATION	
Tax @ 18%	
GRAND TOTAL	

ICT SYSTEM TECHNICAL SPECIFICATION

45U TWO POST FLOOR STANDING NETWORK RACK		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
45U Two Post Open Frame Network Rack & Earthling kit - 2 nos.		
1 Mtr Ladder Tray for Open Frame Rack - 4 nos.		
45U Full Height Double-Sided Vertical Cable manager Finger Duct, 6" Wide - 4 nos.		
19" Rack Mountable 1U PVC Cable Manager Finger Duct with Cover -20 nos.		
19" Rack Mountable 2U PVC Cable Manager Finger Duct with Cover - 6 nos.		
19" Rack Mountable Horizontal AC Distribution Box with Fuse & Power Indicator,		
Captive Mounting Hardware (PKT of 20 nos.) - 5 nos.		
All required accessories shall be included as per the space requirement to make the system complete.		

42U FOUR POST FLOOR STANDING SWITCH / SERVER RACK		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
42 U (600 Wx600 D) Network Rack		
FAN Tray on top with 4 Fans - 1 Set		
Captive Mounting Hardware (Pk of 20) - 5 nos.		
42U Vertical AC Distribution Box with Fuse & Power Indicator, 12 Socket 6/16A Universal Type PDU - 01 nos.		
Castor wheels with brakes - 4 nos.		
Lockable Front Glass door- 1 no.		
Lockable Rear Perforated Steel Door (Double Leaf) - 1 Pair		
Metal Perforated Side Panels - 2 nos.		
Stationary shelf - 1 no.		
Earthling kit - 1 Set		
1U Blank Panel - 5 nos.		
All required accessories shall be included as per the space requirement to make the system complete.		

24U FOUR POST FLOOR STANDING NETWORK RACK		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
24 U (800 Wx600 D) Network Rack		
FAN Tray on top with 4 Fans - 1 Set		
Captive Mounting Hardware (Pk of 20) - 5 nos.		
24U Vertical AC Distribution Box with Fuse & Power Indicator,		
Castor wheels with brakes - 4 nos.		
Lockable Front Glass door- 1 no.		
Lockable Rear Perforated Steel Door (Double Leaf) - 1 Pair		
Metal Perforated Side Panels - 2 nos.		
Stationary shelf - 1 no.		
Earthling kit - 1 Set		
1U Blank Panel - 3 nos.		
All required accessories shall be included as per the space requirement to make the system complete.		

LAYER3 - 24 Port x 10G Fiber CORE Switch		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
Switch type - Layer 3 Fiber Core Switch		
Switch shall be supplied with 24 x 10G SFP+ Slots		
Switch shall be supplied with 2 x 40/100G QSFP28 Slots		
Switch shall be supplied with 1 x RJ45 Serial Console Port		
Form Factor - 1 RU Rack Mount		
SFP+ slots shall be populated & activated with 12 nos. x 10G MM OM4 SFP+ modules from Day 1		
Switch shall includes IoS, IP Base, India 220V AC Type A Power Supplies with power cable		
Switch shall include Additional Hot Swappable Redundant Power Supply with power cable		
Switch shall be supplied with All type of Licences to Activate all the available features of Layer 2 & Layer 3 and these shall be activated from Day 1.		
Switch shall be supplied with All type of Licences to Activate all the available features including but not limited to Management & Configuration, Security & Visibility, UTM, High Availability, QOS, Management, etc. and these shall be activated from Day 1		
High Availability feature (Active - Active) shall be activated from Day 1.		
Switch shall be supplied with latest published Software &Firmware.		
End of Sale announced product shall not be supplied.		
Switch shall be supplied with 3 Year OEM Warranty.		
Switch shall be supplied with 24x7x365 TAC Support by OEM.		
Switch shall be supplied with Onsite RMA Service Level by OEM.		
All required accessories shall be included as per the space requirement to make the system complete.		

