



Airports Authority of India

Information Technology Division
Safdarjung Airport, New Delhi

TENDER DOCUMENT

Name of Work	Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi
Last Date & Time of Submission	Up To 29.04.2024 (1700 Hrs.)
Cost of RFP Documents	INR 2,950.00 (Non – refundable)
CPP Portal Tender ID No.	2024_AAI_188427_1
TENDER No.	AAI/CHQ/ITD/DATA_CENTER_MIGRATION/01/24

Date : 12/03/2024

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SECTION – I**(NOTICE INVITING TENDER)**

1. Airports Authority of India invites e-tenders from OEM(s) or Authorized Representative(s) (AR) of the OEM(s) or System Integrator(s) (SI) of the OEM(s) for **“Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi”** as per the details given below

Sr. No.	Name of the Work	Estimated Cost (INR)	EMD Amount in DD/BG (INR)	COST OF TENDER (INR)
1	Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi	INR 11,46,08,999 /- Exclusive of GST.	INR 22,92,180/-	INR 2950 /- (Inclusive of GST)

2. The bill of material and detailed Technical specifications are given as Annexure IV and Annexure VII respectively of this tender document.
3. This tender is invited through the electronic tendering process and can be downloaded from the Central Public Procurement Portal (CPP Portal) with URL address “<http://etenders.gov.in>”. Please note that the submission of the tender is only through the CPP Portal “<http://etenders.gov.in>”. The tenders will not be accepted in any other form. Further it may be noted that tenders which are duly submitted on CPP Portal shall only be final and tenders just saved without submission / publish will not be available to the evaluation committee. Bidders are requested to go through the CPP Portal for guidelines, procedures & system requirements. In case of any technical difficulty, bidders may contact on the following help desk numbers & email ids.

3.1. For Queries relating to the process of online bid submission or queries relating to CPP Portal or other Technical Assistance on the Portal, please contact the 24x7 Helpdesk, on Telephone Numbers Tel: 0120-4711 508, 0120-4001 002, 0120-4001 005, 0120-6277 787(International Bidders are requested to prefix 91 as country code) or Email Address: support-eproc@nic.in.

3.2. Before submitting queries related to system, bidders are requested to follow the instructions given in CPP Portal and get their computer system configured according to the recommended settings for the CPP Portal.

3.3. Bidders are requested to kindly mention the URL of the Portal and Tender Id in the subject while emailing any issue along with the Contact details.

3.4. For any issues/ clarifications relating to the understanding of the tender(s) published, kindly contact the respective Tender Inviting Authority / Bid Manager whose details are given below.

S.No	Name of the Bid Manager	Designation	Email Id	Phone No.
1	Ankit Mishra	AGM(IT)	ankitmishra@aai.aero	011-24632950 (Ext. 3505)

3.5. In order to facilitate the Vendors / Bidders, the AAI Help desk services shall also be available on all working days (except Sunday) between 0800-2000 hours and shall assist users related to the use of the CPP Portal. In case of technical issues faced, the escalation matrix is as

mentioned below:

SL. No.	Support Persons	Escalation Matrix	E-Mail Address	Contact Numbers	Timings*
1.	Technical Help Desk Team	Instant Support	eprochelp@aai.aero	011-24632950 Ext. 3512	0800-2000 Hrs. (MON - SAT)
2.	Mr. Gamit Vaibhav Manekjibhai JE(IT)	After 4 Hours of Issue	etendersupport@aai.aero or vaibhav_g@aai.aero	011-24632950, Ext-3523	0930-1800 Hrs. (MON-FRI)
3	Sh. Amit Mishra, Sr. Manager. (IT)	After 12 Hrs.	amitmishra@aai.aero	011-24632950, Ext-3520	0930-1800 Hrs. (MON-FRI)
4	Sh. Sunil Kumar Jt. GM (IT)	After 24 Hrs.	sunil.km@aai.aero	011-24632950, Ext-3506	0930-1800 Hrs. (MON-FRI)
5	General Manager(IT)	After 03 Days	gmit@aai.aero	011-24657900	0930-1800 Hrs. (MON-FRI)

3.6. The AAI help desk numbers are intended only for queries related to the ease of use on CPP Portal and help needed on the operation of the Portal. However AAI shall not be responsible for any reason to bidders for not submitting the bids in the CPP Portal. The above Helpdesk services shall remain closed on all Govt. Gazetted Holidays.

4. The critical dates for this tender are as given below.

Sl. No.	Activity	Up to Date & Time (IST)
1	Publishing Date & Time	18:30 Hrs, 12-03-2024
2	Document download / sale start Date & Time	18:30 Hrs, 12-03-2024
3	Seek clarification Start Date & Time	18:30 Hrs, 12-03-2024
4	Pre Bid Meeting (Through VC)	10:45 Hrs, 22-03-2024
5	Seek Clarification End Date	11:30 Hrs, 28-03-2024
6	AAI Response to bidders' queries'	17:00 Hrs, 05-04-2024
7	Bid Submission Start Date & Time	17:30 Hrs, 05-04-2024
8	Bid Submission Closing Date & Time	17:00 Hrs, 29-04-2024
9	Bid Opening Date & Time	17:30 Hrs, 30-04-2024
10	Opening of Financial Bid (Tentative)	15:00 Hrs, 20-05-2024
11	Reverse Auction Date	Shall be intimated later

5. To attend the Pre-Bid meeting, please use the following WebEx link and meeting details:

<https://aai-aero.webex.com/aai-aero/j.php?MTID=mf0a35eaebc26abee29727fd8ea6df4ef>

Meeting number: 2510 421 1239

Password: 1234

The meeting lobby will open at 10 AM and participants can join until 10:45 AM. Please note that latecomers will not be allowed to enter the virtual conference after 11 AM. Additionally, only a maximum of 2 executives from each company are allowed to enter the VC from the lobby. Please make sure to display your name along with your company name. If more than 2 executives from the same company join, AAI reserves the right to admit any 2 of them to the meeting from the lobby.

6. AAI may at its discretion, extend/change the schedule of any activity by issuing an addendum/corrigendum on the CPP Portal. In such cases, all rights and obligations of AAI and the Bidders previously subject to the original schedule will thereafter be subject to the schedule as extended/changed.

GM (IT)

SECTION - II

(INSTRUCTIONS TO BIDDERS)

1. DEFINITIONS

- 1.1 "AAI / The Buyer" means the Airports Authority of India.
- 1.2 "The Bidder / Vendor" means the individual or firm who participates in this tender and submits its bid.
- 1.3 "Project Manager AAI" means the AAI executive responsible for signing all documents from AAI side and shall coordinate all the activities of the project with the bidder / contractor.
- 1.4 "The Supplier / Contractor" means the individual or firm taking up the work as defined under the Notice Inviting Tender.
- 1.5 "The Works Order" means the order placed for the supply, installation, testing & commissioning of systems / works by the Buyer on the Contractor signed by the Buyer including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.6 "The Purchase Order / Supply Order" means the order placed for the supply of items by the Buyer on the Supplier signed by the Buyer including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.7 "The Contract" means the agreement signed between the Buyer and the Contractor as per the terms and conditions contained in the Works Order / Purchase Order.
- 1.8 "The Contract Price" means the price payable to the Contractor under the Works Order / Purchase Order for the full and proper performance of its contractual obligations.
- 1.9 "Non-responsive Bid" means a bid, which is not submitted as per the instructions to the bidders or Earnest Money Deposit has not been attached, or the required data has not been provided with the Bid or intentional errors have been committed in the Bid.
- 1.10 "CPP Portal" means, the Central Public Procurement Portal specified throughout this document is the online system for Bidders to submit their Tender packages.
- 1.11 "EMD" refers to the Earnest Money Deposit to be submitted by the bidder.
- 1.12 "MAF" refers to Manufacturer's Authorization Form (MAF).
- 1.13 "PQQ" refers to Pre-Qualification Questionnaire.
- 1.14 "BOQ" refers to Bill of Quantity.
- 1.15 "NIT" refers to Notice Inviting Tender.
- 1.16 "OEM" refers to the Original Equipment Manufacturer.
- 1.17 "RGB" refers to Rajeev Gandhi Bhawan (AAI Corporate Headquarters, New Delhi-110003).
- 1.18 "AAI IS Security Policy" refers to the AAI Information Security Policy.
- 1.19 "PSAT" refers to Partial Site Acceptance Test.
- 1.20 "FSAT" refers to Final Site Acceptance Test.
- 1.21 "CCA" refers to Controller of Certifying Authorities.
- 1.22 "Local Content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- 1.23 'Class-I local supplier' means a supplier or Contractor, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier'. As per GoI Order No P-45021/2/2017-PP (BE-II) Dated 16.09.2020, the local content

requirement to categorize a supplier as 'Class-I local supplier is minimum 50%.

- 1.24 'Class-II local supplier' means a supplier or Contractor, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier'. As per GoI Order No P45021/2/2017-PP (BE-II) Dated 16.09.2020, the local content requirement to categorize a supplier as 'Class-II local supplier is minimum 20%.
- 1.25 'Non – Local supplier means a supplier or Contractor, whose goods, services or works offered for procurement, has local content less than that prescribed for Class-II local supplier. As per GoI Order No P-45021/2/2017-PP (BE-II) Dated 16.09.2020, the local content requirement to categorize a supplier as 'Class-II local supplier is minimum 20%.
- 1.26 'L1' means the lowest bid or the lowest quotation received in a RFP, bidding process or other procurement solicitation as adjudged in the evaluation process as per the RFP or other procurement solicitation.
- 1.27 'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I local supplier"/ "Class-II local supplier"/ "MSE Supplier" may be above the L1 for the purpose of purchase preference.
- 1.28 'Nodal Ministry' means the Ministry or Department identified pursuant to GoI Order No P45021/2/2017-PP (BE-II) Dated 16.09.2020 in respect of a particular item of goods or services or works.
- 1.29 'Procuring entity' means a Ministry or Department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the companies Act.
- 1.30 "Bidder from a country which shares a land border with India" means: -
 - 1.30.1 An entity incorporated, established or registered in such a country; or
 - 1.30.2 A subsidiary of an entity incorporated, established or registered in such a country; or
 - 1.30.3 An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - 1.30.4 An entity whose beneficial owner is situated in such a country; or
 - 1.30.5 An Indian (or other) agent of such an entity; or
 - 1.30.6 A natural person who is a citizen of such a country; or
 - 1.30.7 A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
 - 1.30.8 The beneficial owner for the purpose of (1.3) above will be as under:
 - 1.30.8.1 In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

 - 1.30.8.1.1 "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - 1.30.8.1.2 "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 - 1.30.8.2 In case of a partnership firm, the beneficial owner is the natural person(s) who, whether

acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

1.30.8.3 In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

1.30.8.4 Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

1.30.8.5 In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

2. Instructions for Online Bid Submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://etenders.gov.in/eprocure/app>

2.1 Registration at CPPP:

2.1.1 The Bidders are required to enroll on the e-procurement module of the Central Public Procurement Portal (URL: <http://etenders.gov.in/eprocure/app>). Registration is free of charge.

2.1.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

2.1.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

2.1.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class-II or Class-III certificates with signing key usage) issued by any certifying Agency recognized by CCA India.

2.1.5 A bidder must register only one valid DSC. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

2.1.6 Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

2.2 SEARCHING OF TENDER DOCUMENTS

2.2.1 There are various search options built in the CPP Portal, to facilitate bidders to search active RFPs by several parameters. These parameters could include CPP PORTAL TENDER ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for RFPs, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a RFP published on the CPP Portal.

2.2.2 Once the bidders have selected the RFPs they are interested in, they may download the required documents / RFP schedules. These RFPs can be moved to the respective 'My RFPs' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the RFP document.

2.2.3 The bidder must make a note of the unique CPP PORTAL TENDER ID assigned to each RFP, in case they want to obtain any clarification / help from the Helpdesk.

