

INDIAN INSTITUTE OF SCIENCE BANGALORE

Notice Inviting Tender (NIT) in *E-TENDER mode only* through Central Public Procurement Portal (CPPP) of Government of India under Two-Cover Bid System

for

Supply and Installation of Network Test-bed equipment at Centre for Networked Intelligence, RBCCPS, IISc Bangalore

> Tender No.: IISc/Purchase/RBCCPS/2020/03 Date: February 18, 2020

> > Chair CNI Test-bed Purchase Committee Division of EECS and RBCCPS Indian Institute of Science, Sir C. V. Raman Road, Bangalore 560012 (INDIA)

> > > Website: www.iisc.ac.in

GSTIN: 29AAATI1501J2ZV

<u>CPPP website for e-tender submission</u> <u>https://eprocure.gov.in/eprocure/app</u>

Email ID for this tender purchasetestbed.cni@iisc.ac.in

INTRODUCTION

The Centre for Networked Intelligence (referred henceforth as the Purchaser in this document), under the division of EECS and RBCCPS, Indian Institute of Science (IISc), is planning to set up a Test-bed consisting of wired network switches, wireless access points (APs), wireless LAN controller, network management/automation appliance, and computing servers. The Test-bed is meant for research purposes — to conduct research in next generation networking technologies, and to develop experiments to demonstrate the applications of latest networking technologies.

The Test-bed is required to support the evolving networking paradigms of *intent-based networking* and *software-defined networking* (SDN), and should be compatible with protocols such as OpenFlow and WiFi-6 (802.11ax). In accordance with the specialised nature of planned experiments, the Purchaser has identified the OEM equipment (with model numbers) that needs to be procured for the Test-bed. Bids are invited from bidders in two-cover format for the Test-bed equipment, along with the management software, as per the bill of quantity in Annexure-I. The proposed topology of the Test-bed is illustrated in Annexure-II.

1. SCOPE OF WORK

The solution proposed by the bidder is expected to be a total turn-key solution meeting all the stipulated requirements including supply, installation (including intra-Testbed network cabling), commissioning, configuration of the management software, and configuring connectivity to the rest of the IISc campus via the gateway router. The bid is also expected to include three years of OEM support.

The proposed Test-bed will be housed in the ground floor of the ECE department building and the requirements of power and cooling will be the responsibility of the Purchaser. The bidders have to ensure that the resources (personnel) allocated for each one of the above tasks are competent and capable to meet all the technical requirements in order to ensure that the broad objective of delivery of services as per expectations is fully met.

2. BIDDER'S ELIGIBILITY CRITERIA

- 1) Bidder should be an OEM authorised vendor. The bidder should submit documentary proof that he is authorised by the OEM to supply the equipment.
- 2) The bidder should have a track record of having previously supplied similar equipment to Central/State Government or other reputed firms. Purchase order copies of previous installations are required along with customer contact details.
- 3) In the technical bid, the bidder should clearly demarcate the responsibilities between the OEM and the bidder. Complete details of the same have to be submitted in the technical bid. However, for complete supply, installation, and post-installation service, the bidder shall be responsible.
- 4) The bidder has to provide an undertaking on the official letter-head of the company that it has not been blacklisted by any department or undertaking of the Central or

State Government department/Public Sector Undertakings (PSU)/Public Sector Enterprises (PSE)/ Banks in India.

5) The bidder (along with the OEM) should be in a position to demonstrate their competence and capability (with sales office and service centre based in Bangalore), as a team, to deliver all the services expected during the contract period.

3. SUBMISSION OF BID

- The offer should be in two-bid system in two-cover format i.e., "Technical bid" and "Commercial bid" – only in e-tender mode through CPPP of the Govt of India, for which the website address is: <u>https://eprocure.gov.in/eprocure/app</u>
- 2) Technical bid must contain the technical details only. This part must not include price offered by the bidder. The Price must be mentioned in the commercial bid part only.
- 3) Late or delayed tenders shall be summarily rejected. Bids sent through email/fax or submitted in hard copy format will not be accepted and such bids will be treated as non-responsive bids.
- 4) Bidder(s) must submit PAN given by Income Tax authorities, TIN and copy of PAN / TIN with the bid.
- 5) Bid document(s) and all enclosures must contain the name and address of the bidder, as well as the signature and seal of the authorised representative of the bidder.
- 6) The Bank/RTGS detail on the letter-head of the bidder(s) must be submitted along with the tenders (technical bid). A copy of the cancelled cheque should also be attached.
- 7) The bidders are required to register themselves with the CPPP, in order to participate in the bidding, for which above website may please be consulted. IISc has no role in creation of user ID for bidders for using CPPP.

3.1 EARNEST MONEY DEPOSIT (EMD)

- The Bidder shall furnish, as part of his bid, earnest money deposit (EMD) of Rs.80,000 (Rupees Eighty Thousand only) through RTGS/NEFT only. Other modes of payment for EMD are not acceptable. The bidder must attach e-receipt of the RTGS/NEFT payment as proof of payment of EMD. The entire EMD amount for the tender has to be paid in a single transaction through NEFT/RTGS.
- 2) After the evaluation of the tender and placement of the purchase order on the successful bidder, the EMD amount will be returned to unsuccessful bidders.
- 3) EMD amount will be returned to the successful bidder after IISc places a firm purchase order and the successful bidder submits the performance security guarantee.

3.2 TECHNICAL BID

The technical bid should contain the following.

- 1) Overall compliance statement indicating adherence to each and every clause in the terms and conditions, as per annexure-III.
- 2) Detailed technical description of the products and datasheets for the specific configuration options quoted.
- 3) A letter from the OEM authorizing the bidder to bid for this tender.
- 4) Terms for licensing (perpetual or linked with support contract) and service/support for each hardware/software component. Terms for software usage and update should be unambiguously stated.
- 5) A clear installation-deployment-testing plan for the Test-bed, with requirements from Purchaser clearly identified phase-wise.
- 6) A copy of the masked commercial bid of the bill-of-materials.
- 7) It is mandatory that the BoQ adequately covers all hardware/software necessary for satisfactory operation of the Test-bed. The bid has to quote for the entire solution as per BoQ, partial offers will not be accepted.

The bidder is required to indicate, by filling-in Annexure-IV, whether each line item in the BoQ is quoted.