LAYER2 - 24 Port x 100/1000 Mbps Ethernet NON-PoE Ports		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
Switch type - Layer 2 Ethernet (Non PoE) Access Switch		
Switch shall be supplied with 24 x 10/1000 Mbps Ethernet Non PoE Ports		
Switch shall be supplied with 2 x 10G OM4 MM Fiber Stakable SFP Slots		
Switch shall be supplied with 1 x RJ45 Serial Console Port		
Form Factor - 1 RU Rack Mount		
All the Ethernet Ports shall be populated & activated from Day 1		
SFP Slots shall be populated & activated with 2Nos. x 10G SFP + MM OM4 Fiber Modules to connect with Layer 2 and 2Nos. x 10GBaseT SFP Modules, from Day 1		
Switch shall includes IoS, IP Base, India 220V AC Type A Power Supplies with power cable		
Switch shall include Additional Hot Swappable Redundant Power Supply with power cable		
Switch shall be supplied with 1 no. Stacking Cable (50 cm)		
Switch shall be supplied with 1 no. Return Stacking Cable (1 mtr.)		
Switch shall be supplied with All type of Licences to Activate all the available features of Layer 2 and these shall be activated from Day 1.		
Switch shall be supplied with All type of Licences to Activate all the available features including but not limited to Management & Configuration, Security & Visibility, UTM, High Availability, QOS, Management, etc. and these shall be activated from Day 1		
High Availability feature (Active - Active) shall be activated from Day 1.		
Switch shall be supplied with latest published software & firmware.		
End of Sale announced product shall not be supplied.		
Switch shall be supplied with 3 Year OEM Warranty.		
Switch shall be supplied with 24x7x365 TAC Support by OEM.		
Switch shall be supplied with Onsite RMA Service Level of 8x5xNBD by OEM.		
All required accessories shall be included as per the space requirement to make the system complete.		

LAYER2 - 24 Port x 100/1000 Mbps Ethernet POE Ports		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
Switch should have 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full		
Switch should have 4x SFP+ 1/10GbE ports. Bidder need to supply 2*10G SFP+ transceivers with each switch from day1 and 2 * 1/10G SFP transceivers to be provided from day 1		
Switch should 185W of POE capacity, where 12 ports should be able to provide (802.3af/at)		
Switch should provide 128 Gbps of switching capacity		
Switch should provide 190 Mpps of throughput		
Switch should have a capacity of 32k MAC address table size		
Switch should be in the form of 1RU with 19" Rackmount		
Switch should provide traffic prioritization (IEEE 802.1p) allows real-time traffic classification into priority levels		
Switch should provide layer 4 prioritization based on TCP/UDP port numbers		
Switch should provide class of service (CoS) sets the IEEE 802.1p priority tag based on IP address, IP Type of Service		
Switch should provide Rate limiting sets per-port ingress enforced maximums and per-port, per-queue minimums		
Switch should support IEEE 802.1s Multiple Spanning Tree provides high link availability by allowing multiple		
Switch should support EEE 802.3ad link-aggregation-control protocol (LACP) and port trunking support up to 26 static, dynamic, or distributed trunks with each trunk having up to eight links (ports) per static trunk		
Switch should support SNMPv1, v2, and v3 provide complete; support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption		
Switch should support dual flash images provide independent primary and secondary operating system files for		
Switch should support custom port names to allow assignment of descriptive names to ports		

Switch should have VLAN support and tagging supports IEEE 802.1Q (4,094 VLAN IDs) and 4k VLANs supported.		
Switch should support jumbo packets to improves the performance of large data transfers; supported frame size of up to 9,000 bytes		
Switch should support Rapid PVST interoperation. Should support Spanning Tree Protocol MSTP native, and backwards compatible with STP, STP BPDU Guard and STP Root Guard and should support LLDP, LLDP-MED		
Switch should support DHCP server to centralize and reduces the cost of IPv4 address management		
Switch should support static IP routing to provide manually configured routing		
Switch should use an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards		

Specifications	Compliance (Yes/No)	Datasheet Page Ref.
Switch should support multiple IEEE 802.1X users per port to provide authentication of multiple devices on a single port; which will prevent a user from piggybacking on another user's IEEE 802.1X authentication		
Switch should support RADIUS/TACACS+ to ease switch management security administration by using a password authentication server		
Switch should support secure shell encryption for all transmitted data for secure remote CLI access over IP networks		
Should support IGMP snooping, DHCP snooping and Dynamic ARP Inspection, Should support sticky MAC, Sflow v5.		
All the solution should be managed by the central manager and if central management is unavailable it must have capability to get managed through proposed firewall itself.		
Security functionalities allowed to be extended till the access port. Proposed Firewall, Core Switch, Access points should preferably from single OEM in case of multiple OEM's solution integration to be built by bidders.		
Switches should be capable of providing visibility to the devices connected in to the connected ports		
Switch shall includes IoS, IP Base, India 220V AC Type A Power Supplies with power cable		
Switch shall be supplied with 1 no. Stacking Cable (50 cm)		
Switch shall be supplied with 1 no. Return Stacking Cable (1 mtr.)		
Switch shall be supplied with All type of Licences to Activate all the available features of Layer 2 and these shall be activated from Day 1.		
Switch shall be supplied with All type of Licences to Activate all the available features including but not limited to High Availability feature (Active - Active) shall be activated from Day 1.		
Switch shall be supplied with latest published software & firmware.		
End of Sale announced product shall not be supplied.		
Switch shall be supplied with 3 Year OEM Warranty.		
Switch shall be supplied with 24x7x365 TAC Support by OEM.		
Switch shall be supplied with Onsite RMA Service Level by OEM.		
All required accessories shall be included as per the space requirement to make the system complete.		