2.3 PREPARATION OF BIDS

2.3.1. Please go through the RFP document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

2.3.2. Bidder, in advance, must get ready the bid documents to be submitted as indicated in the RFP document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

2.4. SUBMISSION OF BIDS:

2.4.1. Bidder must consider all corrigendum(s) (if any) published on the RFP document for preparation of bid.

2.4.2. Bidder must log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

2.4.3. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the RFP document.

2.4.4. Bidder has to select the payment option as "online mode" to pay the RFP fee as applicable and shall deposit the RFP fee through the Integrated / mapped Gateway in CPP Portal.

2.4.5. Bidders are requested to note that they must necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the RFP document, then the same is to be downloaded and to be filled by all the bidders. They are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells must be changed. Once the details have been completed, the bidder must save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

2.4.6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders must follow this time during bid submission.

2.4.7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. Unauthorized persons cannot view the data entered until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded RFP

documents become readable only after the RFP opening by the authorized bid openers.

2.4.8. The uploaded RFP documents become readable only after the RFP opening by the authorized bid openers.

2.4.9. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the Portal), the Portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

2.4.10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

2.5. ASSISTANCE TO BIDDERS

2.5.1. Any queries relating to the RFP document and the terms and conditions contained therein must be addressed to the RFP Inviting Authority for an RFP or the relevant contact person indicated in the RFP.

2.5.2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

2.6. CONFLICT OF INTEREST AMONG BIDDERS

2.6.1. A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practises to the detriment of Procuring Entity's Interests. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process if;

2.6.1.1. They have controlling partners (s) in common; or

2.6.1.2. They receive or have received any direct or indirect subsidy/ financial stake from any of them; or

2.6.1.3. They have the same legal representative/agent for purposes of this bid; or

2.6.1.4. They have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder; or

2.6.1.5. Bidder participates in more than one bid in this bidding process. Participation by a bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/subassembly/assemblies from one manufacturer in more than one bid; or

2.6.1.6. Bidder offers same product (as sought in the Bill of Materials) from two or more manufacturers; or

2.6.1.7. Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or

2.6.1.8. In case of a holding company having more than one independent manufacturing units, or more than one unit having common business ownership/ management, only one unit must submit the bid. Similar restrictions would apply to closely related Parent/ Group/ Sister companies. Bidder must proactively declare such entities in same/ similar line of business.

2.6.2. Violation of aforesaid clauses shall lead to disqualification of all the bids related to the particular bidder.

2.7. COMPLIANCE

- 2.7.1. The unconditional acceptance of all the terms & conditions of the NIT has to be submitted through a letter. The format of the letter is attached at Annexure-I.
- 2.7.2. The submission of the tender will imply acceptance of all the tender conditions by the bidder laid in tender document including all the Annexure(s) & schedules to the tender document.
- 2.7.3. The compliance to the terms & conditions should be supported by authenticated documentation wherever required.
- 2.7.4. Each page of the Bid and cuttings / corrections shall be duly signed with stamp by the bidder. (Not applicable for E-Tender)
- 2.7.5. The submission of unconditional acceptance of the terms & conditions of the NIT, as described above is essential for the tender evaluation. The failure to submit the unconditional acceptance statement in the said format shall result in the bid being rejected.

2.8. LANGUAGE AND CURRENCY

- 2.8.1. The bidder shall quote the rates in English language and international numerals. The rates shall be in whole numbers. The rates shall be written in both figures as well as in words. Over writing is not permitted. In case of disparity in figures & words, the rate in words will be considered.
- 2.8.2. The Proposal must be filled by the bidders in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is required and must be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.
- 2.8.3. In the event of the order being awarded, the language of all services, manuals, instructions, technical documentation etc. provided under this contract will be English. The bidders must quote only in Indian Rupees and the bids in currencies other than Indian rupees shall not be accepted.

2.9. STANDARD CONDITIONS

- 2.9.1. Standard printed conditions of the bidder to the offer, other than the conditions specified here, will not be acceptable.
- 2.9.2. For the purpose of the RFP, the metric system of units shall be used.
- 2.9.3. Bidder's offers shall be with reference to section and clause numbers given in the RFP schedules.

3. The bidder shall submit the documents comprising the bid, in four covers available on CPP Portal as given below.

3.1 COVER-1: TENDER FEE , EMD AND INTEGRITY PACT

- 3.1.1 **Tender Fee:** The tender fee shall be as per NIT and will be non-refundable. The tender fee shall be deposited online through Payment Gateway in CPP Portal or through Net Banking or through NEFT/RTGS Payment Gateway integrated /mapped with CPP Portal.
 - 3.1.1.1 Bidders that are eligible for waiver of tender fee such as MSE's in valid category with valid document, for relevant items, have to upload scanned copy of documents in support of this exemption.
 - 3.1.1.2 No other instrument shall be accepted for tender fee.

- 3.1.1.3 NSIC registered bidders shall upload copy of valid NSIC Registration Certificate as per Gol rules for the purpose of verifying their claim for exemption from Tender fee in cover-1.
- 3.1.1.4 Tenders not accompanied by the requisite Tender Fee or valid proof as per Gol of exemption from Tender Fee, shall be rejected.
- 3.1.2 **Earnest Money Deposit:** EMD of value as mentioned in clause 1 Section I of this tender document shall be deposited online through Payment Gateway in CPP Portal or through Net Banking or through NEFT/RTGS Payment Gateway integrated /mapped with CPP Portal.
- 3.1.2.1 The bidder may also submit EMD in the form of Bank Guarantee/ Insurance Surety Bond/ Account Payee Demand Draft/ Fixed Deposit Receipt/ Banker's Cheque from any of the Commercial Banks, in favour of "Airports Authority of India" payable at New Delhi.
- 3.1.2.1.1 Scanned copy of the same shall be uploaded by the bidder at CPP portal and hard copy of the same will have to be submitted directly to AAI within 5 working days of bid opening, failing which the bid may be treated as incomplete & may lead to rejection of the bid by AAI without making any reference to the bidder. AAI shall not be responsible for any postal or other delays.
- 3.1.2.1.2 The Address for sending EMD in sealed envelope through post/courier shall be as below
O/o Executive Director (IT)
IT Department, Hanger Building
Safdarjung Airport
Airports Authority of India
New Delhi- 110003
[Kind Attention: Sh. Ankit Mishra, AGM (IT)]
- 3.1.2.2 Bidders that are eligible for waiver of EMD such as MSE's/startups in valid category with valid document, for relevant items, have to upload scanned copy of documents in support of this exemption.
- 3.1.2.3 No other instrument shall be accepted for EMD.
- 3.1.2.4 NSIC registered bidders shall upload copy of valid NSIC Registration Certificate as per Gol rules for the purpose of verifying their claim for exemption from EMD in Tender fee Pack-1.
- 3.1.2.5 The EMD Bank Guarantee shall be valid for a period of minimum six (6) months from the notified date of opening of the Tender without any conditions by the bidder. In the case of any extension of Tender opening date, the bidder shall arrange to extend the validity of the EMD Bank Guarantee suitably within two weeks.
- 3.1.2.6 The following bank details need to be incorporated by the bidder in the PBG document/ EMD documents in form of BG ·
CORPORATE NAME: AIRPORTS AUTHORITY OF INDIA
BANK NAME: ICICI BANK
IFSC CODE: ICIC0000007
BG ADVISING MESSAGE: IFN 760COV (BG ISSUE).
IFN 767COV (BG AMENDMENT)
UNIQUE IDENTIFIER CODE: AAICORHQ to be mentioned in field 7037 of the BG
- 3.1.2.7 The bidder has to issue a letter to its bank which is issuing BG. This letter is for the generation of SFMS (Structural Financial Messaging System) Message from issuing

bank to AAI's beneficiary bank (ICICI bank- details given in point 5) for BG confirmation. The format of the letter from a vendor to its issuing bank is given in Annexure – XVI.

3.1.2.8 The bidder shall not change or alter or modify in any way, the language or contents of Annexure- II A & B (EMD Bank Guarantee) of this document.

3.1.2.9 Details regarding EMD payment/Refund/forfeit may be seen in Section – III.

3.1.3 **Integrity Pact:** Integrity pact would be implemented through a panel of Independent External monitors. Shri Prabhat Ranjan Acharya, IA & AS (Retd.) & Shri Kuldip Kumar Peshin, CE & MES (Retd.) shall act as IEMs. All correspondences regarding implementation of Integrity Pact, shall be addressed to Shri Prabhat Ranjan Acharya & Shri Kuldip Kumar Peshin. c/o Chairman, Airports Authority of India, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi-110003. E-mail id of IEMs are prabhatacharya@gmail.com & kkpeshin@yahoo.com respectively.

3.1.3.1 Bidder has to submit two physical copies of Integrity Pact (Format attached as Annexure IX of this tender document) on a non judicial stamp paper of INR 100, duly signed on each page by the signatory authority. The date of signing of the Integrity pact will be the "date of submission of bid". Soft copy of the same has to be uploaded on CPP portal as well.

3.1.3.2 Any bid not accompanied by Integrity Pact duly signed by the bidder shall be considered to be a non-responsive bid and shall be rejected straightway.

3.1.4 List of documents to be attached with the Eligibility Bid (Cover 1)– Bidder, please note the name of e-File corresponding to the Documents

S. No.	Eligibility Bid (Cover 1) e-Documents (PDF)	e-File: Named As
A	RAR File 1	
i.	Tender Fee (Soft copy of the tender fee submission acknowledgment statement generated on CPP portal)	TenderFee
ii	Earnest Money Deposit (Soft copy)	EMD
iii	Integrity Pact (Soft copy)	IP

3.2 COVER-2: (PRE-QUALIFICATION BID) IT SHALL CONSIST OF THE FOLLOWING DOCUMENTS: -

(Bidders shall upload the required documents in **JPEG/PDF** in readable form under **specific .RAR Files in English Language** at e-procurement portal as mentioned in bid documents)

3.2.1 GST No./TIN , PAN and ESI-PF - Registration number in India .

3.2.1.1 The bidder should have valid PAN & GST/TIN registration etc. in India or any regulatory requirement in this region.

3.2.2 **Value Criteria:** Bidder should have successfully completed similar supplies or with better (higher) requirements, works or services with

3.2.2.1 One Work Order of value equal to 80% or more of the estimated cost i.e. INR 9,16,87,199 (Exclusive of taxes) or more

3.2.2.2 Two separate Works Orders, each for a value equal to 50% or more of the

estimated cost i.e. INR 5,73,04,500 (Exclusive of Taxes) or more

3.2.2.3 Three separate Work Orders, each for a value equal to 40% or more of the estimated cost i.e. INR 4,58,43,600 (Exclusive of Taxes) or more

3.2.2.4 The above criteria should be completed in last 7 years, for Government Departments or Public Undertakings or Private sectors (within India). Similar supplies, works or services shall mean "Supply Installation Testing and Commissioning of certified (atleast Tier II) Data Center infrastructure including UPS, In-row Cooling racks/PAC, PDU, DCIM and other datacenter related items". Please Note: Civil and Electrical works in the submitted work order will not be considered for eligibility evaluation. Also the above stated items like UPS, In row Cooling Racks/PAC, PDU, DCIM and other datacenter related items have to be supplied and installed under single work order.

3.2.3 **Proof of satisfactory service:** Bidder shall submit performance certificate in respect of the experience of works claimed by bidder against execution of works listed above. Certification of satisfaction with complete detail of work carried out shall be submitted. Further, completion certificates should be issued by the Customer. In case of work experience of Private Sector, bidder has to additionally submit TDS certificate issued by the Customer in support of payment received and execution of work. Please note that partial completion of a project scope will not be considered, although pre-determined phases of work will be accepted.

3.2.4 The bidder should attach an OEM certificate or a valid authorization letter from OEM (if tender is being submitted on behalf of the OEM) of line items 1, 2, 3, 11 & 12 given in the Bill of Material of Tender (Annexure IVA) to quote.