3.3 COMMERCIAL BID

- 1) The commercial bid should contain details of the prices for each one of the subsystems (including of the software licenses) of the total offer giving clearly the rate and the quantity.
- 2) Price must be offered only in the prescribed priced bid format for all the line items.
- 3) Price should include all discounts applicable to research institution given that the testbed will be used for research purposes.

4. INSTALLATION, TRAINING AND DOCUMENTATION, SUPPORT CONTRACT

4.1 INSTALLATION

The total solution supply, installation, and commissioning, as per the PO (purchase order), should be completed within 8 weeks after receiving firm PO from IISc.

4.2 TRAINING AND DOCUMENTATION

- 1) Appropriate number of training sessions for IISc technical staff for effective operation and management of the Test-bed, including the configuration/usage of the management software supplied.
- 2) Documentation (manuals, operating instructions, etc.) for all hardware, software, and services offered (in printed/digital format) shall be provided to the Purchaser.

3) A technical report on the Test-bed specific hardware and (management) software configuration will be a prerequisite condition for granting acceptance from the Purchaser.

4.3 WARRANTY AND OEM SUPPORT CONTRACT

- 1) The bidder/OEM shall be fully responsible for the warranty period.
- 2) Preventive maintenance and repairs of the components supplied by the bidder are the responsibilities of the bidder.
- 3) OEM support contract should be for a period of three years from the date of acceptance of the equipment for both hardware and software.
- 4) While the support contract is valid, the bidder/OEM shall attend to all the hardware and/or software problems on site and shall replace the defective parts at no extra cost to the purchaser within 5 working days after reporting the issue.
- 5) All critical security updates must be promptly applied by the bidder/OEM personnel. The purchaser should be intimated about all non-critical security updates within a week of their release by the OEM. All feature update releases for software must be made available to the Purchaser during the validity period of support contract.
- 6) All software tools should also be provided in CD/USB format and the purchaser shall be permitted to make at least 2 copies of the software tools /updates for emergency recovery.
- 7) Performance security guarantee through any nationalized bank in India for 10% of the total purchase order amount shall be given by the selected bidder to the Purchaser. Format of the performance security guarantee will be given by the purchaser at the time of issuing the purchase order.
- 8) OEM/bidder shall clearly specify the conditions over which the service obligations will be void. Detailed document regarding warranty conditions and applicability should be submitted along with bid with a declaration of accepting the warranty conditions of the purchaser stated at above clause 4.3.

5. ADDITIONAL GUIDELINES

 Regarding any clarification on technical aspects or any other issue, a pre-bid meeting will be held on a date and time as mentioned in this tender document at Indian Institute of Science, Bangalore (Robert Bosch Centre for Cyber-Physical Systems). Queries, if any, may only be submitted to the email ID <u>purchasetestbed.cni@iisc.ac.in</u> before the pre bid meeting. No queries will be entertained after the pre-bid meeting.

The changes in the tender, if any, made after pre-bid meeting, would be published on the IISc website <u>www.iisc.ac.in</u> and on the CPPP (<u>https://eprocure.gov.in/eprocure/app</u>) as corrigendum. Any kind of corrigendum/ addendum will become an integral part of this tender document.

- 2) IISc is eligible for customs exemption under notification 10/97-ce. The bidder must mention in the technical bid (with name and details of the foreign firm), if some of the items are being imported. IISc will not be involved in the import or in the customs clearance or in the forwarding. These will be the sole responsibility of the bidder. IISc will not raise any separate purchase order for the imported items. However, being a DSIR recognised research institution, IISc will provide customs duty exemption certificate (CDEC) for availing customs duty exemption/concession subject to submission of airway bill, invoice, and packing list with a request letter before issue of CDEC. IGST is NIL for import items against CDEC. Bill of entry of must be filed in the name of IISc and a copy of the same must be attached with the bill raised for payment. GST will not be paid for any import items.
- 3) For all Indian items (non-imported), GST rate will be 5%; any other statutory levies should be shown separately and not included in the total amount, to enable IISc to avail exemption. IISc is eligible for 5% GST under concessional certificate for which GST exemption certificate will be provided against proforma invoice.
- 4) Delayed and/or incomplete tenders are liable to be rejected.
- 5) The technical bid should not contain any price information. Non-conformance will result in disqualification.
- 6) All pages of the technical bid should be duly signed by the bidder.
- 7) The bidder must submit all the original documents submitted for technical bid (hard copy, properly spiral bound in one volume only), which are uploaded in CPPP portal, to IISc for verification at the time of technical presentation. However, in case of any discrepancy in the hard copy of the bid, the documents submitted on CPPP will only be considered as final.
- 8) The bidders are requested to go through the terms and conditions detailed in this document, before filling out the tender. Agreeing to the terms and conditions of the tender document (by signing all pages of the copy of the tender document) is a mandatory requirement.
- 9) Award criteria: the two-cover system will be followed; the technical and commercial bids will be opened through CPPP online mode only.
 - a. Commercial bids of technically qualified bids alone will be taken up for further processing. Decision of IISc will be final and binding.
 - b. Subject to Clause 5(11), IISc will award the contract to the bidder whose technical bid has been determined by the Purchase Committee to meet technical evaluation criteria and who has offered the lowest evaluated bid price.
- 10) IISc reserves the right to accept or reject any bid, and to cancel the tender process and reject all bids, at any time prior to the award of contract, without thereby

incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for the IISc's action.

- 11) The Director, IISc, Bangalore-12 reserves the right to modify the technical specifications or the required quantity at any time.
- 12) IISc will place the purchase order only on the successful bidder. Courts of Bangalore/New Delhi shall have exclusive jurisdiction over matters covered in this tender.
- 13) The bid must be addressed to "The Chair, CNI Test-bed Purchase Committee" and submitted through CPPP portal.
- 14) Contact: any queries or requests for clarification must be directed (through email only) to purchasetestbed.cni@iisc.ac.in

6. COMMERCIAL TERMS AND CONDITIONS

- 1) The commercial bid should contain, among other things, payment terms, warranty, installation, and commissioning charges. These charges will be paid only after successful supply, installation and acceptance.
- 2) Vendor should quote the prices for imported items on 'DDP' terms.
- 3) Withholding tax, if applicable, will be deducted from the PO amount.
- 4) Price should be quoted per unit and the total amount for the required quantity should also be quoted.
- 5) Offer should be valid for 60 days from the date of submission.

