

NOTICE FOR INVITING TENDER

Item Rate, tenders are invited in the prescribed format from bidders for execution of Internal furnishing, Civil, Electrical and Networking works for the PROPOSED RENOVATION WORKS AT Hall No 5 of Old DST Building as per following details:

Sl. No.	Bid Details	
1.	Bid Offer Validity (From End Date)	90 (Days)
2.	Ministry/State Name	Ministry Of Science And Technology
3.	Department Name	Department Of Science And Technology (dst)
4.	Organization Name	Technology Development Board (tdb)
5.	Office Name	New Delhi
6.	Total Quantity	3742
7.	Item Category	SITC Of Office Furniture and Interior , SITC Of Office Interior, Office Interior Services , SITC For Networking , Electricals, Civil Construction, SERVICES
8.	Minimum Average Annual turnover of the bidder (For 3 Years)	20 Lakh
9.	Years of Past Experience Required for same/similar service	3 Years
10	Document required from seller	Experience Criteria, Past Performance, Bidder Turnover, Certificate (Requested in ATC) ,OEM Authorization Certificate,
11	Past Performance	50 %
12	Time allowed for Technical Clarifications during technical evaluation	2 Days
13.	Estimated Bid Value	20 Lakh + GST
14.	EMD Detail	5% Demand Draft (DD)
	ePBG Detail	
15.	ePBG Percentage	3%
16.	Duration of ePBG required (Months)	12 months
17.	Date of Issue of Tender : During office hours	Technology Development Board, Technology Bhawan, Block-II, Second Floor, New Mehrauli Road, New Delhi 110016
18.	Last date of submission of Tender :	09.04.2024
19.	Date & Time of opening the Technical bid	12.04.2024
20.	Period of Completion	1 Month

1. EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.
2. The EMD % will be applicable for each schedule/group selected during Bid creation.
3. EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.
4. Bids submitted by all the bidders would be evaluated for eligibility as mentioned in the 'Eligibility Criteria' section. Bids not complying with the eligibility criteria are liable to be disqualified/ rejected and will not be considered for further evaluation. TDB reserves the right to cancel the bid / call for clarifications in this regard. Bidders must submit the proof of all the credentials as required for evaluation of eligibility criteria. Claims of the bidders without verifiable facts won't be considered as credentials towards satisfying eligibility criteria.

Beneficiary:

Smriti Tripathi
 Department of Science and Technology (DST), Technology Development Board (TDB), Ministry of Science and Technology, Technology Bhawan, Block-II, Second Floor, New Mehrauli Road, New Delhi 110016.
 (Under Secretary)

Pre Bid Detail(s)

Pre-Bid Date and Time	Pre-Bid Venue
27.03.2024 and 11:00AM	Technology Development Board, Technology Bhawan, Block-II, Second Floor, New Mehrauli Road, New Delhi 110016

- 2) The Item Rates under the contract include for full, final & entire completion of all works in all respects described in the tender document forming part of the contract. Bidders must quote Item Rates on estimated cost. Tenders will be opened in the presence of bidders or their authorized representatives.
- 3) Every page of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General and Special Conditions of Contract, Specifications etc. as laid down. Any tender with any of the documents not so signed will be subjected to rejection.
- 4) The Technology Development Board reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
- 5) This notice inviting tenders, the conditions of tender and the duly completed form of tender etc. will form part of the Agreement to be executed by the successful tenderer with the Board (TDB).
- 6) Tender submitted without EMD from Nationalized Bank will be treated as incomplete and the same will be rejected out rightly. The EMD shall be strictly in the form of Pay Order / Demand Draft. No Cheques will be accepted on account of EMD. Tenders submitted with the cheque as EMD will be treated as incomplete and will be rejected.
- 6) No tender will be received after the expiry of the time notified for receiving tenders under any circumstances whatsoever.
- 7) The tender rate against each item of work/ price indicated in the schedule of quantities and rates/ prices should be indicated both in words and figures. In case of any discrepancy, the rates indicated in words would prevail.

8) Tender submitted without earnest money shall be summarily rejected. Applicants registered as MSME/ NSIC / Udyog Aadhar/ SSI Scheme are exempted from depositing cost of BID document/ EMD provided they attach self-attested copy of the relevant certificate.

9) The successful bidder will have to submit performance security deposit for a sum of 5% of the value of the accepted tender in the form of an Account Payee DD or Performance Bank Guarantee from a commercial bank in an acceptable form safeguarding the interest of the bank in all respect. The Earnest Money shall be returned to successful bidder on submission of performance Bank Guarantee or retained in the case the successful tenderer desires to do so, as part of the performance security deposit for due fulfillment of the Contract. No interest shall be paid on this deposit.

10) Failure to enter into the Contract agreement within the stipulated time of 10 days from the date of acceptance of work order or withdrawal from bidding during bid validity period shall entail the forfeiture of the Earnest money Deposit.

11) The Earnest money of unsuccessful tenderer will be released after issue of work order, without any interest.

12) Security money deposit of the successful contractor who fails to carry out the job after issue of work order by the bank shall be forfeited.

13) All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.

14) COMMERCIAL EVALUATION: Only the technically qualified bidders who are successful will be asked to participate in commercial bid/price Bid opening

15) Procurement through MSEs will be done as per the Policy guidelines issued by the Ministry of Micro, Small & Medium Enterprises from time to time. MSEs should submit the relevant documentary proof for claiming the exemptions. MSEs shall have basic required qualification under eligibility criteria specified in the RFP and the above Policy will be applicable to those qualifying Bidders only.

16).False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules issued by the Ministry of Finance for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

18. PRE-QUALIFICATION CRITERIA: Mandatory Criteria

1. Must be registered with income tax authority (Yes / No)
2. Must be registered with GST authority (Yes / No)
3. Firm should have Registered Branch Office in Delhi/ NCR (Yes / No)
4. Should have executed one similar work of 80% of estimated cost i.e. Rs.16 Lacs OR Should have executed two similar work of 50% of estimated cost i.e. Rs.10 Lacs
- 5) Average turnover for the last three years shall be
- 6) Should have made profit at least in two years during last three years.

NOTE :The similar work means Interior furnishing work including interiorfurnishing along with related service of Civil, Electrical, Air , Networking, etc.

19). The contractor shall not assign the contract. He shall not sub-let any portion of the contract .

20). The contractor shall carry out of all the work strictly in accordance with Drawings, details and instructions of the Board (TDB).

21). A Schedule of probable quantities in respect of each work and specifications accompany these s conditions. The Schedule of probable quantities is liable to alteration by omission, deductions or additions at the discretion of the Board. No claim will be entertained from the contractor on account of loss of profit over revising the tender rates.

22).The Tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of filling of Tender and for entering into a contract and must examine the drawings and must inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto no compensation will be paid on account of not getting proper information.

23).The rates quoted in the Tender shall be inclusive of all charges for clearing of site before commencement as well as after completion.

24)Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the contractor and its shall be reckoned from the 10 days after acceptance of order to commence the work or the date of handing over the site to the contractor whichever is later. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and if the contractor fails to complete the work within the specified period i.e. 1 Month, he shall be liable to pay compensation as defined in the conditions of contract.

25).The successful Tenderer is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Board.

26)The contractor must bear in mind that all the work shall be carried out strictly in accordance with the specificationsand no deviation on any account will be permitted

27).The rates quoted in the Tender shall also include Electric consumption charges for Power. If no power is available at site, the contractor shall have to make his own arrangement to obtain electric power connection and maintain at his own cost an efficient service of electric light and power and shall pay for the electricity consumed.The rates quoted in the Schedule rates also include the expenditure for providing all the water required for the work .

28).The contractor shall be responsible for the observance of all Central Rules and Regulation framed by the Central Government under the Contract Labour (Regulation and Abolition) Act,1970. The Bank shall be entitled to deduct all damages, which it might suffer on account of non-observance of these rules by the Contractor, from the amount payable to the Contractor.

29).Contractors are instructed to note that no extra item or deviated item of work to be executed without taking prior permission, the Board shall not be held responsible for the payment of such works executed. Contractors will have to submit all the particulars including purchase bills/price list for the materials along with the rate analysis for verification of Item Rates.