3.2.5 A letter from the bidder containing details of customer of works claimed for experience including postal address, official Phone Number, Email Address and URL (if any).

3.2.6 A list of clients served (with contact address) shall also be attached.

3.2.7 Articles of Memorandum of Association or Partnership Deed or Proprietorship Deed as the case may be.

3.2.8 **Average Annualized Financial Turnover:** Bidder should have annualized average financial turnover of at least INR 3,43,82,700/- (Rupees Three Crore Forty Three Lakh Eighty Two Thousand Seven Hundred Only) i.e. 30% of the estimated cost or equivalent during last 3 years ending 31st March of previous financial year. As a proof of financial turn over, copy of abridged Balance Sheet along with profit & loss account of the bidder for the last three years should be submitted. (Tenderers have to submit UDIN generated documents like Balance Sheet/Turnover certificate, Working Capital Certificate (works done during last 5 financial years & works in hand), Net worth Certificate, Tax Deduction at Source (TDS) Certificates for Non-Govt. works etc. as per NIT conditions duly certified by CA and having UDIN. The documents submitted by bidders without UDIN shall not be entertained.)

3.2.9 **Acceptance Letter:** Unconditional acceptance of all tender conditions in the format enclosed as Annexure-I of the tender document.

3.2.10 **Power of Attorney:** Notarized Power of Attorney on a Non-Judicial Stamp Paper Costing INR 100/- (Rupees One Hundred Only) as per Annexure – XI authorizing the designated executive to sign all documents on behalf of the company or firm, if the bid is not signed by the Director of the Company or Partner / Proprietor of the Firm, must be submitted.

In case of Companies, Board Resolution authorizing the designated executive to sign all documents on behalf of the company, duly certified by the Company Secretary, to the effect that the said Board Resolution is valid on the date of submission, if the bid is not signed by the Director of the Company, must be submitted.

- 3.2.11 **Undertaking regarding Debarment/ Blacklisting:** Bidder is required to submit an undertaking regarding Debarment/ Blacklisting, on their company letterhead as per format in Annexure – X.

If the claim of the bidder is found to be wrong during the bid evaluation process, or during the currency of the contract, his bid/ the contract, as applicable, is liable to be rejected/ cancelled.

- 3.2.12 **Non-Disclosure Agreement:** Bidder shall submit Non-Disclosure Agreement as per Annexure-XIII of this tender document.

- 3.2.13 Details of the Vendor Firm/Company: Format enclosed as Annexure-VIII of the tender document.

- 3.2.14 **Local Content Certificate:** The Bidder must submit the Certificate of Local Content as per Annexure – XVIII from a Statutory Auditor or Cost Auditor of the Company (in case of Companies) or from a practicing Cost Accountant or practicing Chartered Accountant (in respect of Suppliers other than Companies). In case the Local content certificate is obtained from practicing Chartered Accountant, then the Local content certificate must bear the UDIN generated against the document.

- 3.2.14.1 Certificate of Local Content must be supported by Local Content % (percentage) declaration by the OEM, on OEM letterhead, having the address of the Factory location where the value addition is being made by the OEM, for the items under Annexure – IV A.

- 3.2.14.2 False declaration will be breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred up to two years as per Rule 151 (iii) of the General Financial Rules along with such others actions as may be permissible under law. The Supplier / OEM who has been debarred by any procuring entity for violation for aforesaid clause, shall not be eligible for preference for the duration of the debarment.

- 3.2.14.3 Bidders offering imported products cannot claim services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/ CMC etc as local value addition.

- 3.2.14.4 The Local Content Percentage mentioned under the individual BoQ Items are applicable only on the overall Bid level. Percentage of Local Content shall be calculated on the overall Bid level for Supply/ SITC items of the BoQ as per the formula provided below-

$$3.2.14.4.1 \text{ Local Content Percentage} = ((\text{Sale price of "X1"} - \text{Value of imported content in "X1"}) + (\text{Sale price of "X2"} - \text{Value of imported content in "X2"}) + \dots + (\text{Sale price of "XN"} - \text{Value of imported content in "XN"})) * 100 / (\text{Sale price of "X1"} + \text{Sale price of "X2"} + \dots + \text{Sale price of "XN"}).$$

- 3.2.14.4.2 As per the GoI Order No P-45021/2/2017-PP (BE-II) Dated 04.06.2020, Dated 16.09.2020 & subsequent notification issued by GoI, "Sale Price" means price excluding net domestic indirect taxes and "Value of

imported content" means price of imported content inclusive of all custom duties.

3.2.14.5 Reciprocity Clause:

If it comes to the notice of AAI that, any suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, AAI may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and / or other items.

For this purpose, a supplier or bidder shall be considered to be from a country if;

3.2.14.6.1. The entity is incorporated in that country; or

3.2.14.6.2. A majority or its shareholding or effective control of the entry is exercised from that country; or more than 50% of the value of the item being supplied has been added in that country.

3.2.15 **Land Border share Compliance Certificate:** Any bidder from a country which shares a land border with India will be eligible to bid in this RFP only if the bidder is registered with the Competent Authority as per Gol Order No. F.No. 6/18/2019-PPD Dated 23.07.2020 & subsequent notification issued by Gol. The bidder must submit a signed & Stamped copy of Compliance Acceptance Letter on their company letterhead as per Annexure - XVII

3.2.16 **List of documents to be attached with the Eligibility Bid (Cover 2)– Bidder, please note the name of e-File corresponding to the Documents**

S. No.	Pre-Qualification Bid e-Documents (PDF)	e-File: Named As
A	RAR File 1	
i.	GST No. /TIN ,PAN ,ESI-PF registration	TIN/GST–“Name of Firm/Company” PAN–“Name of Firm/Company” ESI–“Name of Firm/Company” PF–“Name of Company”
ii	Articles of Memorandum of Association or Partnership Deed or Proprietorship Deed.	MoA or Firm Deed
iii	Audited Balance Sheet during last three years	ABS-2020-21 ABS-2021-22 ABS-2022-23
B	RAR File 2	
i	Proof of Experience of Works claimed. (PO/Work Order issued by the customer)	PO-1,PO-2,PO-3 as required.
ii	Proof of satisfactory service(TDS certificate in case of Private Customer)	CC-1, CC-2 ,CC-3,TDS-1,TDS-2,TDS-3 as required.

iii	A letter of bidder having details of customer of works claimed for experience including postal address, official Phone Number, Email Address and URL (if any).	CustomerDetails
iv	List of client references with contact details including Email Ids.	Client List
C	RAR File 3	
i	Letter of Unconditional Acceptance of terms & conditions of tender as per as Annexure-I	Acceptance Letter
ii	Details of the Vendor Firm/Company: Format enclosed as Annexure-VIII of the tender document	Vendor Details
iii	Proforma of Undertaking for Blacklisting/Debarment (Annexure –X)	Blacklisting
iv	Power of Attorney (Annexure XI)	POA
v	Non-Disclosure Agreement (Annexure XIII)`	NDA
vii	Undertaking as per clause 6(b) of Annexure XIV states that "Local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content." (Self Certificate for local content as per format Annexure XVIII)	MII
viii	Land Border share Compliance Certificate(Annexure XVII)	Land
D	RAR File 4	
I	Any other eligibility related documents as per tender document.	Other Docs

3.3 COVER-3: - LIST OF DOCUMENTS TO BE ATTACHED WITH THE TECHNICAL BID–

- 3.3.1 Detailed Bill of Material duly certified by bidder as per Annexure – IV A
- 3.3.2 Duly Filled Compliance Statement as per Annexure –VII with supporting documents/literature.
- 3.3.3 Supporting Documents/ Brochures/Literature in support of technical specifications should be clearly highlighted with specifications and serial numbers as per Annexure –VII.
- 3.3.4 Digitally Signed Tender Document including Corrigendum's (if any)

Bidders, please note the name of e-File corresponding to the Documents:

S. no.	Technical Bid e-Documents (PDF)	e-File: Named As
A	RAR File -1	
I	Detailed Bill of Material duly certified by bidder as per Annexure IV (A)	BOM
B	RAR File -2	

I	Duly Filled Compliance Statement as per Annexure –VII with supporting documents/literature.	Compliance Statement
II	Supporting Documents/Brochures/Literature in support of technical specifications should be clearly highlighted with specifications serial numbers as per Annexure –VII. If any point/ specification is missing in the brochure/ literature, then, the bidder has to submit a letter from the OEM about compliance of the respective point/ specification.	Support Docs
C	RAR File-3	
I	Digitally Signed Tender Document including Corrigendum's (if any)	Tender
II	Any other documents (if any)	Other

3.4 Cover 4: - Documents to be attached with the Financial Bid –

- 3.4.1 Financial Bid form (Excel File) to be filled as per BOQ/Format given in Schedule-A.
- 3.4.2 Details of Statutory Taxes as per Annexure XII
- 3.4.3 Submit their financial bids in the format provided with the bid document and no other format is acceptable.

4. COST OF BIDDING:

- 4.1 The Bidder shall bear all costs associated with the preparation and submission of the bid. The Buyer will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

5. CONTENTS OF TENDER DOCUMENT

- 5.1 The required materials, bidding procedures and contract terms are prescribed in the Bid Documents. The Bid Documents include-

S.No.	Item	Description
I.	Section – I	(Notice Inviting Tender)
II.	Section – II	(Instructions to Bidders)
III.	Section – III	(General Terms & Conditions of the Contract)
IV.	Section – IV	(Special Conditions of the Contract)
V.	Annexure – I	(Acceptance Letter)
VI.	Annexure – II	(Proforma Bank Guarantee)
VII.	Annexure – IIA & IIB	(Bank Guarantee format for EMD)
VIII.	Annexure – III	(Support Staff details)
IX.	Annexure – IV	(Details of Make Model offered against Tender)
X.	Annexure – IVA	(Detailed Bill of Material)
XI.	Annexure – V	(Format for intimation of force Majeure)
XII.	Annexure – VI	(Application for extension of time)
XIII.	Annexure – VII	(Equipment/ Product Specifications & Compliance Statement)

XIV	Annexure – VIII	(Details of Vendor Firm)
XV	Annexure – IX	(Integrity Pact)
XVI	Annexure – X	(Proforma for Undertaking regarding Debarment/Blacklisting)
XVII.	Annexure – XI	(Power of Attorney)
XVIII	Annexure – XII	(Details of Statutory Taxes)
XIX	Annexure – XIII	(Non-Disclosure and Confidential Agreement)
XX	Annexure – XIV	(Public Procurement Linked with Local Content)
XXI	Annexure – XV	(Competent Authority and Procedure for Registration)
XXII	Annexure – XVI	(Request Letter: Transmission of BG cover message)
XXIII	Annexure – XVII	(Land Border Sharing Certificate)
XXIV	Annexure – XVIII	(Proforma of Self Certification for Local Content)
XXV	Annexure – XIX	(Inventory for Relocation)
XXVI	Schedule – A	(Price Schedule)

5.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the Bid Documents. Failure to furnish information as per bid document will be at the bidder's risk, which could lead to rejection of the bid.

6. CLARIFICATIONS OF TENDER DOCUMENTS:

6.1 A bidder may request clarification regarding the Tender document. The clarification request shall be in the following format (PDF document) and same has to be submitted on e-procurement portal only within the timeframe specified under Section-I Clause 4 of this document

Name of the Bidder						
Sl. No.	Document	Section No.	Clause No.	Page No.	Existing Clause	Clarification Sought

6.2 AAI shall respond to Clarification Request till the Date of Response queries as specified in the schedule as indicated in the table in Section-I Clause 4 of this document, unless the Date is extended by AAI. Any request pertaining to tender clarification, received through any other means, except e-procurement portal shall not be entertained.

6.3 AAI shall not entertain any tender clarifications, post the closing date for clarifications.

6.4 Response to Clarification requests shall be uploaded by AAI on CPP e-procurement portal through corrigendum/corrigenda.