7. PAYMENT TERMS

100% payment as per PO will be released after complete supply, installation, and commissioning of the items followed by submission of invoice and warranty certificate. Any payment will be released only after submission of performance bank guarantee as per clause 4.3(7).

8. IMPORTANT DATES

Release of tender document	February 18, 2020
Submission of queries (for pre-bid clarification) by email to purchasetestbed.cni@iisc.ac.in	February 26, 2020, 5.00 pm
Pre-bid Clarification meeting Venue: Robert Bosch Centre for Cyber-physical Systems (RBCCPS), 3 rd Floor, SID Entrepreneurship Building, (close to J N Tata Auditorium, Near Maramma Circle Gate), IISc campus, Bangalore 560012	March 02, 2020, 2.00 pm
Deadline for submission of bids	March 20, 2020, 5.00 pm
Opening of technical bids	March 23, 2020, 11:30 am
Technical presentations Venue: Robert Bosch Centre for Cyber-physical Systems (RBCCPS), 3 rd Floor, SID Entrepreneurship Building (close to J N Tata Auditorium, Near Maramma Circle Gate), IISc campus, Bangalore 560012	 March 23, 2020; 12:30pm; All bidders are required to report for presentation at 12:30 pm. No separate communication will be sent in this regard. Bids of those bidders, who do not present for Technical Presentation, will be treated as non-responsive and hence their bids will not be evaluated further.
Opening of price bids (price bids of only those bidders, whose technical bid is shortlisted by the purchase committee, will be opened	March 27, 2020, 3.00 pm

ANNEXURE-I

The bidders are required to submit their bids as per the following Bill of Quantity:

SI. No.	Item Description	Cisco Part Number	Quantity
1	SDN controller kit consisting of the following		1
1.0	subsystems: Cisco DNA Starter Kit - For Customer Production or Lab Use	SDA-WW-LABKIT	1
1.0	Cisco DNA Center Appliance (Gen 2) - 44 Core	DN2-HW-APL	1
1.1	Cisco DNA Center Appliance (Gen 2) - 44 Core	DNA-SW-1.3	1
1.1.1	AC Power Cord - 250V, 10A , India	CAB-250V-10A-ID	2
1.1.2	2.1 GHz 6152/140W 22C/30.25MB Cache/DDR4 2666MHz	DN2-CPU-6152	2
	32GB DDR4-2666-MHz RDIMM/PC4-21300/dual		
1.1.4	rank/x4/1.2v	DN2-MR-X32G2RS-H	8
1.1.5	Intel X710-DA2 dual-port 10G SFP+ NIC	DN2-PCIE-ID10GF	1
1.1.6	Cisco UCS 770W AC Power Supply for Rack Server	DN2-PSU1-770W	2
1.1.7	64GB SD Card for UCS Servers	DN2-SD-64G-S	1
1.1.8	1.9TB 2.5 inch Enterprise Value 6G SATA SSD	DN2-SD19TM1X-EV	8
1.1.9	Trusted Platform Module 2.0 for UCS servers	DN2-TPM2-002	1
1.1.10	Cisco 12G Modular RAID controller with 2GB cache	DN2-RAID-M5	1
1.1.11	Mini Storage Carrier for SD (holds up to 2)	DN2-MSTOR-SD	1
1.1.12	480 GB 2.5 inch Enterprise Value 6G SATA SSD	DN2-SD480GM1X-EV	2
1.1.13	Intel X710 quad-port 10G SFP+ NIC	DN2-PCIE-IQ10GF	1
1.1.14	10GBASE-SR SFP Module, Enterprise-Class	SFP-10G-SR-S	2
1.1.0.1	SOLN SUPP 8X5XNBD DNA Center Appliance (Gen 2)	CON-SSSNT-DN2HWPL	1
1.2	Catalyst 9300 24-port PoE+, Network Advantage	C9300-24P-A	2
1.2.1	C9300 Network Advantage, 24-port license	C9300-NW-A-24	2
1.2.2	UNIVERSAL	S9300UK9-169	2
1.2.3	715W AC 80+ platinum Config 1 Power Supply	PWR-C1-715WAC-P	2
1.2.4	715W AC 80+ platinum Config 1 Secondary Power Supply	PWR-C1-715WAC-P/2	2
1.2.5	India AC Type A Power Cable	CAB-TA-IN	4
1.2.6	Cisco pluggable USB3.0 SSD storage	SSD-120G	2
1.2.7	50CM Type 1 Stacking Cable	STACK-T1-50CM	2
1.2.8	Catalyst Stack Power Cable 30 CM	CAB-SPWR-30CM	2
1.2.9	Catalyst 9300 8 x 10GE Network Module	C9300-NM-8X	2
1.2.10	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	2
1.2.0.1		CON-SNT-C93002PA	2
1.2.11	Prime Infrastructure Lifecycle & Assurance Term - Smart Lic	PI-LFAS-T	2
1.2.11.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	2
1.2.12	ISE BASE Term License	ISE-BASE-T	50
1.2.12.0.1	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	50
1.2.13	StealthWatch 1 FPS Term License	SWATCH-T	50
1.2.13.0.1	ISE BASE Tracker Term 3Y	SWATCH-TRK-3Y	50
1.2.14	ISE PLS Term License	ISE-PLS-T	50
1.2.14.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	50
1.2.15	C9300 24-Port DNA-Premier License	C9300-DNA-P-24	2
1.2.15.0.1	C9300 DNA Premier, 24-Port, 3 Year Term License	C9300-DNA-P-24-3Y	2
1.3	Cisco 3504 Wireless Controller	AIR-CT3504-K9	1
1.3.1	Cisco 3504 Wireless Controller SW Rel. 8.5	AIR-CT3504-SW-8.5	
1.3.2	AC Power Cord, Type C5, India	CAB-AC-C5-IND	
1.3.3	3504 Wireless Controller Rack Mount Tray	AIR-CT3504-RMNT	
1.3.4	Cisco 3504 Wireless Controller Power Supply	PWR-115W-AC	1
1.3.0.1	SNTC-8X5XNBD Cisco 3504 Wireless Controller	CON-SNT-AIRCTRTK	1