INDOOR WIRELESS ACCESS POINT (802.11ax Wi-Fi 6E, 2x2 MU-MIMO)		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
802.11ax Wi-Fi 6E Indoor Wireless Access Point with Tri-Radio 2.4 GHz + 5 GHz + 5 GHz / 6 GHz / Scanning, 2x2 MU-MIMO		
Number of Radios - 3+1 BLE		
Number of Anteenas - x2 Dual Band Wi-Fi + x2 Tri Band Wi-Fi and Scanning + 1 Single Band 2.4 GHz BLE		
Radio 1 Capabilities - Frequency Band: 2.4 GHz, Channel Width: 20/40 MHz, MIMO Chains: 2 x 2 Service		
Radio 2 Capabilities - Frequency Band: 5 GHz, Channel Width: 20/40/80 MHz, MIMO Chains: 2 x 2 Service		
Radio 3 Capabilities - Frequency Band: 2.4 GHz, 5 GHz, and 6 GHz , Channel Width: 20/40/80/160 MHz, MIMO		
Maximum Data Rate - Upto 574 Mbps for Radio 1, Upto 1201 Mbps for Radio 2 and Upto 2301 Mbps for Radio 3		
Per Radio Client Capacity - Upo 512 Clients per Radio (Radio 1, Radio 2 & Radio 3)		
PoE mode - 1 x 802.3at PoE default, Max Power Consumption - 25.5 Watt		
Interfaces - 1x 2.5Gbps Ethernet Port, 1x 1Gbps Mbps Ethernet Port for PoE diversity, 1x Type 3 USB, 1x RS232RJ45 Serial Port		
AP shall be supplied with Indian Power Adapter and power Cable.		
AP shall include low profile mounting brackets		
AP shall be supplied with AP Activation Licence and this shall be activated from day 1		
AP shall be supplied with All type of Licences to Activate all the available features and these shall be activated from		
AP shall be supplied with latest published software & firmware.		
End of Sale announced product shall not be supplied.		
Switch shall be supplied with 3 Year OEM Warranty.		
Switch shall be supplied with 24x7x365 TAC Support by OEM.		
Switch shall be supplied with Onsite RMA Service Level of 8x5xNBD by OEM.		
All required accessories shall be included as per the space requirement to make the system complete.		