7. AMENDMENTS TO TENDER DOCUMENT

7.1 At any time, prior to the date of submission of bids, AAI may, for approved reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bid documents by amendments.

7.2 The corrigendum with the above amendments shall be uploaded on the e-procurement portal and shall be part of tender document. All bidders should visit the CPP portal on regular basis.

7.3 These corrigendum/corrigenda shall be considered as part of the Tender package.

8. DOCUMENTS COMPRISING THE BID:

8.1 Bidder should take into account corrigendum/s (if any) published on the tender document for preparation of bid.

8.2 The bid prepared by the bidder shall be in four covers to be submitted as per **clause 3** of this Section. Each cover to contain the following documents respectively:

8.2.1 Tender Fee, EMD & Integrity Pact (Cover-1): for provision of "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi" consisting of the following documents.

8.2.1.1 Tender Fee, EMD and Integrity Pact in accordance with clause 3.1 of section-II.

8.2.2 Pre-Qualification Bid (Cover-2): for provision of "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi" consisting of the following documents.

8.2.2.1 All the relevant documents as asked for Pre-Qualification Bid of the tender, in accordance with clause 3.2 of section-II.

8.2.3 Technical Bid (Cover-3): for provision of "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi" consisting of the following documents.

8.2.3.1 All the relevant documents as asked for technical bid of the tender in accordance with clause 3.3 of section-II

8.2.3.2 Documentary evidence established in accordance with Clause 10 of this section that the bidder is eligible to bid and is qualified to perform the contract if his bid is accepted.

8.2.3.3 Compliance Statement as per Clause 10.1.2 of Section II of tender document.

8.2.4 Financial Bid (Cover-4): for provision of "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi" consisting of the following documents and filled online as per clause 9 of this section.

8.2.4.1 Financial Bid Form (**Excel File**) to be filled as per BoQ/ format given in Schedule - A.

8.2.4.2 Bidders are requested to note that they should necessarily submit their financial bids in the provided format and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

8.2.4.3 Should the bidder's quoted price for relocating IT items (Line Item 19 of Schedule A) exceed 5 % of the aggregate cost of line items 1 to 18 of Schedule

A, any excess amount above this threshold will be distributed in equal instalments. These payments will be made as quarterly arrears in the operation and maintenance period.

8.2.4.4 The CMC rate of Line Items 1-10 & 13-17 of Schedule A for First year after warranty(Price of Line Item 22 of Schedule A) shall be at predetermined rate of 9% of 70% of Cost of Line Items 1-10 & 13-17 of Schedule A.

8.2.4.5 The CMC rate of Line Items 1-10 & 13-17 of Schedule A for Second year after warranty(Price of Line Item 23 of Schedule A) shall be at predetermined rate of 10% of 70% of Cost of Line Items 1-10 & 13-17 of Schedule A.

8.2.4.6 The CMC rate of Line Items 1-10 & 13-17 of Schedule A for Third year after warranty(Price of Line Item 24 of Schedule A) shall be at predetermined rate of 11% of 70% of Cost of Line Items 1-10 & 13-17 of Schedule A.

8.2.4.7 The CMC rate of Line Items 1-10 & 13-17 of Schedule A for Fourth year after warranty(Price of Line Item 25 of Schedule A) shall be at predetermined rate of 12% of 70% of Cost of Line Items 1-10 & 13-17 of Schedule A.

8.2.4.8 The bidder shall quote the rates in English language and international numerals.

8.2.4.9 Only one Financial Bid shall be submitted by the bidder.

9. BID PRICES:

9.1 The Financial Bid shows the bill of material for all items with scheduled quantities. The bidder shall download the BOQ file (.xls file) and shall upload the duly filled file with Quoted rates online on the CPP Portal. It may be noted that only duly submitted bids shall be evaluated and bids just saved but not submitted shall not be part of the evaluation process.

9.2 The Rate offered by the bidder shall be exclusive of GST but inclusive of other statutory taxes & fees.

9.3 The Unit Rate in INR (exclusive of GST but inclusive of other statutory taxes & fees) shall be used for calculating the total amount in the Financial Bid. In the event of any ambiguity, the unit rate given in the financial bid shall be taken as the correct basis for calculating all other data. In the event of any errors or Ambiguity in Rate itself the Price Bid of the Bidder shall be rejected.

9.4 The price bid of the RFP document is for pricing only. Conditional price bid shall be liable for rejection. Price quoted shall be firm & fixed and subject to no escalation, whatsoever, till the validity period of the RFP, including extension, if any.

9.5 The prices quoted by the bidder shall remain firm on the date of submission of the Bid and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

9.6 Post offer discount, if any, offered by the bidders shall not be considered. Bidders' planning to offer discount shall therefore modify their offers suitably while quoting and shall quote clearly net price considering discount etc. However, such discounts from the firm declared as L1 on the basis of post bid negotiations if any shall be considered and such negotiated offers when agreed by AAI & the bidder shall form a part of the financial Bid.

9.7 The rates of statutory taxes shall be uploaded on to the e-procurement portal along with the financial bid or otherwise no claim will be entertained towards decrease or increase in statutory taxes.

9.8 The bidder shall quote only one price for each item of same specification against the nomenclature shown in Financial Bid.

9.9 The bidder shall quote as per price schedule given in Financial Bid for all the items as per specifications in Annexure – VII.

9.10 **Each Bidder should submit only one product for each item. Offering products of more than one brand or multiple models of the same brand against one item shall make the technical / financial bid of the bidder invalid and such offers shall be rejected at the technical / financial stage wherever such defaults are noticed.**

9.11 **Price bid file or any other document containing financial terms/prices shall not be submitted in any other cover other than financial bid cover of the e-procurement portal or in hard copy to AAI in any case or else the bid will be straightaway rejected.**

10. DOCUMENTS ESTABLISHING ITEMS CONFORMITY TO BID DOCUMENTS:

10.1 Pursuant to **Clause 8**, the bidder shall furnish, as part of his bid, documents establishing the conformity of his bid to the Bid document of all Items and services, which he proposes to supply under the Contract. Submission shall be as follows:

- 10.1.1 The documentary evidence of the Items and services in conformity to the Bid Documents shall be in the form of literature, drawings and data that the Bidder shall furnish. These shall be attached as Annexure to the Compliance Statement as per **Clause 10.1.2 below**.
- 10.1.2 Compliance Statement in Annexure-VII shall be in the format given below. Compliance Statement shall be one of the **two statements viz. "Complied or "Not complied"**. No other remark or comment will be accepted.

S. No	Specifications	Complied/Not Complied

- 10.1.3 Bidder must attach required technical brochures/literatures/data sheets for all the products asked in the tender to ensure that compliance to all the specifications given in the tender document can be verified. Non-availability of specifications (as mentioned in the tender document) in the brochure/literature will be treated as non-compliance. If bidder fails to submit the required brochures/literatures along with the tender document, it shall be treated as non-compliance and may lead to outright rejection of bid submitted by bidder.
- 10.1.4 Each specification sought shall be marked or highlighted in the attached brochures / literatures / data sheets. The brochures / literatures / data sheets/ data available on public domain shall be superscripted with the Item Number and shall be arranged sequentially. The supporting documents shall carry all the required specifications and the same shall be marked.
- 10.1.5 The compliance statement submitted as per clause 10.1.2 shall be duly supported by technical literature, equipment brochures & other related reports / documents from the OEM. The compliance statement not supported by the documentary evidence shall not be considered. Such bids shall be considered as non-responsive and may result in rejection on technical grounds.
- 10.1.6 The products offered by the bidder shall be supported and AAI may ask a letter from the prospective supplier in writing that the product offered is available in the market and will be supplied without any change in specifications & model during the contract period shall be required.
- 10.1.7 AAI may ask the manufacturer of the product offered for the verification of specifications

and other documents.

- 10.1.8 The product/configuration offered by the bidder must be standard and proven to be already available in the market. Bidder shall submit a list of clients/locations where similar product/configuration is available, if asked by AAI. AAI, if so desires, may visit these locations to verify that all the specifications and operational requirements are met as mentioned in the tender document. Any non-compliance observed during such visits shall lead to rejection of the bid.

11. PERIOD OF VALIDITY OF TENDER (BID)

- 11.1** The offered Bid shall remain valid for a minimum of 180 days from the date of opening of the technical bid. The bidder shall not be entitled to revoke or cancel the offer or to vary any term thereof, during the said period of validity without the consent in writing of AAI. In case of the bidder revoking or canceling the offer or varying any term in regard thereof, the bidder's earnest money deposit shall be forfeited.
- 11.2** If there is any delay in finalization due to unforeseen factors, all the bidders shall be asked to extend the validity for an appropriate period, as per the date specified by which the tender is expected to be finalized. However, the tender process shall not be vitiated if any bidder declines to extend the offer as requested for.

12. FORMATS AND SIGNING OF BID:

- 12.1** The e-Bid shall be digitally signed by the bidder at e-procurement portal duly authorized to bind the bidder to the contract. Written power-of-attorney accompanying the bid shall indicate the letter of authorization. The person or persons signing the e-bid shall sign the bid, except for the printed literature. The e-bid submitted shall be in properly readable form and encrypted as per the e-tendering portal requirements. Standard Printed terms and conditions of the company other than the NIT conditions shall not be considered.

13. SEALING AND MARKING OF BIDS:

- 13.1** The bidders shall digitally sign their bid and upload the bid online at the CPPP (e-procurement portal) only.
- 13.2** If all the documents are not digitally signed & encrypted, AAI shall not accept such open bids for evaluation purpose and treated as non-responsive. Such bid shall be liable to be rejected.

14. CORRECTIONS / MODIFICATIONS AND WITHDRAWAL OF BIDS:

- 14.1** The bidder may correct/modify his digitally signed bid after submission prior to the deadline, through provisions of e-procurement portal.
- 14.2** No bid shall be modified subsequent to the deadline for submission of bids.

15. OPENING OF BIDS:

15.1 Tender Fee, Pre-Qualification and Technical Bid (Cover-1, Cover-2, Cover-3):

- 15.1.1** The Buyer shall open Bids online through the e-procurement portal as per schedule or as per intimation of Bid Opening Date & Time to bidders. Bid opening shall be two times. First

time, Three Covers (Cover-1, Cover-2 & Cover-3) shall be opened simultaneously and documents may be downloaded for all three covers and Second time, only financial bid shall be opened. Bidders or their authorized representatives who choose to attend on the opening date and time may do so if desired. The bidder shall submit authority letter to this effect before they are allowed to participate in bid opening.

15.1.2 Representative whose bid is not submitted / rejected cannot attend the tender opening.

15.2 Financial Bid (Cover-4): Financial bids shall be opened only for technically qualified bidders as per schedule or as per intimation of bid opening date & time to bidders. Time and date of opening shall be notified through system generated email.

15.3 Online Reverse Auction Process: After opening of the Financial Bids of the Bidders, a reverse auction shall be carried out among the technical qualified bidders based on the lowest price offered in the financial bid or as decided by AAI. (in case of Reverse Auction Process).

15.3.1 The details of Reverse auction process are available at clause 27 of this section.

15.3.2 Vendor shall offer the total price in reverse auction exclusive of all taxes or as per instruction given at the time of reverse auction.

15.3.3 Maximum of two well-informed representatives of each eligible bidder shall only be allowed to attend the opening of the bids. Representative whose bid is not submitted or rejected due to any reason at any stage, cannot attend the tender opening. (Not applicable for tender on CPP portal).

16. CLARIFICATION / CONFIRMATION OF COMPLIANCE OF BIDS

16.1 The general eligibility criteria shall be evaluated during preliminary stage and the vendors who have not submitted requisite documents shall be asked through CPP e-procurement portal or by email to substantiate their claims with documentary evidence before a given date failing which their bids shall not be considered further for detailed evaluation.