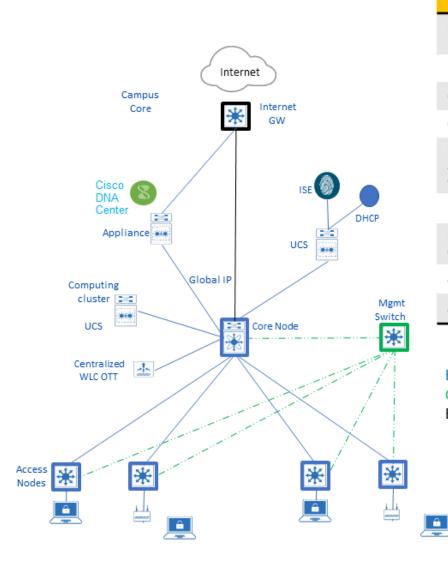
SI. No.	Item Description	Cisco Part Number	Quantity
1.4	Cisco ISE Virtual Machine Small	R-ISE-VMS-K9=	1
1.4.0.1	SOLN SUPP SWSS Cisco ISE Virtual Machine Small	CON-ECMUS-RISEV9SM	1
1.5	Cisco Catalyst 9120AX Series	C9120AXI-D	2
1.5.1	Capwap software for Catalyst 9120AX	SW9120AX-CAPWAP-K9	2
1.5.2	802.11 AP Low Profile Mounting Bracket (Default)	AIR-AP-BRACKET-1	2
1.5.3	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	AIR-AP-T-RAIL-R	2
1.5.4	Aironet AP License Term Licenses For Tracking	CDNA-P-C9120	2
1.5.4.0.1	C9120AX CISCO DNA Advantage 3 Year Term Licenses For Trackin	DNA-P-3Y-C9120	2
1.5.5	CISCO DNA Premier Term Wireless	AIR-DNA-P	2
1.5.5.0.1	CISCO DNA Premier Term Wireless 3Y	AIR-DNA-P-3Y	2
1.5.6	Aironet AP License Term Licenses	WLC-AP-T	2
1.5.6.0.1	Aironet AP License 3 Year Term License	WLC-AP-T-3Y	2
1.5.7	Prime AP Term Licenses	PI-LFAS-AP-T	2
1.5.7.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	2
1.5.8	Aironet AP License Term Licenses	AIR-DNA-A-T	2
1.5.8.0.1	Aironet CISCO DNA Advantage 3 Year Term License	AIR-DNA-A-T-3Y	2
1.5.9	ISE BASE Term License	ISE-BASE-T	30
1.5.9.0.1	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	30
1.5.10	ISE PLS Term License	ISE-PLS-T	30
1.5.10.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	30
1.5.11	AIR CISCO DNA Perpetual Network Stack	AIR-DNA-NWSTACK-A	2
1.5.12	Cisco DNA Spaces Act Term License for Cisco DNA	D-CISCODNAS-ACT-T	2 2
1.5.12.0.1	Cisco DNA Spaces ACT for Cisco DNA - 3Year Network Plug-n-Play Connect for zero-touch device	D-CISCODNAS-ACT-3Y	
1.5.13	deployment	NETWORK-PNP-LIC	2
1.5.0.1	SNTC-8X5XNBD Cisco Catalyst 9120AX Series	CON-SNT-C9120AXI	2
2	Cisco ASR1001-X ASR set with the following components:		1
2.0	Cisco ASR1001-X Chassis, 6 built-in GE, Dual P/S, 8GB DRAM	ASR1001-X	1
2.1	Cisco ASR 1000 Advanced Enterprise Services License	SLASR1-AES	1
2.1.0.1	SNTC-8X5XNBD Cisco ASR 1000 Advanced Enterprise Ser	CON-SNT-SLASR1AM	1
2.2	ASR1K-Int Edge/Peering incl. BGP/NAT/ZBFW - tracking	ASR1K-INTERNET	1
	only 1000BASE-T SFP transceiver module for Category 5 copper		1
2.3	wire	GLC-TE	4
2.4	Cisco ASR1001-X 8GB DRAM	M-ASR1001X-8GB	1
2.5	Blank faceplate for NIM slot on Cisco ISR 4400	NIM-BLANK	1
2.6	Blank Cover for regular SPA	SPA-BLANK	1
2.7	Cisco ASR1001-X AC Power Supply	ASR1001-X-PWR-AC	2
2.8	AC Power Cord (India)	CAB-IND	2
2.9	Cisco ASR1001-X IOS XE UNIVERSAL W/O LI	SASR1K1XUNLIK9-166	1
2.0.1	SNTC-8X5XNBD Cisco ASR1001-X Chassis, Crypto, 6 built	CON-SNT-ASR1001X	1
3	Cisco Catalyst 9200L switch set with the following components:		1
3.0	Catalyst 9200L 24-port data, 4 x 1G, Network Essentials	C9200L-24T-4G-E	1
3.1	C9200L Network Essentials, 24-port license	C9200L-NW-E-24	1
3.2	India AC Type A Power Cable	CAB-TA-IN	1
3.3	Config 5 Power Supply Blank	PWR-C5-BLANK	1
3.4	Catalyst 9200 Blank Stack Module	C9200-STACK-BLANK	2