Unified Threat Management Appliance		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
The appliance-based security platform should be capable of providing firewall, application visibility, IPS, antivirus, url filtering functionality, & In-Built WiFi Controller in a single appliance		
Firewall appliance should be supplied with at least 4 x 10 GE SFP+ slots, 12 GE RJ-45 interfaces, and 4 x GE SFP slots. Bidder needs to supply 4*10G SFP+ transceivers with each Firewall from day1		
The proposed solution should support HA in Active/Active and Active/Passive mode. The Firewall in HA should support stateful clustering across sites. HA should be supported on both IPV4 and IPV6. Feature like IPS, Anti malware, Web filtering, DDOS prevention and Traffic Shaping should be available in Active-Active from Day 1 with all necessary licenses		
Must support NAT (SNAT and DNAT) with following modes Static, Dynamic, PAT, Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4), Nat46 (IPv4- to-IPv6) , DNS64 & DHCPv6 functionality.		
Product shall be supplied with the features such as SD-WAN underlay bandwidth and quality monitoring, SD-WAN overlay as a service, etc. and these shall be activated from Day 1		
High Availability feature (Active - Active) shall be activated from Day 1.		
Product shall be supplied with All type of Licences to Activate all the available features and these shall be activated from Day 1		
Product shall have the flexible capability to deploy as UTM AND Secure SD-WAN and both the functionality shall be activated from Day 1		
Product shall deliver an extensive routing, switching, wireless controller and high performance IPsec VPN capabilities to consolidate networking and security functionality		
Firewall appliance must have at least 10 virtual firewall domains/instants (active from day-1) with each firewall domains/instances having a separate administrative control OR equivalent, Security zones and VLAN. Associated Licenses, Software and Hardware towards Virtual domains / Virtual Firewalls/ Virtual instances shall be provided from day 1		
Firewall policy must facilitate IP, Network, Port, Protocol, User, Application and Zone. And must facilitate to apply features like IPS, Web & application Content filtering, Anti-Malware, IPS, DDOS prevention, Traffic Shaping (define - guaranteed, burstable/maximum bandwidth, set different level of priority) on any firewall policy for a specific time/Date/Period. Firewall policy must also have an option of configuring exceptions to any specific features.		
The appliance hardware should be a multicore CPU architecture with a hardened 64-bit operating system		
Performance & Scalability		
Firewall should support at least 25 Gbps of throughput on 64 byte packets without degrading the firewall performance		
Should support at least 2.5 Gbps of Mix / production performance with firewall, IPS, AVC & Anti-malware combined		
Firewall should support at least 2.5 Million concurrent sessions		
Firewall should support at least 120,000 sessions per second		
Firewall should support at least 1000 VLANs		
Firewall should support at least 30 Gbps of IPSEC VPN throughput		
Firewall should provide application detection for DNS, FTP, HTTP, SMTP,ESMTP, LDAP, MGCP, RTSP, SIP, SCCP, SQLNET, TFTP, H.323, SNMP		
Firewall should support creating access rules with IPv4 & IPv6 objects simultaneously		
Should support Static, RIP, OSPF, OSPFv3 and BGP		
Firewall should support manual NAT and Auto-NAT, static nat, dynamic nat, dynamic pa		
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4- to-IPv6) functionality		
Firewall solution should support DNS64 & DHCPv6		
Firewall should support Multicast protocols like IGMP, PIM, etc.		
Should support security policies based on group names in source or destination fields or both		
Should support capability to limit bandwidth on basis of apps/groups, Networks / Geo, Ports, etc.		
Should support 500 concurrent SSL VPN users		
Firewall should support SSL inspection throughput of 2.5 Gbps.		
The proposed system shall be able to operate on either Transparent (bridge) mode or NAT/Route mode. Both modes can also be available concurrently using Virtual Contexts.		
Firewall should be capable of delivering AI Powered Security, Web Security, Content Security, Device Security, Advance Tools, Firewall must have capability to manage switches from same console.		

Specifications	Compliance (Yes/No)	Datasheet Page Ref.
Should be able to perform Anti-malware scans for HTTP, SMTP, IMAP, POP3, and FTP traffic.		
Should be able to call 3rd party threat intelligence data on malicious IPs, URLs and Domains to the same firewall policy to block those malicious attributes and list should get updated dynamically with latest data.		
Should have a dual redundant power supply		
The proposed solution should support the ability to create QoS policy on a per rule basis- by source address, by destination address, by application (such as Skype, BitTorrent, YouTube, azureus, webex), by static or dynamic application groups (such as Instant Messaging or P2P groups), by port and services.		
Security functionalities allowed to be extended till the access port. Proposed Firewall, Core Switch, Access points should preferably from single OEM in case of multiple OEM's solution integration to be built by bidders.		
Product shall be supplied with latest published software & firmware.		
End of Sale announced product shall not be supplied.		
Product shall be supplied with 5 Years OEM Warranty and must reflect on OEM Portal.		
Product shall be supplied with 24x7x365 TAC Support by OEM with premium software support.		
Product shall be supplied with Onsite RMA Service Level by OEM		
All required accessories shall be included as per the space requirement to make the system complete.		

Centralized logging and analysis System		
Specifications	**Compliance (Yes/No)**	**Datasheet Page Ref.**
Should have a dedicated centralized network monitoring and visibility solution		
Solution should have a capability of managing Advanced threat and vulnerability detection		
Solution should provide 65+ reports and 1900+ ready-to-use datasets, charts, and macros		
Subscription license for minimum 10 GB/Day Central Logging & Analytics. Include OEM Premium support, IOC,		
The solution should be VM based		
Virtual appliance must run on Microsoft HyperV platform		
Should be capable of providing Network and Security Operations Teams with real-time detection capabilities,		
Solution should enable Security teams to monitor and manage alerts and event logs from the devices, with events		
should provide automation driven analytics that empowers network security operations teams to complete a fast		
Log analyser should support integration with syslog servers for archiving the logs		
Solution must have capability to automatically collects, stores, and analyzes logs from all Next-Generation Firewalls,		
solution must provide sophisticated event correlation across different types of log sources with an intuitive rule's		
Solution should provide Therat intelliegnce integration to share real-time information on emerging threats and		
Management must provide security automation capability to reduce complexity with automation enabled via REST		
Solution should provide Advanced Compliance Reporting by providing hundreds of pre-built regulation-specific		
Product shall be supplied with All type of Licences/ Subscriptions to activate all the available features and these shall		
End of Sale announced product shall not be supplied.		
Product shall be supplied with 5 Years of OEM Warranty.		