16.2 Shortfall documents will be asked through CPP e-procurement portal. Bidders are responsible to submit all the requisite shortfall documents in the given chance, till the stipulated time. AAI reserves the right for further extension in deadline for submitting shortfall documents as per provisions in CPP e-procurement portal.

16.3 It may be noted that enquires / clarifications shall be responded only through CPP e-procurement Portal. All such queries shall be entertained which are received on or before last date/time for submission of queries. AAI response will be uploaded through e-procurement portal. Written responses, through email, verbal, telephonic enquiry or enquiry received after last date of submission of queries shall not be entertained during or post tender process.

17. EVALUATIONS AND COMPARISON OF SUBSTANTIALLY RESPONSIVE BIDS:

17.1 Pre-qualification and Technical Bid Evaluation:

17.1.1 The Pre-qualification and Technical criteria shall be evaluated after opening of bids. Clarifications if any shall be asked from bidders as per para 18.1, 18.2. Bids meeting Pre-qualification and Technical criteria shall only be considered for financial bid opening.

17.1.2 The Technical requirements shall be verified against the manuals / technical literature submitted by the vendors. The vendors may be asked to substantiate their compliance

submitted in the tender by suitable documentation from OEM wherever the same is lacking. The Technical evaluators on their own may download the information from the websites of the OEM(s) to verify the claims of the vendors. The technical Bids of the vendors who fail to substantiate their claim on meeting the technical requirements even after the above process shall be rejected.

- 17.1.3 AAI may seek performance report on a vendor from other clients whose references are given in the bid. An adverse report from a client shall make the vendor technically unfit leading to his rejection. The process of seeking performance report shall be kept confidential so that the vendor is not able to influence the process.
- 17.1.4 **At no cost to AAI, as a part of Technical Evaluation, the bidder participating in this tender may be required to demonstrate (any or all) operational and technical requirements or specifications, at a location considered fit by the AAI.**
- 17.1.5 A short-list of bidders qualifying technically shall be drawn and thereafter these short-listed bids shall be treated at par for the purpose of financial comparison.

18. Financial Bid Evaluation:

- 18.1.1 Financial Bids of those bidders who qualify technically shall be opened electronically at CPP e-procurement portal on-line. Time and date of opening shall be notified through system generated email. The bidder shall issue authority letters to their representatives to attend the opening of financial bids if desired to be present at AAI premise.
- 18.1.2 **Online Reverse Auction:** Online Reverse auction shall be carried out after opening of the financial bid. Base price for Reverse auction shall be put same as L-1 price offered in financial bid or justified cost as decided by AAI. L1 bidder shall be decided on the basis of final offer obtained through Reverse Auction process.
- 18.1.3 Status of bidders L1, L2, L3 shall be based on the total price arrived after reverse auction.
- 18.1.4 The Bidder's names, bid prices, modifications, bid withdrawals and such other details as the Buyer, at its discretion, may consider appropriate; will be announced at the opening.

19. CONTACTING THE BUYER:

- 19.1 Canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing are liable for rejection. Such rejected tenders will not be returned.
- 19.2 No bidder shall try to influence directly or through external source, the Buyer on any matter relating to its bid, from the time of publication of NIT till the time the contract is awarded.
- 19.3 Any effort by a bidder to influence the Buyer in the bid evaluation, bid comparison or contract award decisions shall result in the rejection of the bid, and such actions will be considered as bad performance for future Projects.

20. RIGHT TO ACCEPT OR REJECT THE TENDERS:

- 20.1 The right to accept the tender in full or in part/parts will rest with AAI. However, AAI does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason whatsoever.
- 20.2 Tenders not accompanied with prescribed information or are incomplete in any respect, and/or not meeting prescribed conditions, shall be considered non-responsive and are liable to be rejected.

- 20.3** The Buyer reserves the right to accept or reject any bid or a part of the bid or to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the Buyer's action.
- 20.4** The documentation submitted by bidder shall not be returned unless the bidder explicitly states this request at the time of submission of the tender. AAI also reserves the right at its sole discretion not to award any order under the tender called. AAI shall not pay any costs incurred in the preparation and submission of any tender.
- 20.5** If the bidder gives wrong information in his Tender, AAI reserves the right to reject such tender at any stage or to cancel the contract, if awarded, and forfeit the Earnest Money.
- 20.6** **Tenders that are not accompanied with Earnest Money Deposit (EMD) and bidder not agreeing to accept Integrity Pact shall be rejected outright. The date of Integrity Pact shall be "date of submission of bid".**
- 20.7** Should a bidder have a relation or relations employed in AAI in the capacity of an officer or the authority inviting tender, the same shall be informed by the bidder. In the event of failure to inform and in a situation where it is established that the relation or relations employed in AAI has / have tried to influence the tender proceedings then AAI at its sole discretion may reject the tender or cancel the contract and forfeit the Earnest Money.
- 20.8** The requirements indicated in this NIT are the minimum and bids of the firms not complying with these minimum requirements or having deviations equivalents to the minimum requirements shall be rejected. However, higher than the minimum requirements shall be technically acceptable without any additional financial implication.
- 20.9** Any correspondence after the opening of the technical bid, from the bidder, regarding the bid unless specifically sought by AAI shall not be considered. Such post bid offers / clarifications may be liable for action as per clause "Contacting the Buyer" above.

21. ISSUE OF WORK ORDER:

- 21.1** The acceptance of the tender will be intimated to the successful bidder by AAI, either by letter, email or CPP portal.
- 21.2** The issue of a Works Order / Purchase Order shall constitute the intention of AAI to enter into the contract with the bidder.
- 21.3** On receipt of the Work Order, the Contractor shall carry out Project Site Survey immediately. Survey needs be carried out the Contractor without any additional financial implications to AAI.
- 21.4** Acceptance of the Works order / Purchase Order will be deemed as effective from the date of issue of Works Order / Purchase Order. All formalities of submission of the Contract Performance Bank Guarantee in pursuant to clause 6 of section-III of NIT in the format attached Annexure – II and signing of the contract shall be completed within 30 days of the issue of Work Order/Purchase order.
- 21.5** AAI shall be the sole judge in the matter of award of contract and decision of AAI shall be final and binding.

22. SIGNING OF CONTRACT AGREEMENT:

- 22.1** The issue of Works Order / Purchase Order shall constitute the award of contract on the bidder. The signing of the Contract Agreement shall be completed within 30 days of the acceptance of the Works Order / Purchase Order.

- 22.2** The L-1 Bidder must also submit hard copies of all the documents uploaded on CPP Portal within 30 days of the acceptance letter which will form a part of agreement.

23. ANNULMENT OF AWARD:

- 23.1** Failure of the successful bidder to comply with the requirement of Clause 22 shall constitute sufficient ground for the annulment of the award and forfeiture of the EMD in which event the Buyer may make the award to any other bidder at his discretion or call for new bids.

24. QUALITY ASSURANCE REQUIREMENTS:

- 24.1** The supplier shall submit copies of Valid Certificates to ensure that all works comply with standards specified in the QRs.

25. TRANSFER OF TENDER DOCUMENT:

- 25.1** Transfer of Tender Documents by one bidder to another is not permissible. Similarly transfer of tenders submitted by one bidder in the name of another bidder is not permissible.

26. CONTRACT MONITORING:

- 26.1** The buyer shall hold regular contract monitoring meetings after the award of the contract to monitor the performance of the contract.
- 26.2** First such meeting shall be held within one week of award of the contract. The date and time of such meeting shall be intimated to the contractor / supplier by fax. /e-mail/ post. The date and time of subsequent meetings shall be decided and recorded in previous meetings.
- 26.3** The proceedings of each meeting shall be recorded and action as required towards successful completion of the project shall be initiated promptly by both AAI and the contractor. Project review meetings shall be with reference to mile stones and contract performance analysis.
- 26.4** Buyer shall communicate the readiness of the site(s) as & when the buyer is ready with the installation plans.

27. ONLINE REVERSE AUCTION:

- 27.1** This e-tender shall be decided on the basis of online Reverse Auction after opening of financial bid
- 27.2** Base price for Reverse Auction shall be the Estimated Price or L-1 price received in the financial bid opening or as decided by AAI. The auction will be open for the bidders on specified date & time. During this period the Bidders are allowed to reduce the prices as many times as they desire.
- 27.3** Bidders are advised to prepare well in advance regarding maximum reduction they can offer on their proposal keeping in view the limited time allowed for reverse auction.
- 27.4** Bidders whose technical bids are accepted and are eligible for opening of the financial bids shall only be allowed to participate in Online Reverse Auction.
- 27.5** The due date and time of conduct of Reverse Auction and price bid opening shall be intimated in advance to the bidders, through e-procurement portal.

- 27.6** After selection of L1 bidder (if L1 price is received through Reverse Auction), itemized cost for the successful bidder shall be calculated by reducing the tendered items cost (quoted price as per Schedule-A) on pro-rata basis. For this purpose, reduction in the overall price from reverse auction is applied on pro-rata basis to each item of Schedule –A and accordingly purchase order / contract shall be awarded. The EMD of bidder who fails to adhere to the Auction price shall be forfeited and the vendor shall be blacklisted as per rules.
- 27.7** Bidders shall be informed regarding Reverse Auction and they may contact Helpdesk for the guidance on Reverse Auction process.
- 27.8** If required, AAI may arrange training to all eligible bidders on request on the Online Reverse Auction process prior to conduct of Online Reverse Auction.
- 27.9** Bidders shall confirm process of Reverse Auctioning after getting invitation of process. If any change in the process, or bidders desire so, a training on the process shall be given in AAI premises New Delhi.
- 27.10** Reverse Auction may be conducted online with vendors from their own offices. However, necessary facilities / arrangements may be provided in AAI premises in Case of such requests by the vendors or for training purposes.

28. OUTRIGHT BID REJECTION CRITERIA

Non-Compliance to the following criteria by the bidder shall lead to the Outright rejection of their offer submitted on the CPP Portal:

- 28.1** Bids not accompanied by the requisite tender fee or valid exemption document shall be rejected straightaway, or
- 28.2** Bids not accompanied by the requisite EMD or valid exemption document shall be rejected straightaway, or
- 28.3** Bids not accompanied by Integrity Pact duly signed by the bidder shall be considered to be a non-responsive bid and shall be rejected straightaway.

SECTION - III

(GENERAL TERMS & CONDITIONS OF THE CONTRACT)

1. PURPOSE & SCOPE

- 1.1** This document sets out the terms & conditions to be met in connection with the provision of **"Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi"** to AAI for the work as per details given in the notice inviting Tender with specifications in Annexure-VII.
- 1.2** This tender document includes details like quantity, delivery, installation, commissioning (including Operating system & other software for the items as tendered for) & support services for maintenance, etc.
- 1.3** The hardware & software supplied against this tender must include all the modules, sub modules and items required for installation, smooth performance and crash recovery of the software such as installation kit, CDs, Software Manuals, hardware sub-systems etc.

2 BENEFITS TO MICRO & SMALL ENTERPRISES (MSES)

As per MSMED Act 2006 & provision (para 10) of Public Procurement Policy order 2012 & amendment till date

2.1 EXEMPTION FROM PAYING RFP FEE & EARNEST MONEY DEPOSIT:

Micro and small enterprises (MSEs) – registered with NSIC or District Industries Centres or khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicraft and Handloom or any other body specified by the ministry of micro, small and medium enterprises as MSMED Act, 2006 for goods produced and services rendered – shall be issued RFP Documents free of cost. As per latest DoE OM No F/9/4/2020-PPD dated 12.11.2020, EMD is not applicable for this particular RFP for all bidders.