30) SCOPE OF WORK: The work consists of refurbishing works at . It also includes all the necessary allied work required such as Carpentry, Civil work, interior services, networking or any other work, etc. as required on site. necessary and incidental to the construction and completion of the work.

31) COMPLETION CERTIFICATE:

31.1 APPLICATION FOR COMPLETION CERTIFICATE

The Competent Authority normally issue to the contractor the completion certificate within one month after receiving, an application thereof from the contractor and after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawing and contract documents.

The contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

31.2 Completion Certificate Within one month of the completion of the work in all respects, the Contractor shall be furnished with a certificate by the Competent Authority of such completion but no certificate shall be given nor shall the work be deemed to have been completed until all scaffolding, surplus materials and rubbish is cleared of the site completely. The work will not be considered as complete and taken over by the Board, until all the temporary works, labor etc., are removed and the works site cleared to the satisfaction of the Board.

32). LIQUIDATED DAMAGES/ DAMAGES FOR NON-COMPLETION If the Contractor fails to complete the works within stipulated or within any extended time and the competent authority in writing that in his opinion, the same ought reasonably to have been completed, the Contractor shall pay the Board liquidated damages @ 0.5% of the contract amount per week of delay subject to maximum deduction of 10 % of the contract amount.

33. ARBITRATION

Wherever, in any of the documents forming part of the Contract, the Board has been vested with the final powers, his decision, opinion, certificate or any other discretion shall be final conclusive and binding on the contractor and shall be without appeal.

All other matters shall be subject to the right of arbitration. All disputes or differences of any kind whatsoever save and except matters referred to in clause 1) arising out of or in connection with the Contract, whether during the progress of Work or after Completion and shall after written notice by either party to the contract to the other of them and to the Board hereinafter mentioned be referred for adjudication to two Arbitrator, one each to be nominated by the Contractor and the Board, who shall thereafter appoint an Umpire. The provisions of Indian Arbitration and Conciliation Act 1996 shall apply for the purposes.

The Work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings. The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing. The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award. The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid

The award of the Arbitrator shall be final and binding on both the parties

Subject to aforesaid the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The Board and the Contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

Jurisdiction: All matters arising out of or in any way connected with this contract shall be deemed to have arisen in Delhi and only the courts in Delhi shall have jurisdiction to determine the same

LIST OF ENCLOSURES:

ANNEXURE NO.	PARTICULARS	TICK IF ENCLOSED
I	Certificate of registration of Company / partnership deed.	
IA, IB	Certificates of registration with Income Tax, GST, EPF authorities,	
IC	Proof for having registered branch office in state of Delhi	
IVA, IVB, IVC	Audited Balance Sheet & Profit & Loss A/c Statement for 2019- 2020, 2020-2021 and 2021-2022,2022-23	
VI	Copies of work orders along with Xerox copies of relevant TDS certificate, satisfactory completion certificate mentioning value of work.	
VII	Copies of performance certificate, work orders issued by valued clients, preferably Govt. and Semi-Govt. Bodies.	
VIIIA, VIIIB, VIIIC, VIIID, VIIIE	Copies of income-tax returns/ assessment orders for each year from 2019 to 2023	

Note: In absence of any of the above enclosures, your application is likely to be rejected.

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - I

(Filling all details is mandatory without which application will be summarily rejected)

1.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
2.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. 2. CIVIL WORK = Rs. 3. ELECTRICALS = Rs. 4. NETWORKING = Rs
3.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
4.	VALUE OF CONTRACT EXECUTED	
5.	BRIEF DISCRPTION OF THE WORK	
6.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
7.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
8.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
9.	DELAY IN EXECUTION OF WORK	
10.	WHETHER TIME SCHEDULE IS ADHERED TO	
11.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - II

(Filling all details are mandatory without which application will be summarily rejected)

12.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
13.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. 2. CIVIL WORK = Rs. 3. ELECTRICALS = Rs. 4. NETWORKING = Rs
14.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
15.	VALUE OF CONTRACT EXECUTED	
16.	BRIEF DISCRIPTION OF THE WORK	
17.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
18.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
19.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
20.	DELAY IN EXECUTION OF WORK	
21.	WHETHER TIME SCHEDULE IS ADHERED TO	
22.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - III

(Filling all details are mandatory without which application will be summarily rejected)

23.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
24.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. 2. CIVIL WORK = Rs. 3. ELECTRICALS = Rs. 4. NETWORKING = Rs
25.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
26.	VALUE OF CONTRACT EXECUTED	
27.	BRIEF DISCRPTION OF THE WORK	
28.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
29.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
30.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
31.	DELAY IN EXECUTION OF WORK	
32.	WHETHER TIME SCHEDULE IS ADHERED TO	
33.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

SITC Of Office Furniture and Interior					
Sl. No.	DESCRIPTION	UNIT	QTY.		
1	SITC for Cabin In Hall as per Specification	Nos.	2		
2	SITC for LV Room	Nos.	1		
3	SITC for Conference Room In Hall as per Specification	Nos.	1		
4	SITC for Pantry Cabin as per specification	Nos.	1		
5	SITC for Reception Cabin as per specification	Nos.	1		
6	SITC for False Ceiling in 740 Square Feet	Nos.	1		
7	SITC for Office Floor Tiles in 740 Square Feet	Nos.	1		
8	SITC for LED GX 2'*2' 36 watt Skylux GX LED	Nos.	15		
9	SITC for Ceiling Fan	Nos.	6		
10	SITC for LED TV 55" as per specification	Nos.	1		
Office Interior Services					
Sl. No.	DESCRIPTION	UNIT	QTY.		
1	Assembling and repairing of work station (item already available with office)	Job	11		
2	Wall Wooden tiles Polish and Patching	Job	1		
3	Assembling and repairing of Furniture in Cabin (item already available with office)	Job	2		
4	Assembling and repairing of Furniture in Conference Room (item already available with office)	Job	1		
5	Assembling and repairing of Furniture in Reception Cabin (item already available with office)	Job	1		
6	Repairing of Main & Back Door	Job	2		
7	Installation and repairing of Ceiling Cassette AC (item already available with office)	Job	4		
8	Installation and repairing of 20 KVA UPS with battery (item already available with office)	Job	1		
9	Installation and repairing of Overhead wooden cabinets/storage (item already available with office)	Job	11		
10	Installation and repairing of Tower AC (item already available with office)	Job	2		
SITC For Networking					
Sl. No.	DESCRIPTION	UNIT	QTY.		
A.	ACTIVE COMPONENTS				
1	Layer 2 Access Switch 24 Ports 10/100/1000Mbps + 4 x 10G SFP L2+ Switch	Nos.	1		
2	Wireless access point (indoor) 2x2 MIMO as per specification	Nos.	2		
3	Controller for access point	Nos.	1		
B.	PASSIVE COMPONENTS - UTP				
4	Cat6 UTP CableCAT6 UTP 23AWG	Box	6		
5	Cat6 UTP Patch Cord, 1 Mt. CAT6 UTP 24AWG PATCH CORD:1M	Nos.	36		

6	Cat6 UTP Patch Panel, 24 port, fully loaded Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded	Nos.	1		
7	Cat6 Single I/O with back box Jack Cat 6 Keystone UTP	Nos.	36		
8	Rack - 9U Wall Mount 9U x 500 W x 450 D , Front Glass Door with Lock, 2 pairs of 19" Mounting Rails :-Standard Accessories : - 1U Cable Manager, Roof Mounted Fan Unit / 90 CFM /230V AC,6 Way 5 Amp Power Distribution Unit, Mounting Hardware	Nos.	1		
C.	SERVICES				
9	Supply & Fixing of Conduits	Mtr.	1200		
10	Laying of UTP cable in conduits	Mtr.	1830		
11	Fixing of Racks	Nos.	1		
12	Fixing of I/O box	Nos.	36		
13	Supply & Laying of power cable 1.5sqmm x 3 core	Mtr	500		
14	Supply & Fixing of DP- 64 AMP and MCB- C Type 16 Amp 04 Numbers	Nos.	1		
15	Supply & Fixing of DP-32 Amp and MCB C Type 16 Amp 02 Numbers each	Nos.	4		
16	Electrical socket 6A/ 16 A (Combines) with switches at Each work station by making wire looping (03 Each)	Nos.	20		