SI. No.	Item Description	Cisco Part Number	Quantity
3.5	Network Plug-n-Play Connect for zero-touch device	NETWORK-PNP-LIC	1
3.0.1	deployment SNTC-8X5XNBD Catalyst 9200L 24-port data, 4 x 1G, Net	CON-SNT-C920L24T	1
3.6	C9200L Cisco DNA Essentials, 24-port Term license	C9200L-DNA-E-24	1
3.6.0.1	C9200L Cisco DNA Essentials, 24-port, 3 Year Term license	C9200L-DNA-E-24-3Y	1
	Cisco Catalyst 9300 switch set, each with specified		
4	components per set as follows		2
4.0	Catalyst 9300 24-port data only, Network Advantage	C9300-24T-A	1
4.1	C9300 Network Advantage, 24-port license	C9300-NW-A-24	1
4.2	Cisco Catalyst 9300 XE 16.12 UNIVERSAL	S9300UK9-1612	1
4.3	350W AC 80+ platinum Config 1 Power Supply	PWR-C1-350WAC-P	1
4.4	350W AC 80+ platinum Config 1 Secondary Power Supply	PWR-C1-350WAC-P/2	1
4.5	India AC Type A Power Cable	CAB-TA-IN	2
4.6	Cisco pluggable USB3.0 SSD storage	SSD-120G	1
4.7	50CM Type 1 Stacking Cable	STACK-T1-50CM	1
4.8	Catalyst Stack Power Cable 30 CM	CAB-SPWR-30CM	1
4.9	ISE BASE Term License	ISE-BASE-T	25
4.9.0.1 4.10	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	25 25
4.10 4.10.0.1	ISE PLS Term License ISE PLS Tracker Term 3Y	ISE-PLS-T ISE-PLS-TRK-3Y	25
4.10.0.1 4.11	StealthWatch 1 FPS Term License	SWATCH-T	25
4.11.	ISE BASE Tracker Term 3Y	SWATCH-T SWATCH-TRK-3Y	25
4.11.0.1	Prime Infrastructure Lifecycle & Assurance Term - Smart Lic	PI-LFAS-T	25
4.12.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	1
4.13	Catalyst 9300 8 x 10GE Network Module	C9300-NM-8X	1
	Network Plug-n-Play Connect for zero-touch device		
4.14	deployment	NETWORK-PNP-LIC	1
4.15	C9300 24-Port DNA-Premier License	C9300-DNA-P-24	1
4.15.0.1	C9300 DNA Premier, 24-Port, 3 Year Term License	C9300-DNA-P-24-3Y	1
4.0.1	SOLN SUPP 8X5XNBD Catalyst 9300 24-port data only, Network	CON-SSSNT-C93002TA	1
5	Cisco Catalyst 9120AX Access Point set, each with		3
	specified components per set as follows:	0010003/1 5	
5.0	Cisco Catalyst 9120AX Series Network Plug-n-Play Connect for zero-touch device	C9120AXI-D	1
5.1	deployment	NETWORK-PNP-LIC	1
5.2	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	AIR-AP-T-RAIL-R	1
5.3	802.11 AP Low Profile Mounting Bracket (Default)	AIR-AP-BRACKET-1	1
5.4	Capwap software for Catalyst 9120AX	SW9120AX-CAPWAP-K9	1
5.5	Aironet AP License Term Licenses For Tracking	CDNA-P-C9120	1
5.5.0.1	C9120AX CISCO DNA Advantage 3 Year Term Licenses For Trackin	DNA-P-3Y-C9120	1
5.6	CISCO DNA Premier Term Wireless	AIR-DNA-P	1
5.6.0.1	CISCO DNA Premier Term Wireless 3Y	AIR-DNA-P-3Y	1
5.7	Aironet AP License Term Licenses	WLC-AP-T	1
5.7.0.1	Aironet AP License 3 Year Term License	WLC-AP-T-3Y	
5.8	Prime AP Term Licenses	PI-LFAS-AP-T	
5.8.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	1
5.9 5 0 0 1	Aironet AP License Term Licenses	AIR-DNA-A-T	
5.9.0.1 5.10	Aironet CISCO DNA Advantage 3 Year Term License ISE BASE Term License	AIR-DNA-A-T-3Y ISE-BASE-T	1
5.10 5.10.0.1	ISE BASE Term License ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	15

SI. No.	Item Description	Cisco Part Number	Quantity
5.11	ISE PLS Term License	ISE-PLS-T	15
5.11.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	15
5.12	AIR CISCO DNA Perpetual Network Stack	AIR-DNA-NWSTACK-A	1
5.13	Cisco DNA Spaces Act Term License for Cisco DNA	D-CISCODNAS-ACT-T	1
5.13.0.1	Cisco DNA Spaces ACT for Cisco DNA - 3Year	D-CISCODNAS-ACT-3Y	1
5.0.1	SOLN SUPP 8X5XNBD Cisco Catalyst 9120AX Series	CON-SSSNT-C9120AXI	1
6.0	10GBASE Active Optical SFP+ Cable, 10M	SFP-10G-AOC10M=	10
7.0	10GBASE-SR SFP Module, Enterprise-Class	SFP-10G-SR-S=	6
8	Cisco UCS C220 Server set with the following components:		1
8.0	UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU	UCSC-C220-M5SX	1
8.1	32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual	UCS-ML-X32G2RS-H	4
8.2	rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD	UCS-HD600G10K12N	4
8.3	IMC SW (Recommended) latest release for C-Series	CIMC-LATEST	1
	Servers.		
8.4	Cisco UCS 770W AC Power Supply for Rack Server	UCSC-PSU1-770W	2
8.5	AC Power Cord - 250V, 10A , India	CAB-250V-10A-ID	2
8.6	Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers	UCSC-RAILB-M4	1
8.7	Unknown	UCS-SID-INFR-UNK	1
8.8	Unknown Heat sink for UCS C220 M5 rack servers 150W CPUs &	UCS-SID-WKL-UNK	ľ
8.9	below	UCSC-HS-C220M5	2
8.10	UCS C-Series M5 SFF drive blanking panel	UCSC-BBLKD-S2	6
8.11	Super Cap cable for UCSC-RAID-M5 on C240 M5 Servers	CBL-SC-MR12GM52	1
8.12	Super Cap for UCSC-RAID-M5, UCSC-MRAID1GB-KIT	UCSC-SCAP-M5	1
8.13	2.2 GHz 4114/85W 10C/13.75MB Cache/DDR4 2400MHz	UCS-CPU-4114	2
8.14	Cisco 12G Modular RAID controller with 2GB cache	UCSC-RAID-M5	1
8.0.1	SNTC 8X5XNBD UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, P	CON-SNT-C220M5SX	1

ANNEXURE-II: TEST-BED TOPOLOGY

Topology



Role	Platform
DNAC Appliance	DN2-HW-APLDNAC 1.3 (S/W)
Internet GW	• ASR1001X
Core Node (1)	• C9300
Centralized WLC	• AIR-3504
UCS (Security, Addr resolution, Controller)	 UCS C220 ISE 2.6 (S/W) DHCP (S/W)
Mgmt Switch	• C9200L
UCS (Computing cluster)- (4node)	• UCS C220
Access Node (3)	• C9300
Access Points (5)	• C9120AXI

Blue – Main Network Green – Management Network Black – Global IP to external network

ANNEXURE-III: TECHNICAL BID COMPLIANCE CHECKLIST

(to be submitted with technical bid)