2.2 PRICE PREFERENCE:

Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. **If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the any one of the offered products (Modular UPS/In Row Cooling racks/Racks). Traders are excluded from the purview of this Policy. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product.**

2.3 As it's a turnkey project, the order shall be non-divisible in nature & Purchase Price Preference shall be given to MSE Supplier over Non-MSE Supplier as per following procedure:

- 2.3.1** If L-1 is not an MSE and technically qualified MSE Supplier (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller

shall be given opportunity to match L-1 price and contract shall be awarded to such MSE Supplier subject to matching the L-1 Price.

2.3.2 In case such lowest eligible MSE Supplier fails to match the L1 price, the MSE Supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly.

2.3.3 In case none of the MSE Supplier within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

2.3.4 The margin of Purchase preference shall be 15%.

2.3.5 The buyers are advised to refer the DoE OM No. F.1/4/2021-PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

2.4 DOCUMENTARY EVIDENCES TO BE PROVIDED:

The benefit as above to MSEs shall be considered only for goods/ services produced and provided by MSEs for which they are registered. MSEs seeking exemption and benefits shall upload a self-attested copy of valid registration certificate for MSE like NSIC, Udyog Aadhar etc as mentioned above on the CPP Portal, failing which their bid shall be passed over as ineligible for the benefits applicable to MSEs.

3 PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA):

3.1 The Bid is reserved to be procured from 'Class-I local supplier' or 'Class-II local supplier' only as defined in the GoI Order No P-45021/2/2017-PP (BE-II) Dated 04.06.2020, Dated 16.09.2020 & subsequent notification issued by GoI.

3.2 **As it's a turnkey project, the order shall be non-divisible in nature** & Purchase Preference shall be given to Class-I local supplier over Class-II local supplier as well as Non-local supplier as per following procedure: -

3.2.1 Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contractor will be awarded to L1.

3.2.2 If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.

3.2.3 In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

3.2.4 The margin of Purchase preference shall be 20%.

3.2.5 The buyers are advised to refer the DoE OM No. F.1/4/2021-PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

Note1: - Bidders offering imported products cannot claim services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc as local value addition.

Note2: - If it comes to the notice of AAI that, any suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, AAI may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and / or other items.

3.3 For this purpose, a supplier or bidder shall be considered to be from a country if;

3.3.1 The entity is incorporated in that country; or

3.3.2 A majority or its shareholding or effective control of the entry is exercised from that country;
or

3.3.3 More than 50% of the value of the item being supplied has been added in that country.

4 PROCUREMENT FROM START-UP(S):

4.1 Start-Up benefits will be considered in terms of exemption of EMD, Past Experience and Turnover Criteria.

4.2 Start-ups shall be considered for relaxation only for those items/ products for which they are recognized as a "Start-up". Otherwise, they shall need to meet the required technical/ experience and Financial criteria.

4.3 All Start-up must have valid Department of Industrial Policy and Promotion (DIPP) number. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service.

5 REFUND OF EARNEST MONEY:

5.1 The EMD of bidder who are not qualified in initial eligibility qualification or Technical qualification, EMD shall be refunded after Prequalification/Technical evaluation.

5.2 The EMD of the bidder other than the lowest bid shall be discharged / returned promptly, after evaluation of financial bids.

5.3 The EMD of the successful bidder will be returned after the bidder provides the performance guarantee, as required in para 6 of this section of the tender document.

5.4 The EMD amount may be forfeited in the following events:

5.4.1 If the successful bidder fails to enter into a contract with AAI within 15 calendar days after the receipt of the purchase order / work order as specified under clause 23 of section-II.

5.4.2 If the successful bidder fails to submit the performance guarantee as stipulated in para 6 of this section within 30 calendar days after the receipt of the purchase order / work order.

5.4.3 In the event of not accepting the conditions of the contract even after agreeing to do so and submitting the letter of un-conditional acceptance of terms as per letter in Annexure-I.

5.5 No interest or any other expenses, whatsoever, shall be payable by AAI on the EMD in any manner. The Contractor shall pay all banking or conversion charges (and any other expenses incurred in this regard).

5.6 If a bidder withdraws from the Tender process for any reason deemed unsatisfactory in the sole opinion of the AAI, their EMD will be encashed and forfeited.

5.7 Should the AAI cancel this Tender process, AAI will return the EMD of all bidders for whom the EMD was not already forfeited and encashed without any interest.

6 PERFORMANCE BANK GUARANTEE.

- 6.1** The Contractor shall submit Performance Bank Guarantee (in lieu of Contract Performance security) for the contract of the value equivalent to **10% (Ten percent) of the value of Purchase Order/ Work Order** in the form of an irrevocable and unconditional bank guarantee on Nationalized / scheduled bank as per Proforma attached as Annexure – II. The guarantee shall be **submitted within 30 calendar days of the issue of Purchase Order/ Work Order**, and it must remain valid for a period of 90 days beyond the date of completion of all contractual obligations of the supplier, including warranty and CAMC obligations.
- 6.2** The Performance Bank Guarantee will be forfeited and credited to the accounts of AAI in the event of a breach of contract by the contractor. It must be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 90(ninety) days of completion of all such obligations including the warranty under the contract.
- 6.3** In case the Contractor fails to submit the PBG within stipulated period, interest at 12% per annum on Performance Guarantee amount would be levied (non-refundable) for delayed period of submission or submission of Bills along with required document till amount equal to Performance Bank Guarantee value, whichever is earlier.
- 6.4** The interest amount levied (non-refundable) shall be deducted from the bills payable to the Contractor. Also, the Stipulated Performance Bank Guarantee Value (10% of the Purchase Order Price to AAI) shall be withheld from Bills payable in lieu of Performance Bank Guarantee until the same is submitted or till the successful commissioning of the project, whichever is earlier.
- 6.5** However, the extended period for PBG submission must be approved by the Accepting Authority in AAI.
- 6.6** In case, Contractor fails to submit performance guarantee within 60 days of the issue of the letter of acceptance of his bid, AAI reserve the right to Cancel the order.
- 6.7** The Performance Bank Guarantee amount shall be payable to AAI without any condition whatsoever and the guarantee shall be irrevocable.
- 6.8** The Performance Bank Guarantee shall be deemed to govern the following guarantees from the successful bidder, in addition to other provisions of the guarantee:
- 6.8.1** Defect liability period is to cover the defects which remain pending after the completion of the Warranty/ CAMC period. It includes unserviceability occurring immediately prior to the end of the Warranty period, unserviceability which remains unattended at the end of the Warranty/ CAMC period, repairs of unserviceable parts or subsystems which became unserviceable prior to completion of Warranty/ CAMC period etc.
- 6.8.2** At the time of completion of the Warranty/ CAMC period, the bidder shall handover all the systems/ subsystems in working conditions to AAI. Any unserviceable system/ subsystem shall be covered under defect liability.
- 6.8.3** The Hardware/ Software/ Services under the contract shall be free from all defects/ bugs and upon written notice from AAI, the Contractor shall fully remedy, free of expenses to AAI, all such defects/ bug as developed under the normal use of the said hardware within the period of Guarantee/ Warranty.
- 6.9** The Performance Bank Guarantee is intended to secure the performance of the entire system. However, it is not to be construed as limiting the damages stipulated in any other clause.
- 6.10** The Performance Bank Guarantee amount shall be released to the contractor 90 days post completion of warranty and CMC period, after deducting the penalty/ recoveries, if any as applicable, as per the 'Compensation of Delay / Recovery' clause.
- 6.11** The validity period of PBG shall be extended by the bidder as and when provisional extension is granted.

7 Correspondence:

- 7.1 All correspondence shall be directly with the bidder and correspondence through agents will not be entertained.

8 Testing and Inspection:

- 8.1 The testing and inspection of the equipment / components procured shall be carried out in two stages as follows.

8.1.1 Factory Inspection / Acceptance Testing:

- 8.1.1.1** The Buyer or his representative shall have the right to conduct pre-dispatch inspection of the Hardware and Accessories including the software for their conformity to the specifications. Where the Buyer decides to conduct such tests on the premises of the Original Equipment Manufacturer (OEM) or Supplier of the OEM or its subcontractor(s), all reasonable facilities and assistance like Testing Instruments and other test gadgets including access to drawings and production data shall be furnished to the inspectors at no charge to AAI. The schedule & procedure of testing shall be intimated to the bidder after the placement of the Work order / purchase order. The successfully inspected / accepted items shall be sealed in the presence of the Inspectors and signed by the inspectors accordingly.
- 8.1.1.2** If any inspected or tested Item(s) fail to conform to the specifications, the Buyer may reject them and the Contractor shall either replace the rejected Items or make all alterations necessary to meet Specification requirements free of cost to the Buyer.
- 8.1.1.3** The Factory Inspection/Acceptance testing shall only be carried for Modular UPS with modular batteries, Intelligent In Row cooling system , TOR switch , Intelligent Rack PDU and BusBar trunking system.
- 8.1.1.4** For other modules of Schedule A not mentioned in clause 8.1.1.3, will be subjected to physical inspection and the materials will be accepted under the manufacturer's quality self-certification.

8.1.2 Post receipt / pre-installation testing:

- 8.1.2.1** Notwithstanding the pre-supply tests and inspections prescribed in clause 8.1.1.1 & 8.1.1.2 above, the Items on receipt in the Buyer's premises will also be tested after receipt and if found defective, or the seal is found to be tampered, these items shall be replaced free of cost to the Buyer as laid down in clause 8.3 below

8.1.3 Post installation Acceptance testing / Inspection:

- 8.1.3.1** This testing / inspection shall be performed after the completion of installation of the parts. The inspectors shall verify the subsystem level details during this testing and shall sign the installation report after successful completion of the post-installation testing. Defects / shortcomings brought out in this testing shall have to be attended as per the contract within the permitted time schedule.

8.1.3.2 The post-installation acceptance testing/ inspection shall prove that the procured systems meet all system requirements as per specifications specified in the tender document. The vendor shall provide all necessary test equipment, tools and instruments for the acceptance testing. Installation shall be termed as completed after successful completion of SAT/post-installation acceptance testing and resolution of all defects/bug.

- 8.2** If any Item or any part thereof, before it is taken over under above testing/inspection clauses, is found defective or fails to fulfill the requirements of the contract, the consignee/ AAI Project Manager shall give the Contractor notice setting forth details of such defects or failure. The Contractor shall make the defective material good, or alter the same to make it comply with the requirements of the contract forthwith and in any case within a period not exceeding one month of the initial report. The replacements by the Contractor shall be made free of all charges at site. Should he fail to do so within this time, the Buyer reserves the discretion to reject and replace at the cost of the Contractor the whole or any portion of the items as the case may be, and that is defective or fails to fulfill the requirements of the contract. The cost of any such replacement made by the Buyer shall be deducted from the amount payable to the Supplier
- 8.3** The testing & inspection as per above clauses in any way does not relieve the Contractor from any Warranty, CAMC or other obligations under this contract.
- 8.4** Acceptance test procedure & Programme for all the items shall be discussed and finalized after the award of the work in a joint meeting.

9 Extension of Time:

- 9.1** This work is urgent and hence the completion period as per contract shall be adhered to strictly. However, in-case of extraordinary situations which may delay the completion of the project, the contractor shall apply for extension in time as per format contained in Annexure-VI.
- 9.2** AAI at its sole discretion may extend the time period for completion of the work without any prejudice to operate the penalty clauses provided for in the Tender Document. Such extension of time and the circumstances leading to the extension of time shall be communicated in writing to the contractor.

10 Compensation for Delay:

- 10.1** Time is the essence of the Contract.
- 10.2** LD and Penalty will be levied as per Service Level Agreement and Payment Terms defined in Annexure – VII
- 10.3** The amount of compensation for delay and waiver of compensation for delay in case of justified reasons shall be decided at the discretion of Accepting Authority and the same shall be final and binding on the contractor. Time taken by AAI and local statutory authorities for approval of drawings, design, estimate etc, force majeure reasons and any other reasons beyond control of the contractor shall be considered as justified reasons. The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with AAI.
- 10.4** Appeal for waiver of compensation for delay with due justification shall be decided by the Competent Authority. The decision of the competent authority on appeal shall be final and binding on the contractor.
- 10.5** Blank.