Specification of Cabin Room			
S. No.	Specification		Compliance (Yes/No)
	GENERIC		
1	Configuration of Cabin	One Cabin In Hall	
2	Transportations / Freight charges	Offer Prices are on Free Delivery at Consignee site basis.	
3	Approval of Advance sample	After award of contract - Seller shall have to get proto type Advance sample approved from Buyer before manufacturing / starting Bulk supplies - Buyer shall approve / provide list of modifications required within 10 days of offer of advance sample - If there is delay in approval of advance sample from Buyer side - the delivery period shall be regularized for the period of delay in sample approval.	
4	Foundation for Cabin	Building of Foundation at site shall be the responsibility of the Consignee and the Seller shall Install / Erect and Commission the structure on the foundation constructed upto plinth level by the Consignee.	
5	Special Condition	Scope of supply includes Supply and Erection of Cabin at consignee site hence Offer Price to include all these cost components. Further Offer Prices are on Free Delivery at Consignee site basis hence Transportation / Freight charges are to be included in Offer price. Building of Foundation at site shall be the responsibility of the Consignee and the Seller shall Erect the structure on the foundation constructed upto plinth level by the Consignee. In case advance sample is required - after award of contract - Seller shall have to get Advance sample approved from Buyer before manufacturing / starting Bulk supplies. Buyer shall approve / provide list of modifications required within 10 days of offer of advance sample. If there is delay in approval of advance sample from Buyer side - the delivery period shall be regularized for the period of delay in sample approval.	
6	Time period for completion of Erection work at site by seller	Within 20 days of the date of receipt of consignee's confirmation regarding completion of ground and foundation work	
7	Suitability / structural stability / completeness of structures, the structure is intended for use in	In wind condition of 55m/s - in Seismic zone V and ambient temperature range (-) 40 degree C to (+) 50 degree C - 1 M snow load standing on the roof - Roof slope 1 : 2 Cabin should be structurally stable and suitable to meet severity of these climatic condition.	
8	Shape of Cabin	Square	
9	Insulation of Wall / door panels	Insulation core of panel to be formed in one piece and provides desired structural and physical properties.	
10	Provision for Power Connection	The seller to be liable to get the Electric connection through 3 core insulated underground cable covered with MS pipe from the power supply point provided by the Buyer.	

11	Wiring	Concealed wiring	
12	Provision for Cable , Switches and Junction box connection	Seller to make appropriate provisions for cable laying - installing meter / junction box with switches - other related electrical accessories as may be require for the power supply to the Cabin.	
13	Other requirements	All necessary required permissions from civic agencies for installation and commissioning to be arranged by seller - necessary assistance / documents required to be provided by Buyer.	
14	Completeness of the work	Any fittings or items which may not be specially mentioned in the specifications but which are necessary for commissioning of Cabin are to be provided by the Seller without any extra charge.	
15	Electricity charges	Charges applicable for obtaining Power connection and recurring monthly power consumption charges levied by sevice provider to be borne by Buyer / user depatment.	
	PANEL MATERIAL		
16	Side wall panel material	1.25 mm thick corrugated HR sheet	
17	Door panel material	Flush door 32 mm thick water proof.	
18	Door and Window canopy material	Fibreglass Reinforced plastics (F.R.P).	
19	Floor panels material	24 mm Block board thickness with FRP coating checkers style.	
20	End panel material	1.25 mm thick corrugated HR sheet	
21	Insulation material for sides and End walls	With 50 mm thick glass wool	
22	Inside panel material for sides, end walls	Consists of 8 mm thick pre-laminated board.	
	FRAME MATERIAL		
23	Side Panel frame	Made of MS having stiffner Top 40 mm x 20 mm x 3.2 mm thick	
24	Floor panel frame	MS having 50 mm x 50 mm x 1.2 mm	
25	Understructure / Base	Made up of MS pipe 50 mm x 50 mm x 1.2 mm thick for vertical and beside - Centre block and outer ride with 25 mm x 25 mm x 2 mm thick MS pipe	
26	Door panel frame	Made of aluminium powder coated frame.	
	Dimensions And Thickness		
27	Inside Length \pm 15 mm	3048 mm	
28	Inside Width \pm 15 mm	2134 mm	
29	Total Height (mm) \pm 15mm	1830 mm	
30	Door Width \pm 5 mm	760 mm	
31	Door Height \pm 10 mm	1830 mm	
32	Total thickness of Wall panel \pm 2 mm	75 mm	
33	Total thickness of Door panel \pm 2 mm	40 mm	
	MISCELENIIOUS		
34	Number of Door hinges	1 nos.	

	Hint : For each Door		
35	Number of Door handles Hint : For each Door	1 nos. (1 no. each inside and outside)	
36	Number of Tower bolt Hint : For each Door	1 nos.	
37	Number of Aldrop on each door	1 nos.	
38	safety Grills (for windows)	Made from MS square bar of 8 mm having equal spacing of 125 mm	
39	Position of door	On one of the longer side	
40	Electric fittings	Only electric points to be provided for one fan - One light - One bulkhead fitting point - one 5 amp. power point with Switch board including Double pole MCB 20A with metal enclosure - continuous earth wires to be provided and also internal earth terminal to be provided.	
41	Number of Doors	1	
42	Door opening	internal	
43	Flashing item (U track, L corner etc)	To be made out with 0.45 mm thick PPGI sheet in require size and shape.	
44	Locking / Security	Cabin have to be provision of locking Door and Windows to prevent unwanted intrusion and theft.	
	COLOUR AND FINISH		
45	Colour	White	
46	Top coat	Chlorinated rubber paint 50 microns.	
47	Paint outside	Two coats of synthetic enamel paint to be applied on expose structure and all MS items after installation.	
48	Inside finish	Internal panels - doors - ceiling - shutter to be white finish (excluding polycarbonate / acrylic glass sheet and aluminium frames on windows)	
49	Logo (if any)	Approved logo of desired size to be painted as per Buyer's requirement.	
	WARRANTY		
50	Guarantee / Warranty of bought out components	OEMs guarantee /warranty of all Bought out components to be extended to the user unit - Seller have to submit related documents to the Buyer alongwith supply of Goods.	
51	Service Maintenance	Replacements / repairs to be borne by the seller in respect of fittings and fixtures during guarantee / warrantee period.	
52	Warranty	1 - Year	
	CERTIFICATION		
53	Test reports to be furnished to buyer's on demand	Yes	
54	OEM of offered product is ISO 9001:2015 certified	Yes	
55	OEM of offered product is ISO 14001:2015 certified	Yes	

56	OEM of offered product is ISO 18001:2007 certified	Yes	
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Specification Of Conference Room			
Sno.	Specification		Compliance (Yes/No)
	GENERIC		
1	Configuration of Conference Room	One Conference Room In Hall	
2	Transportations / Freight charges	Offer Prices are on Free Delivery at Consignee site basis.	
3	Approval of Advance sample	After award of contract - Seller shall have to get proto type Advance sample approved from Buyer before manufacturing / starting Bulk supplies - Buyer shall approve / provide list of modifications required within 10 days of offer of advance sample - If there is delay in approval of advance sample from Buyer side - the delivery period shall be regularized for the period of delay in sample approval.	
4	Foundation for Conference Room	Building of Foundation at site shall be the responsibility of the Consignee and the Seller shall Install / Erect and Commission the structure on the foundation constructed upto plinth level by the Consignee.	
5	Special Condition	Scope of supply includes Supply and Erection of Conference Room at consignee site hence Offer Price to include all these cost components. Further Offer Prices are on Free Delivery at Consignee site basis hence Transportation / Freight charges are to be included in Offer price. Building of Foundation at site shall be the responsibility of the Consignee and the Seller shall Erect the structure on the foundation constructed upto plinth level by the Consignee. In case advance sample is required - after award of contract - Seller shall have to get Advance sample approved from Buyer before manufacturing / starting Bulk supplies. Buyer shall approve / provide list of modifications required within 10 days of offer of advance sample. If there is delay in approval of advance sample from Buyer side - the delivery period shall be regularized for the period of delay in sample approval.	
6	Time period for completion of Erection work at site by seller	Within 20 days of the date of receipt of consignee's confirmation regarding completion of ground and foundation work	
7	Suitability / structural stability / completeness of structures, the structure is intended for use in	In wind condition of 55m/s - in Seismic zone V and ambient temperature range (-) 40 degree C to (+) 50 degree C - 1 M snow load standing on the roof - Roof slope 1 : 2 Conference Room should be structurally stable and suitable to meet severity of these climatic condition.	
8	Shape of Conference Room	Square	
9	Insulation of Wall / door	Insulation core of panel to be formed in one piece and provides	