ACS SYSTEM TECHNICAL SPECIFICATION

Access Control Device		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Verification Modes	Fingerprint + Card (MiFare) + PIN		
Fingerprint Capacity	3000		
Card Capacity	3000		
Record Capacity	30000		
Fingerprint Sensor	500 DPI		
Biometric Indentification Speed	<0.5 Sec		
Features	2.4 inch TFT Colour Screen, Touch Keys, Green/Red LED Indicator, Web based Device management, Built-in Time Attendence		
Communication	4 PIN Ethernet (TCP/IP), RS232/485, USB-host, Built-in Wi-Fi, Wiegand In & Out		
Access Control Interface	For Door Position Sensor, Exit Button, Alarm, Emergency Door Release		
Power Supply Adapter	Included		
All required accessories shall be included to make the system complete.			

Exit Push Button		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Panel Type	Stainless Steel Panel, Steel Button		
Panel Material	304 Stainless Steel		
Current (Max)	3A @ 36V DC		
All required accessories shall be included requirement to make the system complete.			

Electromagnetic Lock		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Holding Force	Upto 600 lbs		
Surface Tretement	Zinc Plating		
All required accessories shall be included requirement to make the system complete.			

Magnetic Contact Sensor		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Technology	Magnetic Detection		
Type	Surface Mounting		
Sensor Range	19mm		
All required accessories shall be included to make the system complete.			

Emergency Door Release		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Material	PG Glass		
Current Rating	12/24 V DC, 10A,		
All required accessories shall be included as per the space requirement to make the system complete.			

Contact less MIFARE DESFire card		Compliance (Yes/No)	Datasheet Page Ref.
Specifications			
Technology	MIFARE		
Frequency	13.56 MHz		

Interface Technology	Contactless Interface Complaint with ISO/IEC 14443-2		
In-Built Data Memory	2/4/8 KB		
Chip	NXP Certified		

2/4/8 Core Cable			
Specifications		**Compliance (Yes/No)**	**Datasheet Page Ref.**
Type	22 AWG Shielded Stranded Cable		
Component Jacket	Flame Retardant PVC		
Compatibility	Access Control System		
All required accessories shall be included as per the space requirement to make the system complete.			

CAT6A LAN Cable			
		Compliance (Yes/No)	**Datasheet Page Ref.**
Specifications			
Category	CAT 6A - F/UTP LAN Cable		
Cable Construction	23 AWG Solid Bare Copper with Central Isolation member		
Jacket Material	Low Smoke Zero Halogen (LSZH)		
Standards Compliance	Electrical - ISO/IEC 11801, Fire Performance - IEC-60332-1		

CAT6A Patch Cord			
		Compliance (Yes/No)	**Datasheet Page Ref.**
Specifications			
Category	CAT6A UTP Patch Cord		
Length	3 meter		
Cable Construction	26AWG Stranded Copper		
Jacket Type	CM/LSOH		
Plug Housing & Plastic Material	Flame Retardant		
Standards Compliance	Electrical - ISO/IEC 11801, Fire Performance - IEC-60332-1		
Pluf Body & Boot Flame Rating Complaince	UL94		

8 Core Cable			
		Compliance (Yes/No)	**Datasheet Page Ref.**
Specifications			
Type	22 AWG 8 Core Shielded Starnded Cable		
Component Jacket	Flame Retardant PVC		
Compatibility	Access Control System		
All required accessories shall be included as per the space requirement to make the system complete.			

4 Core Cable			
		Compliance (Yes/No)	**Datasheet Page Ref.**
Specifications			
Type	22 AWG 4 Core Shielded Starnded Cable		
Component Jacket	Flame Retardant PVC		
Compatibility	Access Control System		
All required accessories shall be included as per the space requirement to make the system complete.			

2 Core Cable			
		Compliance (Yes/No)	**Datasheet Page Ref.**
Specifications			
Type	22 AWG 2 Core Shielded Starnded Cable		
Component Jacket	Flame Retardant PVC		
Compatibility	Access Control System		
All required accessories shall be included as per the space requirement to make the system complete.			