11 Blank**12 Force Majeure:**

- 12.1** AAI may grant an extension of time limit set for the completion of the work / repair in case the timely completion of the work is delayed by force majeure beyond the contractors control, subject to what is stated in the following sub paragraphs and to the procedures detailed therein being followed. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, flood, storms etc), acts of states, the direct and indirect consequences of wars (declared or un-declared), hostilities, national emergencies, civil commotion and strikes (only those which exceed a duration of ten continuous days) at successful Bidder's/ OEM's factory. The successful bidder's right to an extension of the time limit for completion of the work in above-mentioned cases is subject to the following procedures.
- 12.2** That within 10 days after the occurrence of a case of force Majeure but before the expiry of the stipulated date of completion, the bidder informs the AAI in writing about the occurrence of Force Majeure Condition (as per Annexure-V to the tender document) and that the Bidder considers himself entitled to an extension of the time limit. The contractor shall submit the application for extension of time as attached in Annexure-VI.
- 12.3** That the contractor produces evidence of the date of occurrence and the duration of the force majeure in an adequate manner by means of documents drawn up by responsible authorities.
- 12.4** That the contractor proves that the said conditions have actually interfered with the carrying out of the contract.
- 12.5** That the contractor proves that the delay occurred is not due to his own action or lack of action.
- 12.6** Apart from the extension of the time limit, force majeure does not entitle the successful bidder to any relaxation or to any compensation of damage or loss suffered.

13 Patents, Successful bidder's Liability & Compliance of Regulations

- 13.1** Successful bidder shall protect and fully indemnify the AAI from any claims for infringement of patents, copyright, trademark, license violation or the like.
- 13.2** Successful bidder shall also protect and fully indemnify the AAI from any claims from successful bidder's workmen/employees, their heirs, dependents, representatives etc or from any person(s) or bodies/ companies etc. for any act of commission or omission while executing the order.
- 13.3** Successful bidder shall be responsible for compliance with all requirements under the laws and shall protect and indemnify completely the AAI from any claims/penalties arising out of any infringements and indemnify completely the AAI from any claims/penalties arising out of any infringements.

14 Settlement of Disputes:

- 14.1** If a dispute of any kind whatsoever arises between AAI and the Contractor in connection with, or arising out of the Contract or the execution of the works, whether during the execution of the Works or after their completion and whether before or after repudiation or after termination of the contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the Project

Leader or his nominee, the matter in dispute shall, in first place be referred to the Dispute Resolution Committee (DRC) appointed by the Executive Director / Member (Planning) / Chairman, Airports Authority of India. It is also a term of contract that fees and other expense if payable to DRC shall be paid equally by both the parties i.e. AAI and Contractor. The disputes will firstly be settled by the DRC, failing which any party may invoke arbitration clause. The Contractor shall be entitled for invoking the arbitration clause only after exhausting the remedy available under the Dispute Resolution Mechanism.

- 14.2** If the parties fail to reach a resolution even after referring to the higher level, either party must be able to start arbitration proceedings under the Indian Bidders as per the Indian Arbitration & Conciliation Act, 1996 & Changes and amendments to the Act in 2015 after following the due procedure.
- 14.3** Unless the Contract has already been repudiated or terminated or frustrated, the Contractor shall in every case, continue to proceed with the works with all due diligence and the Contractor and AAI shall give effect forthwith to every decision of the Project Leader or his nominee unless and until the same shall be revised, as hereinafter provided, by the DRC or in an Arbitral Award.
- 14.4** It is also a term of contract that If the contractor does not make any demand for Dispute Resolution Committee in respect of any claim in writing within 90 (Ninety) days of receiving the intimation from the AAI that the bill is ready for payment, the claim of contractor(s) will be deemed to have been waved and absolutely barred and the AAI shall be discharged and released of all liabilities under the contract in respect of these claims.

15 ADJUDICATION THROUGH ARBITRATION:

- 15.1** Except where the decision has become final, binding and conclusive in terms of Settlement of Disputes as mentioned above in this section, disputes or differences shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Member (Ops) / Chairman, AAI. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
- 15.2** It is also a term of contract that If the contractor does not make any demand for appointment of Arbitrator in respect of any claim in writing within 120 (One hundred Twenty) days of receiving the decision / award from Dispute Resolution Committee, the claim of contractor(s) will be deemed to have been waved and absolutely barred and the AAI shall be discharged and released of all liabilities under the contract in respect of these claims.
- 15.3** It is term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such disputes along with the notice for appointment of arbitrator and giving reference to the rejection of their claims by the Dispute Resolution Committee.
- 15.4** It is also a term of this contract that no person, other than a person appointed by above mentioned appointing authority, must act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.
- 15.5** The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

- 15.6** It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and, in all cases, where the total amount of the claims by any party exceeds INR1,00,000/-, the arbitrator shall give reasons for the award.
- 15.7** It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.
- 15.8** It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the 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) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

16 Arbitration and Law:

- 16.1** Indian laws shall govern this contract.
- 16.2** In the event of any dispute or differences relating to the interpretation and application of the provisions of Commercial Contracts between Central Public Sector Enterprises (CPSEs) / Port Trusts inter-se and also between CPSEs and Government Organization/Department (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or differences shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018.

17 TERMINATION FOR DEFAULT & RISK PURCHASE:

- 17.1** The AAI may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Contractor, terminate this Contract in whole or in part in any of the following events.
- 17.1.1** If the Contractor fails to deliver any or all of the Items within the time period(s) specified in the Contract or any extension thereof granted by the AAI pursuant to Clause 9 of Section - III.
- 17.1.2** If the Contractor fails to perform any other obligation(s) under Contract.
- 17.1.3** If the Contractor, in either of the above circumstances, does not remedy his failure within a period of 30 days (or such longer period as AAI may authorize in writing) after receipt of the default notice from AAI.
- 17.1.4** As a penalty to the Contractor, the AAI shall encash the Contract Performance Bank Guarantee. The AAI in such case shall pay for the assessed value of the executed work that can be used. No payment shall be made for the efforts put in by the Contractor in case the same are of no value to AAI. The balance unfinished work of the project will be got done by fresh tendering on Contractor's risk and that extra expenditure will be recovered.
- 17.2 Risk Purchase:** AAI may resort to provision of the unfulfilled obligation(s) under the Contract from an alternate source. Cost of the same shall be recovered from the Contractor.

18 TERMINATION FOR INSOLVENCY:

- 18.1** The AAI may at any time terminate the Contract by giving written notice to the supplier, without compensation to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right or action or remedy which has accrued or will accrue thereafter to AAI. In the event of termination for penalty to the contractor Clause 17.1.4 shall be applicable.

19 SET OFF:

- 19.1** Any sum of money due and payable to the contractor (including security deposit refundable to him) under this contract may be appropriated by the Buyer to set off the same against any claim of the Buyer for payment of a sum of money arising out of this contract made by the Contractor with Buyer.

20 DEVIATION, SUBSTITUTE AND EXTRA ITEMS:

- 20.1** All quantities mentioned in Schedule A: Anticipated Schedule of Quantities are Estimated Quantities only. Actual Quantities may vary during Execution of the Work as per existing Site Requirement and Condition.
- 20.2** AAI reserves the right to change the quantity to be supplied but within the overall deviation limit of 30% of the contract value.
- 20.3** Substitution shall be avoided as far as possible unless it becomes un-avoidable due to availability of only higher version of model of same Make with better or same technical features. Substitute items as per site requirements up to the overall limit of 30% of the contract value at the Market Rate of the Substitute Item or the Agreement Rate of the Contract Item, whichever is less.
- 20.4** AAI also reserves the right to purchase Extra Items, which are completely new, as per site requirements up to the overall limit of 30% of the contract value at the Market Rate of the Extra Item.
- 20.5** The overall deviation, Extra item or the substitute items taken together shall not exceed 30% of the contract value unless and until it is mutually agreed by both the parties and a specific order is placed on the vendor in this regard.

21 LIMITATION OF LIABILITY

- 21.1** Notwithstanding any other term, there shall be no limitation of liability in case of any damages for bodily injury (including death) and damage to real property and tangible personal property due to gross negligence and willful misconduct of the other party.
- 21.2** In all other cases not covered by Para 21.1 above the total liability of either party under the terms of the contract shall not exceed the total contract value and in no event shall either party be liable to the other for any indirect, incidental, consequential, special or exemplary damages, nor for any damages as to lost profit, data, goodwill or business, nor for any reliance or cover damages even it was advised about the possibility of the same.

SECTION - IV

(SPECIAL CONDITIONS OF THE CONTRACT)

1. COMPLIANCE TO STANDARDS

- 1.1.** All designs, codes, developing platforms, developing techniques and workmanship shall be in accordance with the highest accepted international standards for this type of work.
- 1.2.** The bidder shall also state, where applicable, the National or other International standard(s) to which the whole, or any specific part, of the system, software, or training complies.
- 1.3.** The bidder shall also ensure compliance to applicable Laws/ Acts, Regulations, Instructions, Orders, Circulars etc. or Amendments thereof; issued by Government of India, State Governments or appropriate Public Authorities from time to time.
- 1.4.** The requirements given in this document are firm and no deviation of any kind is acceptable.

2. TIME SCHEDULE

- 2.1.** Please refer Project Milestone, Timelines, Payment Schedule & Liquidated Damages defined in Annexure – VII
- 2.2.** The time and date of completion of the works as contained in the supplier's proposal and as agreed to contractually after modifications, if any, shall be final and binding upon the supplier. It must be understood that the supplier has made the proposal after fully considering all such factors which may have any bearing on the time schedule of the contract, and no extension in the schedule whatsoever shall be permitted on these accounts by AAI.
- 2.3.** The bidder is expected to submit the project plan within 1 week of award of the contract and shall stick to the plan. The contract execution shall be monitored initially on weekly basis and subsequently on daily basis.

3. DELAY & NON-CONFORMANCE

- 3.1.** In case of the above time scheduled including levy of compensation for late delivery of systems as contained in Section-III of the tender document not being adhered to, AAI has the right to cancel the order wholly or in part thereof without any liability to cancellation charges and procure the goods / software elsewhere, in which case, the successful bidder shall make good the difference in the cost of goods procured elsewhere and price set forth in the order with the successful bidder.

4. PAYMENT TERMS

- 4.1.** Please refer Project Milestone, Timelines, Payment Schedule & Liquidated Damages defined in Annexure – VII.
- 4.2.** Documents required for the release of payment
 - 4.2.1.** Invoice + 2 copies
 - 4.2.2.** Delivery Challan + 2 Copies
 - 4.2.3.** Certificate of Factory Acceptance Test (if done by AAI)
 - 4.2.4.** Site acceptance certificate of goods received at site in physically good packed condition

- 4.2.5. Installation / commissioning Certificate (As applicable for final payments)
- 4.2.6. Training Completion Certificate as applicable
- 4.2.7. Quarterly AMC Invoice (For AMC cases)
- 4.2.8. Certificate of satisfactory service during AMC period

5. GUARANTEE / WARRANTY & CAMC

- 5.1. The bidder as per operation, installation, maintenance manuals and performance guarantee tests supplied by the contractor, will do the loading, installation & commissioning of systems. The contractor will be fully responsible for the guaranteed performance of the supplied systems and guarantee/ warranty obligations.
- 5.2. All the Supplied Items including workmanship shall be guaranteed against all defects/ bugs and for a satisfactory performance as per all the listed features, for a period of 1 (One) year from the date of signing of PSAT.
- 5.3. The bidder shall guarantee that the Items, articles sold/ supplied against the Contract to AAI shall be brand new & no refurbished items shall be supplied. The Installation/Services offered shall be as per the Industry Standard & as per the Terms & Condition of the Notice Inviting RFP.
- 5.4. The bidder shall attend at his own expense and get the defects/ bugs removed in the systems as detected by AAI during the period of Guarantee/ Warranty.
- 5.5. It shall be the responsibility of the bidder to coordinate with the OEM and get the Material Fixed/ Replaced in case and Defect / Bugs/ Unsatisfactory Performance occurs.
- 5.6. Guarantee/ Warranty shall be comprehensive in nature, i.e. shall include both parts and labour, and shall be carried out onsite.
- 5.7. Breakdown Complaint shall be considered resolved only when the entire system / Solution works satisfactorily.
- 5.8. A fine of an agreed amount as per the SLA defined in this RFP shall be applicable for any violation of the SLA for breakdowns.
- 5.9. In case, the Breakdown Complaint is not resolved within 5 weeks from the date of intimation of the Complaint, AAI may take required corrective measure to resolve the breakdown at the risk and cost of the Contractor.