Sr. No.	Criterion	Yes/No	Page No. of attachment
1	Proof of EMD submission		
2	Letter from OEM that the bidder is authorised to supply the equipment		
3	Whether the bidder has supplied similar equipment to Govt institutes or reputed firms and whether documentary proof attached		
4	Declaration that the bidder is not blacklisted by any Govt entities in India		
5	Detailed technical specifications and datasheets for all line items		
6	Terms for hardware/software licensing, updates and support clearly stated		
7	A clear installation-deployment-testing plan		
8	BoQ compliance sheet filled in and a copy of masked commercial bid attached		

ANNEXURE-IV: BOQ COMPLIANCE SHEET

(to be submitted with technical bid)

SI. No.	Item Description	Cisco Part Number	Quantity	Quoted Yes/No
1	SDN controller kit consisting of the following		1	
1	subsystems:		•	
1.0	Cisco DNA Starter Kit - For Customer Production	SDA-WW-LABKIT	1	
	or Lab Use	-		
1.1	Cisco DNA Center Appliance (Gen 2) - 44 Core Cisco DNA Center SW 1.3	DN2-HW-APL	1	
1.1.1		DNA-SW-1.3	1	
1.1.2	AC Power Cord - 250V, 10A , India 2.1 GHz 6152/140W 22C/30.25MB Cache/DDR4	CAB-250V-10A-ID	2	
1.1.3	2666MHz	DN2-CPU-6152	2	
1.1.4	32GB DDR4-2666-MHz RDIMM/PC4-21300/dual rank/x4/1.2v	DN2-MR-X32G2RS-H	8	
1.1.5	Intel X710-DA2 dual-port 10G SFP+ NIC	DN2-PCIE-ID10GF	1	
1.1.6	Cisco UCS 770W AC Power Supply for Rack	DN2-PSU1-770W	2	
1.1.7	64GB SD Card for UCS Servers	DN2-SD-64G-S	1	
1.1.8	1.9TB 2.5 inch Enterprise Value 6G SATA SSD	DN2-SD19TM1X-EV	8	
1.1.9	Trusted Platform Module 2.0 for UCS servers	DN2-TPM2-002	1	
	Cisco 12G Modular RAID controller with 2GB			
1.1.10	cache	DN2-RAID-M5	1	
1.1.11	Mini Storage Carrier for SD (holds up to 2)	DN2-MSTOR-SD	1	
1.1.12	480 GB 2.5 inch Enterprise Value 6G SATA SSD	DN2-SD480GM1X-EV	2	
1.1.13	Intel X710 quad-port 10G SFP+ NIC	DN2-PCIE-IQ10GF	1	
1.1.14	10GBASE-SR SFP Module, Enterprise-Class	SFP-10G-SR-S	2	
1.1.0.1	SOLN SUPP 8X5XNBD DNA Center Appliance (Gen 2)	CON-SSSNT-DN2HWPL	1	
1.2	Catalyst 9300 24-port PoE+, Network Advantage	C9300-24P-A	2	
1.2.1	C9300 Network Advantage, 24-port license	C9300-NW-A-24	2	
1.2.2	UNIVERSAL	S9300UK9-169	2	
1.2.3	715W AC 80+ platinum Config 1 Power Supply	PWR-C1-715WAC-P	2	
1.2.4	715W AC 80+ platinum Config 1 SecondaryPower Supply	PWR-C1-715WAC-P/2	2	
1.2.5	India AC Type A Power Cable	CAB-TA-IN	4	
1.2.6	Cisco pluggable USB3.0 SSD storage	SSD-120G	2	
1.2.7	50CM Type 1 Stacking Cable	STACK-T1-50CM	2	
1.2.8	Catalyst Stack Power Cable 30 CM	CAB-SPWR-30CM	2	
1.2.9	Catalyst 9300 8 x 10GE Network Module	C9300-NM-8X	2	
1.2.10	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	2	
1.2.0.1	SNTC-8X5XNBD Catalyst 9300 24-port PoE+, Network Adva	CON-SNT-C93002PA	2	
1.2.11	Prime Infrastructure Lifecycle & Assurance Term - Smart Lic	PI-LFAS-T	2	
1.2.11.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	2	
1.2.12	ISE BASE Term License	ISE-BASE-T	50	
1.2.12.0.1	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	50	
1.2.13	StealthWatch 1 FPS Term License	SWATCH-T	50	
1.2.13.0.1	ISE BASE Tracker Term 3Y	SWATCH-TRK-3Y	50	
1.2.14	ISE PLS Term License	ISE-PLS-T	50	
1.2.14.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	50	