	panels	desired structural and physical properties.	
10	Provision for Power Connection	The seller to be liable to get the Electric connection through 3 core insulated underground cable covered with MS pipe from the power supply point provided by the Buyer.	
11	Wiring	Concealed wiring	
12	Provision for Cable , Switches and Junction box connection	Seller to make appropriate provisions for cable laying - installing meter / junction box with switches - other related electrical accessories as may be require for the power supply to the Conference Room.	
13	Other requirements	All necessary required permissions from civic agencies for installation and commissioning to be arranged by seller - necessary assistance / documents required to be provided by Buyer.	
14	Completeness of the work	Any fittings or items which may not be specially mentioned in the specifications but which are necessary for commissioning of Conference Room are to be provided by the Seller without any extra charge.	
15	Electricity charges	Charges applicable for obtaining Power connection and recurring monthly power consumption charges levied by sevice provider to be borne by Buyer / user department.	
	PANEL MATERIAL		
16	Side wall panel material	1.25 mm thick corrugated HR sheet	
17	Door panel material	Flush door 32 mm thick water proof.	
18	Door and Window canopy material	Fibreglass Reinforced plastics (F.R.P).	
19	Floor panels material	24 mm Block board thickness with FRP coating checkers style.	
20	End panel material	1.25 mm thick corrugated HR sheet	
21	Insulation material for sides and End walls	With 50 mm thick glass wool	
22	Inside panel material for sides, end walls	Consists of 8 mm thick pre-laminated board.	
	FRAME MATERIAL		
23	Side Panel frame	Made of MS having stiffner Top 40 mm x 20 mm x 3.2 mm thick	
24	Floor panel frame	MS having 50 mm x 50 mm x 1.2 mm	
25	Understructure / Base	Made up of MS pipe 50 mm x 50 mm x 1.2 mm thick for vertical and beside - Centre block and outer ride with 25 mm x 25 mm x 2 mm thick MS pipe	
26	Door panel frame	Made of aluminium powder coated frame.	
	Dimensions And Thickness		
27	Inside Length \pm 15 mm	3660 mm	
28	Inside Width \pm 15 mm	2440 mm	
29	Total Height (mm) \pm 15mm	1830 mm	
30	Door Width \pm 5 mm	760 mm	
31	Door Height \pm 10 mm	1830 mm	
32	Total thickness of Wall panel \pm 2 mm	75 mm	
33	Total thickness of Door panel \pm 2 mm	40 mm	

MISCELENIIOUS		
34	Number of Door hinges Hint : For each Door	1 nos.
35	Number of Door handles Hint : For each Door	1 nos. (1 no. each inside and outside)
36	Number of Tower bolt Hint : For each Door	1 nos.
37	Number of Aldrop on each door	1 nos.
38	safety Grills (for windows)	Made from MS square bar of 8 mm having equal spacing of 125 mm
39	Position of door	On one of the longer side
40	Electric fittings	Only electric points to be provided for one fan - One light - One bulkhead fitting point - one 5 amp. power point with Switch board including Double pole MCB 20A with metal enclosure - continuous earth wires to be provided and also internal earth terminal to be provided.
41	Number of Doors	1
42	Door opening	internal
43	Flashing item (U track, L corner etc)	To be made out with 0.45 mm thick PPGI sheet in require size and shape.
44	Locking / Security	Conference Room have to be provision of locking Door and Windows to prevent unwanted intrusion and theft.
COLOUR AND FINISH		
45	Colour	White
46	Top coat	Chlorinated rubber paint 50 microns.
47	Paint outside	Two coats of synthetic enamel paint to be applied on expose structure and all MS items after installation.
48	Inside finish	Internal panels - doors - ceiling - shutter to be white finish (excluding polycarbonate / acrylic glass sheet and aluminium frames on windows)
49	Logo (if any)	Approved logo of desired size to be painted as per Buyer's requirement.
WARRANTY		
50	Guarantee / Warranty of bought out components	OEMs guarantee /warranty of all Bought out components to be extended to the user unit - Seller have to submit related documents to the Buyer alongwith supply of Goods.
51	Service Maintenance	Replacements / repairs to be borne by the seller in respect of fittings and fixtures during guarantee / warrantee period.
52	Warranty	1 - Year
CERTIFICATION		
53	Test reports to be furnished to buyer's on demand	Yes
54	OEM of offered product is ISO 9001:2015 certified	Yes
55	OEM of offered product is ISO 14001:2015 certified	Yes

56	OEM of offered product is ISO 18001:2007 certified	Yes	
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Access Switch - 24 port 10/100/1000baseT with 2nos combo & 2 nos 10G SFP ports			
Sl. No	Description	Compliance (Yes/No)	
General			
1	Non-blocking equipment		
2	Total RU: 1 RU maximum		
3	Power Supply must be internal and integrated into the switch		
4	SFP's HotSwap		
5	Minimum of 24 ports 10/100/1000 Base T RJ45		
6	Minimum of 2 SFP+ ports (1/10Gbps) for Uplink or VFL		
7	Minimum of 2 1000BaseT/SFP combo ports		
8	Equipment MUST be Fanless		
9	Maximum Stack of 4 elements (Single Management IP)		
10	Minimum switching capacity of 92Gbps		
11	Minimum VFL (aggregated) of 40Gbps		
12	Minimum Processing Capacity (Mpps): 137 Mpps		
13	Operating Temperature: 0°C to 45°C		
14	Humidity (operation): 5% to 95% non-condensing		
15	Power Supply efficiency (max load) of 87.3%		
16	MTBF (hours) @ 25°C: 2.595.000		
17	System power consumption idle of 10.7W		
18	System power consumption 100% traffic all ports of 24W		
19	Switch & Transceivers to be from the same OEM		
Resiliency and high availability functionalities			
20	Unified management, control and virtual chassis technology		
21	Virtual Chassis 1+N redundant supervisor manager		
22	Virtual Chassis In-Service Software Upgrade (ISSU)		
23	Smart continuous switching technology		
24	IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) encompasses IEEE 802.1D Spanning Tree Protocol (STP) and IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)		
25	Per-VLAN spanning tree (PVST+) and 1x1 STP mode		
26	IEEE 802.3ad/802.1AX Link Aggregation Control Protocol (LACP) and static LAG groups across modules		
27	Virtual Router Redundancy Protocol (VRRP) with tracking capabilities		
28	IEEE protocol auto-discovery		
29	Bidirectional Forwarding Detection (BFD) for fast failure detection and reduced re-convergence times in a routed environment		
30	Redundant and hot-swappable power supplies		
31	Built-in CPU protection against malicious attacks		
32	Split Virtual Chassis protection		
L3 protocols and features			