SI. No.	Item Description	Cisco Part Number	Quantity	Quoted Yes/No
1.2.15	C9300 24-Port DNA-Premier License	C9300-DNA-P-24	2	
1.2.15.0.1	C9300 DNA Premier, 24-Port, 3 Year Term License	C9300-DNA-P-24-3Y	2	
1.3	Cisco 3504 Wireless Controller	AIR-CT3504-K9	1	
1.3.1	Cisco 3504 Wireless Controller SW Rel. 8.5	AIR-CT3504-SW-8.5	1	
1.3.2	AC Power Cord, Type C5, India	CAB-AC-C5-IND	1	
1.3.3	3504 Wireless Controller Rack Mount Tray	AIR-CT3504-RMNT	1	
1.3.4	Cisco 3504 Wireless Controller Power Supply	PWR-115W-AC	1	
1.3.0.1	SNTC-8X5XNBD Cisco 3504 Wireless Controller	CON-SNT-AIRCTRTK	1	
1.4	Cisco ISE Virtual Machine Small	R-ISE-VMS-K9=	1	
1.4.0.1	SOLN SUPP SWSS Cisco ISE Virtual Machine Small	CON-ECMUS-RISEV9SM	1	
1.5	Cisco Catalyst 9120AX Series	C9120AXI-D	2	
1.5.1	Capwap software for Catalyst 9120AX	SW9120AX-CAPWAP-K9	2	
1.5.2	802.11 AP Low Profile Mounting Bracket (Default)	AIR-AP-BRACKET-1	2	
1.5.3	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	AIR-AP-T-RAIL-R	2	
1.5.4	Aironet AP License Term Licenses For Tracking	CDNA-P-C9120	2	
1.5.4.0.1	C9120AX CISCO DNA Advantage 3 Year Term Licenses For Trackin	DNA-P-3Y-C9120	2	
1.5.5	CISCO DNA Premier Term Wireless	AIR-DNA-P	2	
1.5.5.0.1	CISCO DNA Premier Term Wireless 3Y	AIR-DNA-P-3Y	2	
1.5.6	Aironet AP License Term Licenses	WLC-AP-T	2	
1.5.6.0.1	Aironet AP License 3 Year Term License	WLC-AP-T-3Y	2	
1.5.7	Prime AP Term Licenses	PI-LFAS-AP-T	2	
1.5.7.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	2	
1.5.8	Aironet AP License Term Licenses	AIR-DNA-A-T	2	
1.5.8.0.1	Aironet CISCO DNA Advantage 3 Year Term License	AIR-DNA-A-T-3Y	2	
1.5.9	ISE BASE Term License	ISE-BASE-T	30	
1.5.9.0.1	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	30	
1.5.10	ISE PLS Term License	ISE-PLS-T	30	
1.5.10.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	30	
1.5.11	AIR CISCO DNA Perpetual Network Stack	AIR-DNA-NWSTACK-A	2	
1.5.12	Cisco DNA Spaces Act Term License for Cisco DNA	D-CISCODNAS-ACT-T	2	
1.5.12.0.1	Cisco DNA Spaces ACT for Cisco DNA - 3Year	D-CISCODNAS-ACT-3Y	2	
1.5.13	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	2	
1.5.0.1	SNTC-8X5XNBD Cisco Catalyst 9120AX Series	CON-SNT-C9120AXI	2	
2	Cisco ASR1001-X ASR set with the following components		1	
2.0	Cisco ASR1001-X Chassis, 6 built-in GE, Dual P/S, 8GB DRAM	ASR1001-X	1	
2.1	Cisco ASR 1000 Advanced Enterprise Services License	SLASR1-AES	1	
2.1.0.1	SNTC-8X5XNBD Cisco ASR 1000 Advanced Enterprise Ser	CON-SNT-SLASR1AM	1	
2.2	ASR1K-Int Edge/Peering incl. BGP/NAT/ZBFW - tracking only	ASR1K-INTERNET	1	
2.3	1000BASE-T SFP transceiver module for Category 5 copper wire	GLC-TE	4	
2.4	Cisco ASR1001-X 8GB DRAM	M-ASR1001X-8GB	1	
2.5	Blank faceplate for NIM slot on Cisco ISR 4400	NIM-BLANK	1	

SI. No.	Item Description	Cisco Part Number	Quantity	Quoted Yes/No
2.6	Blank Cover for regular SPA	SPA-BLANK	1	
2.7	Cisco ASR1001-X AC Power Supply	ASR1001-X-PWR-AC	2	
2.8	AC Power Cord (India)	CAB-IND	2	
2.9	Cisco ASR1001-X IOS XE UNIVERSAL W/O LI	SASR1K1XUNLIK9-166	1	
2.0.1	SNTC-8X5XNBD Cisco ASR1001-X Chassis, Crypto, 6 built	CON-SNT-ASR1001X	1	
3	Cisco Catalyst 9200L switch set with the		1	
	following components Catalyst 9200L 24-port data, 4 x 1G, Network			
3.0	Essentials	C9200L-24T-4G-E	1	
3.1	C9200L Network Essentials, 24-port license	C9200L-NW-E-24	1	
3.2	India AC Type A Power Cable	CAB-TA-IN	1	
3.3	Config 5 Power Supply Blank	PWR-C5-BLANK	1	
3.4	Catalyst 9200 Blank Stack Module	C9200-STACK-BLANK	2	
3.5	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	1	
3.0.1	SNTC-8X5XNBD Catalyst 9200L 24-port data, 4 x 1G, Net	CON-SNT-C920L24T	1	
3.6	C9200L Cisco DNA Essentials, 24-port Term license	C9200L-DNA-E-24	1	
3.6.0.1	C9200L Cisco DNA Essentials, 24-port, 3 Year Term license	C9200L-DNA-E-24-3Y	1	
4	Cisco Catalyst 9300 switch set, each with specified components per set as follows		2	
4.0	Catalyst 9300 24-port data only, Network Advantage	C9300-24T-A	1	
4.1	C9300 Network Advantage, 24-port license	C9300-NW-A-24	1	
4.2	Cisco Catalyst 9300 XE 16.12 UNIVERSAL	S9300UK9-1612	1	
4.3	350W AC 80+ platinum Config 1 Power Supply	PWR-C1-350WAC-P	1	
4.4	350W AC 80+ platinum Config 1 Secondary Power Supply	PWR-C1-350WAC-P/2	1	
4.5	India AC Type A Power Cable	CAB-TA-IN	2	
4.6	Cisco pluggable USB3.0 SSD storage	SSD-120G	1	
4.7	50CM Type 1 Stacking Cable	STACK-T1-50CM	1	
4.8	Catalyst Stack Power Cable 30 CM	CAB-SPWR-30CM	1	
4.9	ISE BASE Term License	ISE-BASE-T	25	
4.9.0.1	ISE BASE Tracker Term 3Y	ISE-BASE-TRK-3Y	25	
4.10	ISE PLS Term License	ISE-PLS-T	25	
4.10.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	25	
4.11	StealthWatch 1 FPS Term License	SWATCH-T	25	
4.11.0.1	ISE BASE Tracker Term 3Y	SWATCH-TRK-3Y	25	
4.11.0.1	Prime Infrastructure Lifecycle & Assurance Term -	PI-LFAS-T	1	
4.12.0.1	Smart Lic PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	1	
4.12.0.1	Catalyst 9300 8 x 10GE Network Module	C9300-NM-8X	1	
4.14	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	1	
4.15	C9300 24-Port DNA-Premier License	C9300-DNA-P-24	1	
4.15.0.1	C9300 DNA Premier, 24-Port, 3 Year Term License	C9300-DNA-P-24-3Y	1	
4.0.1	SOLN SUPP 8X5XNBD Catalyst 9300 24-port data only, Network	CON-SSSNT-C93002TA	1	