33	Static routing for IPv4 and IPv6	
34	Up to 64 IPv4 and 4 IPv6 static routes	
35	Up to 32 IPv4 and 4 IPv6 interfaces	
layer-2 capabilities		
36	Up to 16k MAC Addresses	
37	Up to 4000 VLANs	
38	Up to 1.5k total system policies	
39	Latency: < 4 μ s	
40	Max Frame: 9216 bytes (jumbo)	
Multicast protocols and features		
41	IGMPv1/v2/v3 snooping to optimize multicast traffic	
42	Multicast Listener Discovery (MLD) v1/v2 snooping+	
43	Up to 1000 multicast groups	
Security features		
44	Autosensing IEEE 802.1X multiclient, multi-VLAN support	
45	MAC-based authentication for non-IEEE 802.1X hosts	
46	Web based authentication (captive portal): a customizable web portal residing on the switch	
47	Dynamically provide pre-defined policy configuration to authenticated clients — VLAN, ACL, BW	
48	User Network Profile (UNP) simplifies NAC by dynamically providing pre-defined policy configuration to authenticated clients — VLAN, ACL, BW	
49	Secure Shell (SSH) with public key infrastructure (PKI) support	
50	Terminal Access Controller Access- Control System Plus (TACACS+) client	
51	Centralized Remote Access Dial- In User Service (RADIUS) and Lightweight Directory Access Protocol (LDAP) administrator authentication	
52	Centralized RADIUS for device authentication and network access control authorization	
53	Learned Port Security (LPS) or MAC address lockdown	
54	Access Control Lists (ACLs); flow based filtering in hardware (Layer 1 to Layer 4)	
55	DHCP Snooping, DHCP IP and Address Resolution Protocol (ARP) spoof protection	
56	ARP poisoning detection	
57	IP Source Filtering as a protective and effective mechanism against ARP attacks	
58	Role-based authentication for routed domains	
59	BYOD provides on-boarding of guest, IT/non-IT issued and silent devices; restriction/remediation of traffic from non-compliant devices. RADIUS CoA dynamically enforces User Network Profiles based on authentication, profiling, posture check of devices using Unified Policy Access Manager (UPAM)	
Quality of Service (QoS) features		
60	Priority queues: Eight hardware based queues per port for flexible QoS management	
61	Traffic prioritization: Flow-based QoS with internal and external (a.k.a., remarking) prioritization	
62	Bandwidth management: Flow-based traffic policing and bandwidth management, ingress rate limiting; egress rate shaping per port	
63	Queue management: Configurable scheduling algorithms — Strict Priority Queuing (SPQ), Weighted Round Robin (WRR)	
64	Congestion avoidance: Support for End- to-End Head-Of-Line (E2EHOL) Blocking Protection	
65	Auto QoS for switch management traffic	
Software Defined Networking (SDN) features		
66	Fully programmable RESTful web services interface with XML and JSON support. API enables access to CLI and individual mib objects.	

Management features		
67	Intuitive CLI in a scriptable BASH environment via console, Telnet, or Secure Shell (SSH) v2 over IPv4/IPv6	
68	Powerful WebView Graphical Web Interface via HTTP and HTTPS over IPv4/ IPv6+	
69	File upload using USB, TFTP, FTP, SFTP, or SCP using IPv4/IPv6	
70	Human-readable ASCII-based configuration files for off-line editing, bulk configuration, and out-of-the-box auto-provisioning	
71	Multiple microcode image support with fallback recovery	
72	Dynamic Host Configuration Protocol (DHCP) relay for IPv4/IPv6	
73	DHCPv4 and DHCPv6 server	
74	Loopback IP address support for management per service	
75	Policy- and port-based mirroring	
76	Remote port mirroring	
77	sFlow v5 and Remote Monitoring (RMON)	
Compliance and certifications		
78	47 CRF FCC (Class A) , VCCI , ICES-003 , CE-Mark	
79	EN 50581, EN 55022, EN 55024: 2010 ,EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11	
80	CDRH laser , Compliant with RoHS and Waste Electrical and Electronic Equipment (WEEE) directives , EN 60825-1/2 , UL 60950-1 , CAN/CSA , IEC 62368-1 , IEC 60950-1	
81	OEM direct presence in India from last minimum 7 years	
82	OEM should have there R&D center in India. Switches & Wireless device should be from one make.	
83	Presence in Gartner quadrant from last minimum 10 years	
84	Wired and Wireless products should support a single On-Premise or Cloud NMS on same hardware.	

IEEE 802.11b/g/n/ac/ax, Wifi-6, 2x2+2x2 , PoE (802.3at) Access Point, Data Signal Rate Up to 1800 Mbps		
Sno.	Wireless Access point Specification	Compliance (Yes/No)
1	Access Point should have Wi-Fi: 802.11a/b/g/n /ac/ax, 802.11d & 11h, EAP, EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM	
2	Supports enhanced security – WPA/WPA2/WPA3 Personal and Enterprise, RADIUS client, and Cipher negotiation	
3	Access Point should have Interface Power Jack, Factory Reset Button, console port and LAN ports (PoE)	
4	Access Point should support Network Management: HTTP, HTTPS, Software Controller, Hardware Controller, SNMP Support, Telnet, Email Notification, Secure SSH Telnet.	

5	Access Point should allow auto fallback data rate for reliability, optimized throughput and transmission range	
6	Certifications - FCC, CE	
7	Access Point should support Four Dual Band Internal Antennas: - 3.2 dBi (2.4 GHz), 4.3 dBi (5 GHz) and Maximum Output Power 23 dBm (2.4 GHz), 26 dBm (5 GHz)	
8	Access Point should support 802.1x, RADIUS Server, POP3 and LDAP	
9	Access Point should support Multi-Tenant and Role-Based Administration	
10	Access Point should support Wireless Resource Airtime Fairness, Connect Limit, Aging out, ACL RSSI and Band Steering, Wireless MAC ACL, WLAN Partition	
11	Support ARP Spoofing Prevention, Wireless Intrusion Protection, Bandwidth Optimization	
12	Access Point should support Captive Portal with industry-standard authentication	
13	Access Point should support MAC-based access filtering and WLAN partitioning, Wi-Fi Multimedia Quality of Service (QoS), Traffic Control Uplink and Downlink limit,	
14	Access Point should show Ethernet traffic statistics and WLAN traffic statistic,	
15	Access Point should support Load balancing to optimize performance between Access Points	

Hardware Controller for Access Point

Sno.	Hardware Controller for Access Point Specification	Compliance (Yes/No)
1	Controller should have Centralized Wireless AP management for above mentioned access point.	
2	Controller should Device Interfaces:- Gigabit LAN, USB 3.0, SD Slot, Factory Reset Button and Console Port	
3	NAT pass through by using https agent (Can manage multiple APs behind NAT device)	
4	Provide access points information such as status, IP address, MAC address, channel, network, firmware version, model name...etc.	
5	Provide wireless client information such as IP address, MAC address, authentication type, channel, associated SSID...etc.	
6	Controller should view, create and configure logical sites and networks that are related to the physical locations of the wireless devices in the network.	
7	Bandwidth Optimization, Configure the bandwidth settings for access points in this network, Allocate average bandwidth for each client, Allocate specific bandwidth for this SSID, Allocate the maximum bandwidth for each station, Allocate different bandwidth for 11a/b/g/n stations	
8	Controller should Upload SSL certificate of network Aps.	
9	Captive portal: AP supports internal DB, remote radius, POP3, MAC address and passcode authentication, Payment gateway, Captive portal page customization, Hotspot printing and internal captive portal	
10	Controller should be capable of managing up to 100 Access Points (APs) without licensing charges.	
11	Should support Wireless LAN Management Features like AP grouping, Multi-tenancy, Visualized topology, NAT pass-through, AP discovery (layer 2 and layer 3), and Report system.	
12	Should have Multiple SSID with VLAN, Captive portal with multiple SSID and VLAN	
13	Should support features Band steering, Airtime Fairness, Auto RF management, Bandwidth optimization and Client access control	
14	Should support Rate limiting and bandwidth control for guest and hotspot portal.	
15	Controller should support Auto Channel, Output Power Control, Self-healing around	

	failed Aps in RF Management and Control.	
16	Should support Band steering, L2 roaming, Bandwidth optimization and Airtime fairness.	
17	Controller should have Web-based user interface (HTTPS) for easy management.	
18	Should support Scheduling in Firmware update and Configuration update.	
19	Certification: RoHS, Emission (EMI) - CE, FCC, IC and BSMI:- Safety - CE/ LVD, UL	

Access Switch - 24 port 10/100/1000baseT POE with 2nos combo & 2 nos 10G SFP ports		
Sl. No	Description	Compliance (Yes/No)
General		
1	Non-blocking equipment	
2	Total RU: 1 RU maximum	
3	Power Supply must be internal and integrated into the switch	
4	SFP's HotSwap	
5	Minimum of 24 ports 10/100/1000 Base T RJ45 with PoE+	
6	Minimum of 2 SFP+ ports (1/10Gbps) for Uplink or VFL	
7	Minimum of 2 1000BaseT/SFP combo ports	
8	Equipment MUST be Fanless	
9	Maximum Stack of 4 elements (Single Management IP)	
10	Minimum switching capacity of 92Gbps	
11	Minimum VFL (aggregated) of 40Gbps	
12	Minimum Processing Capacity (Mpps): 137 Mpps	
13	Operating Temperature: 0°C to 45°C	
14	Humidity (operation): 5% to 95% non-condensing	
15	Power Supply efficiency (max load) of 93.5%	
16	MTBF (hours) @ 25°C: 1.447.000	
17	System power consumption idle of 16W	
18	System power consumption 100% traffic all ports of 28W	
19	PoE Budget of 180W	
Resiliency and high availability functionalities		
20	Unified management, control and virtual chassis technology	
21	Virtual Chassis 1+N redundant supervisor manager	
22	Virtual Chassis In-Service Software Upgrade (ISSU)	
23	Smart continuous switching technology	
24	IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) encompasses IEEE 802.1D Spanning Tree Protocol (STP) and IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	
25	Per-VLAN spanning tree (PVST+) and 1x1 STP mode	

26	IEEE 802.3ad/802.1AX Link Aggregation Control Protocol (LACP) and static LAG groups across modules	
27	Virtual Router Redundancy Protocol (VRRP) with tracking capabilities	
28	IEEE protocol auto-discovery	
29	Bidirectional Forwarding Detection (BFD) for fast failure detection and reduced re-convergence times in a routed environment	
30	Redundant and hot-swappable power supplies	
31	Built-in CPU protection against malicious attacks	
32	Split Virtual Chassis protection	
L3 protocols and features		
33	Static routing for IPv4 and IPv6	
34	Up to 64 IPv4 and 4 IPv6 static routes	
35	Up to 32 IPv4 and 4 IPv6 interfaces	
layer-2 capabilities		
36	Up to 16k MAC Addresses	
37	Up to 4000 VLANs	
38	Up to 1.5k total system policies	
39	Latency: < 4 μ s	
40	Max Frame: 9216 bytes (jumbo)	
Multicast protocols and features		
41	IGMPv1/v2/v3 snooping to optimize multicast traffic	
42	Multicast Listener Discovery (MLD) v1/v2 snooping+	
43	Up to 1000 multicast groups	
Security features		
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45	MAC-based authentication for non-IEEE 802.1X hosts	
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51	Centralized Remote Access Dial- In User Service (RADIUS) and Lightweight Directory Access Protocol (LDAP) administrator authentication	
52	Centralized RADIUS for device authentication and network access control authorization	
53	Learned Port Security (LPS) or MAC address lockdown	
54	Access Control Lists (ACLs); flow based filtering in hardware (Layer 1 to Layer 4)	
55	DHCP Snooping, DHCP IP and Address Resolution Protocol (ARP) spoof protection	

56	ARP poisoning detection	
57	IP Source Filtering as a protective and effective mechanism against ARP attacks	
58	Role-based authentication for routed domains	
59	BYOD provides on-boarding of guest, IT/non-IT issued and silent devices; restriction/remediation of traffic from non-compliant devices. RADIUS CoA dynamically enforces User Network Profiles based on authentication, profiling, posture check of devices using Unified Policy Access Manager (UPAM)	
Quality of Service (QoS) features		
60	Priority queues: Eight hardware based queues per port for flexible QoS management	
61	Traffic prioritization: Flow-based QoS with internal and external (a.k.a., remarking) prioritization	
62	Bandwidth management: Flow-based traffic policing and bandwidth management, ingress rate limiting; egress rate shaping per port	
63	Queue management: Configurable scheduling algorithms — Strict Priority Queuing (SPQ), Weighted Round Robin (WRR)	
64	Congestion avoidance: Support for End-to-End Head-Of-Line (E2EHOL) Blocking Protection	
65	Auto QoS for switch management traffic	
Software Defined Networking (SDN) features		
66	Fully programmable RESTful web services interface with XML and JSON support. API enables access to CLI and individual mib objects.	
Management features		
67	Intuitive CLI in a scriptable BASH environment via console, Telnet, or Secure Shell (SSH) v2 over IPv4/IPv6	
68	Powerful WebView Graphical Web Interface via HTTP and HTTPS over IPv4/ IPv6+	
69	File upload using USB, TFTP, FTP, SFTP, or SCP using IPv4/IPv6	
70	Human-readable ASCII-based configuration files for off-line editing, bulk configuration, and out-of-the-box auto-provisioning	
71	Multiple microcode image support with fallback recovery	
72	Dynamic Host Configuration Protocol (DHCP) relay for IPv4/IPv6	
73	DHCPv4 and DHCPv6 server	
74	Loopback IP address support for management per service	
75	Policy- and port-based mirroring	
76	Remote port mirroring	
77	sFlow v5 and Remote Monitoring (RMON)	
Compliance and certifications		
78	47 CRF FCC (Class A) , VCCI , ICES-003 , CE-Mark	
79	EN 50581, EN 55022, EN 55024: 2010 ,EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11	

80	CDRH laser , Compliant with RoHS and Waste Electrical and Electronic Equipment (WEEE) directives , EN 60825-1/2 , UL 60950-1 , CAN/CSA , IEC 62368-1 , IEC 60950-1	
81	OEM direct presence in India from last minimum 7 years	
82	OEM should have there R&D center in India. Switches & Wireless device should be from one make.	
83	Presence in Gartner quadrant from last minimum 10 years	
84	Wired and Wireless products should support a single On-Premise or Cloud NMS on same hardware.	

CAT6 4Pair Cable			
Sno.	Technical Specification		ComplianceY/N
1	Type	Unshielded twisted pair cabling system, TIA/EIA 568-C.2 Category 6 Cabling system, CM/CM Rated cable	
2	Network support	Supports ultra high speed data networks such as Gigabit Ethernet (1000 Base- Tand 1000 Base- TX) and beyond.	
3	TIA/EIA568-B.1	ETL Verified, UL Listed and UL channel verified-All three Certificates are mandatory	
4	IEEE802.3ab	Zero-bitError, ETL verified, UL marking on cable	
5	Warranty	25-years stems warranty; Warranty to cover Band width of the specified and installed cabling system and the installation costs. Site certificate Must be issued by OEM	
6	Performance characteristics To be provided along with bid	Attenuation, Pair-to-pair and PSNEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PSACR for 4-connector channel	
7	Manufacturer	All passive cabling must be from same OEM (UTP and Fiber)	
8	Conductors	23 AWG solid bare copper	
9	Insulation	Polyethylene	
10	Approvals	UL Listed and UL Channel verified ETL verified to TIA/EIAC at 6	
11	Frequency tested upto	500 MHz minimum	
12	Packing	Box of 305 meters	
13	Impedance	1000 hms +/-15 ohms	
14	Performance characteristics To be provided along with bid	Attenuation, Pair-to-pair and PSNEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PSACR	
15	DelaySkew:	45nsMax	
16	Impedance:	100±15 Ohms	

17	Current Rating:	1.5A Max	
18	Conductor DC Resistance:	66.5Ω/km	
19	Voltage:	150VAC	
20	Propagation delay:	535ns/100m@250MHz	
21	Mutual Capacitance:	5.6nF/100m Nominal	
22	Insulation Resistance:	500 MΩ Minimum	
23	Dielectric Strength:	1000VRMS	
24	Contact Resistance:	10mΩ Max	