· • ·	Cisco Catalyst 9120AX Access Point set, each		
5	with specified components per set as follows		3
5.0	Cisco Catalyst 9120AX Series	C9120AXI-D	1
5.1	Network Plug-n-Play Connect for zero-touch device deployment	NETWORK-PNP-LIC	1
5.2	Ceiling Grid Clip for Aironet APs - Recessed Mount	AIR-AP-T-RAIL-R	1
5.3	(Default) 802.11.4.D.Low Profile Mounting Procket (Default)		1
5.3 5.4	802.11 AP Low Profile Mounting Bracket (Default) Capwap software for Catalyst 9120AX	AIR-AP-BRACKET-1 SW9120AX-CAPWAP-K9	1
5.5	Aironet AP License Term Licenses For Tracking	CDNA-P-C9120	1
5.5.0.1	C9120AX CISCO DNA Advantage 3 Year Term Licenses For Trackin	DNA-P-3Y-C9120	1
5.6	CISCO DNA Premier Term Wireless	AIR-DNA-P	1
5.6.0.1	CISCO DNA Premier Term Wireless 3Y	AIR-DNA-P-3Y	1
5.7	Aironet AP License Term Licenses	WLC-AP-T	1
5.7.0.1	Aironet AP License 3 Year Term License	WLC-AP-T-3Y	1
5.8	Prime AP Term Licenses	PI-LFAS-AP-T	1
5.8.0.1	PI Dev Lic for Lifecycle & Assurance Term 3Y	PI-LFAS-AP-T-3Y	1
5.9	Aironet AP License Term Licenses	AIR-DNA-A-T	1
5.9.0.1	Aironet CISCO DNA Advantage 3 Year Term	AIR-DNA-A-T-3Y	1
5.10	License ISE BASE Term License	ISE-BASE-T	15
5.10 5.10.0.1	ISE BASE Term License	ISE-BASE-T ISE-BASE-TRK-3Y	15
5.11	ISE PLS Term License	ISE-PLS-T	15
5.11.0.1	ISE PLS Tracker Term 3Y	ISE-PLS-TRK-3Y	15
5.12	AIR CISCO DNA Perpetual Network Stack	AIR-DNA-NWSTACK-A	1
5.13	Cisco DNA Spaces Act Term License for Cisco DNA	D-CISCODNAS-ACT-T	1
5.13.0.1	Cisco DNA Spaces ACT for Cisco DNA - 3Year	D-CISCODNAS-ACT-3Y	1
5.0.1	SOLN SUPP 8X5XNBD Cisco Catalyst 9120AX Series	CON-SSSNT-C9120AXI	1
6	10GBASE Active Optical SFP+ Cable, 10M	SFP-10G-AOC10M=	
		•••••••••••	10
7	10GBASE-SR SFP Module, Enterprise-Class	SFP-10G-SR-S=	10 6
	10GBASE-SR SFP Module, Enterprise-Class Cisco UCS C220 Server set with the following		
7 8	Cisco UCS C220 Server set with the following components		
	Cisco UCS C220 Server set with the following		
8	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD,	SFP-10G-SR-S=	6
8 8.0	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual	SFP-10G-SR-S= UCSC-C220-M5SX	6 1 1
8 8.0 8.1	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C-	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H	6 1 1 4
8 8.0 8.1 8.2	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N	6 1 1 4 4
8 8.0 8.1 8.2 8.3	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST	6 1 1 4 4 1
8 8.0 8.1 8.2 8.3 8.4	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W	6 1 1 4 4 1 2
8 8.0 8.1 8.2 8.3 8.4 8.5 8.6	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4	6 1 1 4 4 1 2 2 1
8 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers Unknown	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4 UCS-SID-INFR-UNK	6 1 1 4 4 1 2 2
8 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers Unknown Unknown Heat sink for UCS C220 M5 rack servers 150W	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4 UCS-SID-INFR-UNK UCS-SID-INFR-UNK	6 1 1 4 4 1 2 2 1 1 1 1
8 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 8.9	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers Unknown Unknown Heat sink for UCS C220 M5 rack servers 150W CPUs & below	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4 UCS-SID-INFR-UNK UCS-SID-INFR-UNK UCS-SID-WKL-UNK UCSC-HS-C220M5	6 1 1 4 4 1 2 2 1 1 1 1 2
8 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 8.9 8.10	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers Unknown Unknown Heat sink for UCS C220 M5 rack servers 150W CPUs & below UCS C-Series M5 SFF drive blanking panel	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4 UCS-SID-INFR-UNK UCS-SID-INFR-UNK UCS-SID-WKL-UNK UCSC-HS-C220M5 UCSC-BBLKD-S2	6 1 1 4 4 1 2 2 1 1 2 1 1 2 1 1 2 6
 8 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 8.9 	Cisco UCS C220 Server set with the following components UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCle, PSU 32GB DDR4-2666-MHz LRDIMM/PC4-21300/dual rank/x4/1.2v 600GB 12G SAS 10K RPM SFF HDD IMC SW (Recommended) latest release for C- Series Servers. Cisco UCS 770W AC Power Supply for Rack Server AC Power Cord - 250V, 10A , India Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers Unknown Unknown Heat sink for UCS C220 M5 rack servers 150W CPUs & below	SFP-10G-SR-S= UCSC-C220-M5SX UCS-ML-X32G2RS-H UCS-HD600G10K12N CIMC-LATEST UCSC-PSU1-770W CAB-250V-10A-ID UCSC-RAILB-M4 UCS-SID-INFR-UNK UCS-SID-INFR-UNK UCS-SID-WKL-UNK UCSC-HS-C220M5	6 1 1 4 4 1 2 2 1 1 1 1 2

8.13	2.2 GHz 4114/85W 10C/13.75MB Cache/DDR4 2400MHz	UCS-CPU-4114	2	
8.14	Cisco 12G Modular RAID controller with 2GB cache	UCSC-RAID-M5	1	
8.0.1	SNTC 8X5XNBD UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, P	CON-SNT-C220M5SX	1	

ANNEXURE-V: DETAILS OF THE BANK ACCOUNT / PAN / GSTN OF IISC BANGALORE

For submitting EMD/Performance Security

NEFT/RTGS: Account's Name – I.I.Sc.

Bank - State Bank of India (Branch: IISc Bangalore, Branch Code: 02215)

Account No. - 31728098170

IFSC - SBIN0002215

MICR - 560002020

PAN/GST No.:

PAN – AAATI1501J

GST No. - 29AAATI1501J2ZV

Note:

Acceptance of the e-receipt of NEFT/RTGS is subject to its verification from Finance & Accounts section.