Information Outlet(I/O) RJ45 CAT6

Sno.	Features and Benefits	Compliance Y/N	
1	Should guarantee to meet or exceed the channel specifications of Amendment 1 to ISO/IEC 11801:2002 Class EA and ANSI/TIA-568-C.2 Category 6		
	Features pointed IDC to prevent speed termination and enhance cable retention		
	Dual color-coding allows for 568A/B wiring configuration		
	Can be terminated using industry standard punch-down tools		
	RJ-11 compatible		
	Moulded category identification on I/O face as well as optional port identification icons		
	USOC Wiring Sequences Available		
2	Dust Proof	RJ45 Jack should be supplied with spring-loaded shutter to avoid Dust.	
3	RJ45 I/O Compatibility	Individual Compatible RJ45 Jack	
		Pointed IDC To prevent RJ45 Jack for easy termination	
4	Mechanical Characteristics		
	Plastic Housing:	Thermoplastic UL94V-0 rated or equivalent	
	Operating Life:	Minimum 750 insertion cycles	
	Contact Material:	Copper Alloy	
	Contact Plating:	50μ" Gold / 100μ" Nickel	
	Contact Force:	100g minimum	
	Plug Retention Force:	11 lbf minimum	
5	IDC Connector		
	Plastic Housing:	Thermoplastic UL94V-0 rated or equivalent	
	Operating Life:	Minimum 20 re-terminations	
	Contact Material:	Copper Alloy	
	IDC Contact Plating:	Tin/Lead Plate	
	Wire Accommodation:	22-24 AWG solid	
6	Electrical Characteristics		
	Interface Resistance:	20 milliohms	
	Initial Contact Resistance:	2.5 milliohms	
	Insulation Resistance:	>100 Megaohms	
7	Certification	Should be covered by UL/ETL certification program.	

Face plate Single or Duplex without Gang Box

Sno.	Features	Compliance Y/N
1	Single square plate, 86mm x 86mm,	
	Write on labels in transparent plastic window – supplied with plate	
	Screw covers – to be supplied with plate, Plug in Icons – Icon tree – to be	

	supplied with plate	
	Should be able to support variety of jacks—UTP, STP, Fiber, Coax etc.	
2	The either the faceplate should be with shutters or in case with out shutters I/O should have provision with shutter	
CAT6 Patchcord 3M, 2M & 1M (Blue, Yellow, Red & Green)		
Sno.	Features	Compliance Y/N
1	Type	Cat 6 U/UTP 4 feet End-to-End Solution And are designed to support data networks for 10/100 BASE-T and 1000 BASE-T applications.
2	Conductor size:	24AWG stranded copper wire
3	Nom. O.D.:	5.9mm
4	Sheath:	LSOH
5	Bend radius:	4X O.D.
6	Boots	Transparent Plug with anti-snags lip on boots
7	RJ45 Plug Standard	ISO/IEC 60606-7-4 and FCC 47 Part 68
8	Sheath Standards	Fire Propagation compliant with CSA FT1, IEC 60332-1, IEC 61034
9	Operating temperature range:	-20°C to 60°C
10	MIN Operating life	: 750 insertion cycles
11	RJ45 plug and boot material:	Clear polycarbonate
12	Contact material:	0.35mm thick copper alloy
13	Contact plating:	Selective gold
14	RJ45 plug dimensions compliance with:	ISO/IEC 60603-7-4 and FCC 47 Part 68
15	Commercial Standards	ISO/IEC 11801:2002/Amd 2:2010 Cat 6-, TIA-568-C.2 Cat 6
16	Verified	UL/ETL Verified
17	Fire Propagation Tests:	LSOH Sheath: CSA FT1, IEC 60332-1, IEC 61034
18	Standard length available	0.5m to 10m

Eligible Criteria for OEM (Passive)		
Sno.	Description	Compliance Y/N
1	The OEM of Passive Network Components should be present in India last 30 Year. (Document proof Required- Proof of Incorporation should be attached)	
2	25-year Performance warranty; Warranty to cover Bandwidth of the specified and installed cabling system	
3	Should have Technical/Telephonic support center in India	
4	OEM must have ISO 9001:2008, ISO 9001:14001.	
5	Factory Test report have to be provided for the product during supply.	
6	All the components/raw material used must be RoHS verified	

7	OEM should have manufacturing Unit and product design & Development center in India. Product should be available on website.	
8	OEM should have at least two dedicated Presales man power in India for after sales support.	
9	Only Premium Brand and No Class B Products should be quoted	
10	Then tire passive components Copper & Fiber should be from single OEM of one make.	

LED GX 2'*2' 36 watt Skylux GX LED			
S.No	Description	Specification	Compliance Y/N
1	Rating of Recess type LED Luminaire/ System Wattage/Rated Power	36W	
2	Type of fixture (in feet)	2x2(30W to 48W)	
3	LED chip Efficacy (>=130 Lm/Watt for 6000 deg K, >=120 Lm/Watt for 4000 deg K, >=110 Lm/Watt for 3000 deg K)	Yes	
4	Standards		
5	Conformity to Indian Standard	IS:10322/part 5/sec-2/2012 and IS 16107 (Part 2/Sec 1) : 2012 for Recess type	
6	Photo biological safety of LEDs used shall be as per IS:16108/2012 (exempt group)	Yes	
7	DC or AC supplied electronic control gear for LED Module shall comply as per IS:15885 (Part 2/Sec.13)	Yes	
8	Luminaire Class (as per Cl. 2.1 Section 2 of IS: 10322 (Part-1)	Class I	
9	Types of LED Modules as per the IS: 16103(Part-2)/2012	Type 3	
10	Rating of Recess type LED Luminaire/System Wattage/Rated Power	36W	
11	Light Intensity(System Lumens) 80 Lm/Watt for 3000 deg K, 90 Lm/Watt for 4000 deg K, 100 Lm/Watt for 6000 deg K	Yes	
12	Color temperature (+/- 500 K)	6000 deg K	
13	Type of fixture (in feet)	2x2(30W to 48W)	
14	Constructional		
15	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest (Minimum)	IP20	
16	Mounting Type	Recess Type	
17	Diffuser Material	Poly carbonate (UV Stabilized)	
18	The luminaire body must be corrosion resistant epoxy powder coated / anodizing	Yes	
19	All fastners must be of nickel/chrome plated	Yes	

20	Number of electronic control gear (power supplies)	1	
21	Light Source	SMD LED Chip as per LM 80/IS16106	
22	Warranty for free replacement	2 Years	
23	Electrical Efficiency Management		
24	Operating Voltage and frequency range	140V to 280 V at 50 Hz AC	
25	Rated Voltage	230 V AC 50 Hz	
26	AC Power Factor	≥ 0.90	
27	Driver Efficiency	≥ 85	
28	Total Harmonics Distortion ($\leq 20\%$ (for upto 20W) ($\leq 10\%$ (for above 20W)	Yes	
29	The total circuit power shall not be more than 110 percent of the value declared by the manufacturer (as per Cl 8 of IS:16104:2012 latest)	Yes	
30	Optical Management		
31	LED chip Efficacy (≥ 130 Lm/Watt for 6000 deg K, ≥ 120 Lm/Watt for 4000 deg K, ≥ 110 Lm/Watt for 3000 deg K)	Yes	
32	Working life for LED : (Minimum 50,000 burning hours as per LM-80 report)	Yes	
33	Color Rendering Index(CRI)	≥ 80	
34	Beam Angle	≥ 120	
35	Reflector type	Diffuser	
36	Thermal Management		
37	Fixture / Luminaire should be die-cast aluminium /CRCA/Extruded Aluminium	Yes	
38	Capacitor shall be rated for a temperature of 105 deg. Celsius or better	Yes	
39	Junction temperature / soldering temperature	< 85 deg C	
40	Operating temperature range	-10 deg. C to +55 deg. C	
41	Humidity Range	10 % to 95% RH	
42	Protection		
43	Short circuit Protection	Yes	
44	Over Load Protection	Yes	
45	High voltage test (1.5 KV for one minute between supply terminals and body of the unit)	Yes	
46	Insulation resistance between earth and current carrying part	Yes	
47	The luminaire shall be protected against surges and transients of ≥ 2.5 KV	Yes	
48	Marking		
49	Manufactures Name and brand shall available on the body of the Luminaire	Engraved/Embossed	
50	Each LED liminaire shall have the manufacturer's	Yes	

	name, model number, serial number, date of manufacture (month-year), and lot number as identification mark inside each unit and the outside of each packaging box		
51	The operation characteristics such as rated voltage and rated power in watts shall be marked inside each LED luminaire unit	Yes	
52	Reports And Certifications		
53	LM 79 (Photometry) (Ref.IS:16106:2012) report from Central Government LAB / NABL/ILAC accredited lab Reports shall be furnish to the buyer on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc)	Yes	
54	LM 80 & TM21 (Ref. IS:16105:2012) Report and Photo biological report for LED report from Central Government Lab /NABL/ILAC accredited lab. Reports shall be furnish to the buyer on demand (LM-80 report shall have the Photo Biological report of the LED	Yes	
55	Availability of test Report from Central Government Lab /NABL/ILAC accredited lab to Indian Standard IS:10322/part 5/sec-2/2012 and IS 16107 (Part 2/Sec 1) : 2012	Yes	
56	Seller has to furnish Type test report to the buyer on demand	Yes	
57	DC or AC supplied electronic control gear for LED Module shall comply as per IS:15885 (Part 2/Sec.13)	Yes	
58	LED Luminaire for recess type shall comply with Compulsory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 2): 2012 as applicable on date	Yes	
59	LED Make	EVERLIGHT / EDISON / BRIDGELUX / NATIONSTAR / SEOUL / SAMSUNG / OSRAM / REFOND / NICHIA / CREE / LUMILEDS / PHILIPS / SYSKA / LUMENMAX, Other than EVERLIGHT / EDISON / BRIDGELUX / NATIONSTAR / SEOUL / SAMSUNG / OSRAM / REFOND / NICHIA / CREE / LUMILEDS / PHILIPS / SYSKA / LUMENMAX	

LEDTV55Inch			Compliance YES/NO
PANEL	ScreenSize	139.7cm(55)	
	PanelTechnology	IPS	
	BackLightType	Direct	
	AspectRatio	16:09	
	NativeResolution	3840x2160(UHD)	
	RefreshRate	60Hz	
	Brightness	400nit(Typ.)	
	ContrastRatio	1,300:1	
	ViewingAngle(HxV)	178x178	
	ColorDepth	10bit,1.07Billioncolors	
	ResponseTime	8ms(GtoG)	
	SurfaceTreatment(Haze)	3%	
	OperationHours(Hours/Day)	16-Jul	
Portrait/Landscape	Yes/Yes		
CONNECTIVITY	Input	HDMI(3,HDCP2.2/1.4),USB2.0TypeA(2)	
	Output	Audio	
	ExternalControl	RS232CIn/Out(4PinPhoneJack),RJ45(LAN)In	
MECHANICALSPECIFICATION	BezelColor	AshedBlue	
	BezelWidth	Off:6.9/6.9/6.9/18.4On:12.8/12.8/12.8/19.9	
	Weight(Head)	14	
	PackedWeight	18.8	
	MonitorDimension(WxHxD)	1235x715x57.5	
	CartonDimensions(WxHxD)(Boxoutsizes)	1360x810 x162	
VESA™StandardMountInterface	300x 300		
KEYFEATURE	KeyFeature	InternalMemory8GB,Built-inWi-Fi,TemperatureSensor,AutoBrightnessSensor,LocalKeyOperation,webOS6.0,EmbeddedCMS(LocalContentsScheduling,GroupManager),USBPlug&Play,FailOver,BackgroundImage(BootingLogImage,NoSignalImage),ScreenShare,PlayviaURL,SettingDataCloning,SNMP,ISM(ImageStickingMinimization)Method,ControlManager,SmartEnergySaving,PMMODE,WakeonLAN,Beacon,HDMI-CEC(Compatibilitymaydifferbyequipment),SISeverSetting,webRTC,Pro:Idiom	
ENVIRONMENTCONDITIONS	OperationTemperature	0°Cto40°C(PortraitScene:0°Cto35°C)	
	OperationHumidity	10%to80%	
POWER	PowerSupply	AC100-240V~,50/60Hz	
	PowerType	Built-inPower	
POWERCONSUMPTION	Typ.	105W	
	Max.	160W	
	BTU(BritishThermalUnit)	358BTU/Hr(Typ.),546BTU/Hr(Max.)	
	SmartEnergySaving(70%)	73.5W	
	DPM	0.5W	
	Poweroff	0.5W	
SOUND	Speaker	Yes	
CERTIFICATION	Safety	CB	
	EMC	FCCClass"A"/CE	
	ErP/EnergyStar	Yes(OldErPforJordan)/Yes	

	ePEAT(USonly)	No	
OPSCOMPATIBILITY	OPSTypeCompatible	No	
	OPSPowerBuiltIn	No	
SOFTWARECOMPATIBILITY	SoftwareCompatibility	SuperSignCMS,SuperSignControl/Control+,SuperSignWB,SuperSignMediaEditor, Signage365Care3)	
ACCESSORY	Basic	RemoteController(includebattery2ea),PowerCord,RegulationBook,PhonetoD-Sub9Gender,CableHolder	

Quotation document for Interior Civil Work

Technology Development Board (TDB), Block II, Second Floor, Technology Bhawan, New Mehrauli Road, New Delhi invites online bid for refurbishment / renovation work for its office space in Technology Bhawan premise.

Terms & Conditions

1. The quotations will remain valid for 90 days from the date of opening of quotations. TDB reserves the right to accept or reject any or all the quotations without mentioning any reason whatsoever.
2. The quotation should quote the rates in the same order and sequence as in the quotation document.
3. The firm should submit the acceptance of the work order within 7 days on receipt of work order from TDB.
4. The work should be completed within 45 days from the date of work started.
5. Liquidated damages for non-completion of work within the stipulated period @ 1.5% of contract value per week subject to a maximum of 10% of the total cost.
6. The rates quoted in the quotation shall include all charges of any tools and plants, freight, labour, conditions and fluctuations in the rates, GST and any other taxes or expenditure for carrying out the work. Nothing extra shall be paid on this account.
7. The water and electricity shall be provided by the TDB free of cost for completing the work.
8. Escalation in rates will not be allowed under any circumstances.
9. The successful firm is bound to carry out the entire work within the period stated in para 5.

10. The successful firm is bound to carry out items of work necessary for completion of job even though the same are not included in the schedule of quantity. Rates of extra items will be derived from the quotation. In case the rates do not exist in the quotation and extra item is not similar to the quotation item, then the rates will be worked out on the prevailing market cost.
11. The Technology Development Board has a right to alter the nature of work and to add or limit any item of work to have the opinion of the same carried out departmentally or otherwise and such alteration of variations shall be carried out without prejudice to this quotation document.
12. The firm shall remove all marks & stains etc. wash and clean the floor / premises at his own cost and hand over the site in proper manner on the completion of work.
13. The firm shall acquaint himself with the site conditions, making his own arrangement for storing of materials at site, lift cartage etc.
14. The firm shall make adequate arrangement for watch and ward of his material and shall ensure the safety, breakage of any theft of materials fixed or unfixed by itself.
15. The work executed should have been approved by the Technology Development Board and the firm shall rectify any bad workmanship pointed out at any stage and remove from site all the rejected materials immediately.
16. The firm shall be responsible for implementing labour laws, compensating for injury and accident to person deployed in the refurbishment work.
17. The firm will take necessary precautions for carrying out the work avoiding any damage to structures / decorative parts of the property. The firm will rectify any damages done at its own cost.
18. The firm shall ensure that workmen employed by them for execution of work are suitably covered against Workman's Compensation Act and that all the liabilities arising out of Workman's Compensation Act, ESIS and other legislative enactment applicable to such works and workmen shall be to the firm's account.
19. The works will be carried out as per specification and to the entire satisfaction of the Technology Development Board.
20. The firm will submit running bills for the value of work done not less than interim payment (as mentioned in the appendix) if any.
21. The firm will not execute any extra item of work without the permission from Technology Development Board in writing.
22. Conditional quotation quoted by the firm is liable to be rejected.

23. The payment shall be made after successful completion work.

24. In case of any dispute between Technology Development Board and the firm, the decision taken by the arbitrator appointed by the Technology Development Board will be final.