6. SUBSTITUTION & WRONG SUPPLIES

- 6.1. Unauthorized/Pirated substitution or materials delivered in error of wrong description or quality or supplied in excess quantity or old versions shall be returned to the successful bidder at his cost and risk.
- 6.2. In case the items/articles are not as per the specifications and required quality, the same are liable to be rejected by AAI. Decision of AAI will be final on this account. The rejected items must be removed by the Contractor from AAI's premises within three days from the date of information of their rejection. The expenses incurred on this account shall be borne by the Contractor.

7. DISPATCH OF DOCUMENTS

- 7.1. Pre-receipted Bills in triplicate at each stage of payment.
- 7.2. Copy of the Delivery Challan.
- 7.3. Copy of the Inspection report (if inspection carried out as a part of the Contract).

7.4. Duly certified Installation / Commissioning Certificate with the final bills.

8. UP GRADATION

8.1. The successful bidder shall guarantee the long-term availability of Upgraded versions of hardware / software to the buyer for the full life of the equipment. The successful bidder shall guarantee that before outdating the current systems covered under the contract, successful bidder shall give AAI at least six (6) months advance notice so that the latter may order the next upgraded system.

9. TECHNICAL MANUAL

9.1. The bidder shall supply complete set of technical/ operations and maintenance manuals (as applicable) along with the delivery. The cost of such manuals supplied will be included in the cost of the system.

10. CHANGE OF MODEL

10.1. No change of model after the placement of order shall be entertained unless the alternate model offered are equivalent or higher in specifications and approval of the competent authority has been obtained in writing for such a change of model before the delivery of the product. Delivery of the alternate product without such an approval shall not be accepted and AAI shall not be responsible for any delay in delivery schedule on this account.

11. SAMPLE TESTING

11.1. The Buyer may demand a sample product at any stage of tendering for evaluation. AAI reserves the right to reject a Bid at any stage of processing and shall forfeit the EMD if the sample product is found to be substandard and / or fails to meet the NIT specifications and the bidder shall have no further claims in the tender.

11.2. AAI shall not bear any cost with regard to transportation of the equipment for testing and all such cost with regard to the testing shall have to be borne by the Bidder.

12. TRAINING

12.1. The bidder is required to conduct a 3-day training session for a total of 15 AAI officials. The training will be organized in three batches each of three days, with each batch consisting of 5 individuals. The training will cover topics related to Datacenter operations, including Modular UPS, In-row cooling racks, DCIM, Bus Bar trunking system, Intelligent Rack PDU, and other items specified in Schedule B.

13. INTELLECTUAL PROPERTY RIGHTS

13.1. Airports Authority of India recognizing the intellectual property rights (in case of Software Development Projects) of the contractor and shall allow the marketing of the product to third party provided the marketing is done jointly or in consultation with AAI. For this, a memorandum of understanding (MoU) shall be arrived at between AAI and the Contractor before taking up such activity. MoU will define in clear terms the responsibilities of both the parties, financial implications and legality of the action.

14. SUBMISSION OF ACCEPTANCE TESTING PROCEDURE

- 14.1.** It will be the responsibility of the vendor to submit the system test procedure for conducting the post-installation site acceptance testing. The procedure submitted by the vendor should be drafted in line with the standard practices followed in the industry and should be in accordance with the test procedures & practices specified by the OEM. The acceptance test procedure on approval by AAI shall become the document for acceptance of the equipment after installation at the site. The draft copy of system test procedure should be made available to AAI before 15 days of the schedule site acceptance date.

15. PROJECT SCHEDULE & MONITORING

- 15.1.** The vendor shall plan various activities and submit the execution schedule within one week of award of the work. The execution schedule should clearly indicate all activities and the time required for completion of each activity taking the total project time as specified in para 2 above. Parallel activities and the dependent activities for each activity may be required to be specified in the schedule. The vendor would be required to submit the bar chart for all the activities along with the schedule. The project shall be closely monitored with respect to this schedule. The project review & coordination meetings shall be held once in 15days/as and when required with respect to this schedule. Apart from the regular monitoring meeting(s) at CHQ, the physical progress of the work shall be monitored from time to time as agreed between both the parties in the progress review meetings. Any slippage from the schedule in completion of one activity and resultant delay / impact on the overall completion schedule shall be reviewed in each review meeting and the vendor would be required to take corrective actions to bring back the project on schedule.
16. The vendor should deploy well trained personnel at the site. AAI shall not be responsible for any incident or accident happening at the site due to the negligence of the personnel deployed by the bidder. The bidder shall absolve AAI against all such claims.
17. The Supplier is responsible for all unpacking, assemblies, wiring, installations, cabling between hardware units and connecting to power supplies at site.
18. Quantity ordered may vary as per site conditions / requirements.

19. BIDDERS REGISTERED WITH NSIC

- 19.1.** Any concessions to the MSEs registered with NSIC and other government agencies specified by the Ministry of Micro, Small & Medium Enterprises as per MSMED Act 2006, for goods produced and services rendered shall be applicable as per the directives of Government of India, prevalent on the date of acceptance of the bid.
- 19.2.** In case a bidder is eligible for any concession/exemption under this clause, documentary proof to this effect must be enclosed. It may be noted that submission, if any, of reference(s) of Govt. notification(s) pertaining to concessions/exemptions must be supported by copy(ies) of such notification(s).
- 19.3.** Bidders (MSEs) registered with NSIC seeking concession/exemption on the basis of "goods produced" need to submit a certificate, issued from the concerned authority (DIC or DEO etc.), that products offered in the bid are being produced by the concerned MSE.
- 19.4.** Tender fee exemption: The tender fee will be refunded to NSIC registered bidders after duly checking and verifying their NSIC registration certificate during evaluation.

- 19.5.** EMD Exemption: In case a bidder seeks and is eligible for exemption from payment of EMD, Documentary proof as above to this effect must be enclosed with the document in fee (Cover-1) of the bid.
- 19.6.** In case NSIC registration certificate is found invalid during evaluation, the bid of such bidder shall be rejected and tender fee shall not be refunded.
- 19.7.** The benefit as above to MSEs shall be available only for goods / services produced and provided by MSEs for which they are registered.

20. LIST OF EXCLUSIONS

- 20.1.** The tender clauses not related to the present tender are not applicable.

ANNEXURE-I

(ACCEPTANCE LETTER)

(TO BE SUBMITTED IN Pre-Qualification BID)

To,
General Manager (IT)
Airports Authority of India
Safdarjung Airport
New Delhi-110003

Sub: Acceptance of Terms & Conditions of Tender

Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi

Tender No.: - AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

Dear Sir,

1. The tender document for the works mentioned above have been sold to me/us by the Airports Authority of India and I / we hereby certify that I / we have read all the terms and conditions of the tender document made available to me / us in the office of the Executive Director (IT), AAI, which shall form part of the contract agreement and I / we shall abide by the conditions / clauses contained therein.
2. I / We hereby unconditionally accept the tender conditions of AAI's tender document in its entirety for the above works.
3. It is clarified that after unconditionally accepting the tender conditions in their entirety, it is not permissible to put any remarks / conditions (except unconditional rebates on quoted rates if any) in the tender enclosed in covers "1", "2", "3" & "4" and the same has been followed in the present case. In case any provisions of this tender are found violated after opening covers "1", "2", "3" & "4". I / we agree that the tender shall be rejected and AAI shall without prejudice to any other right or remedy be at liberty to forfeit the full said earnest money absolutely.
4. That, I /We declare that I/we have not paid and will not pay any bribe to any officer of AAI for awarding this contract at any stage during its execution or at the time of payment of bills, and further if any officer of AAI asks for bribe /gratification, I will immediately report it to the appropriate authority in AAI.

Yours Faithfully,

(Signature of the Tenderer)
with rubber stamp

Date: _____

ANNEXURE-II

(PROFORMA BANK GUARANTEE FOR CONTRACT PERFORMANCE)

(To be stamped in accordance with Stamp Act)

(The non-judicial stamp paper should be in the name of issuing Bank)

Ref : _____

Bank Guarantee No : _____

Date: _____

To

The General Manager (IT),
AIRPORTS AUTHORITY OF INDIA
Rajiv Gandhi Bhawan,
Safdarjung Airport New Delhi

Dear Sirs,

In consideration of the Airports Authority of India (hereinafter referred to as the Owner", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s ----- (hereinafter referred to as the 'Contractor', which expression shall unless repugnant to the context of meaning thereof, include its successors, administrators executors and assigns), a contract. Bearing No. ----- dated-----valued at ----- for - ----- and the contractor having (scope of contract) agreed to provide a Contract Performance of the entire Contract equivalent to ----- (10 per cent) of the said value of the Contract to the Owner. We at ----- (hereinafter referred to as the 'BANK', which expression shall, unless repugnant to the context or meaning thereof, include the successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Owner, on demand any and all money payable by the Contractor to the extent of ----- as aforesaid at any time up to ----- (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the owner the Bank shall be conclusive and binding notwithstanding any difference between the owner and contractor or any dispute pending before any court, tribunal or any authority.

The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee. The Owner shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in then or of any right which they might have against the Contractor,. And to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Owner and the Contractor or any other course of or remedy or security available to the Owner. The Bank shall not be released of its obligations under these presents by any exercise by the Owner or by any other matters or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Owner may have in relation to the Contractors liabilities.

Apart from other guarantees this Bank Guarantee explicitly provides for the following:

- A) The Hardware / Software supplied under the contract shall be free from all defects / bugs and upon written notice from AAI, the successful bidder shall fully remedy, free of expenses to AAI, all such defects / bug as developed under the normal use of the said hardware / software within the period of guarantee/Warranty.
- B) The performance guarantee is intended to secure the performance of the entire system. However, it is not to be construed as limiting the damages stipulated in any other clause.

Notwithstanding anything mentioned herein above our liability under this guarantee is restricted to INR ----- and it shall remain in force upto and including ----- and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s ----- on whose behalf this guarantee has been given.

WITNESS

Dated this ----- day of ----- 2024 at -----

Signature ----- Signature -----

Name ----- (Bank's Rubber Stamp)

Official address ----- Name -----

Designation with Bank Stamp

Attorney as per Power of

Attorney No. -----

Date-----

ANNEXURE-II A

(COMPANY LETTER HEAD)

(To be submitted when the form of EMD submission is BG)

(Letter of understanding from the Bidder to Bank to be submitted along with EMD to Airports Authority of India)

The Branch Manager,
..... **Bank,**
.....

Subject: My/Our Bank Guarantee bearing No..... dated..... for amount issued in favor of Airports Authority of India (AAI).
Sir,

The subject Bank Guarantee is obtained from your branch for the purpose of Earnest Money on account of contract awarded/ to be awarded by M/s AAI to me/us.

I/We hereby authorize the Airports Authority of India in whose favour the deposit is made to close the subject Bank Guarantee before maturity/on maturity towards adjustment of dues without any reference/consent/notice from my/our side and the bank is fully discharged by making the payment to Airports Authority of India.

Date:

Signature of the Depositor

Place:

ANNEXURE-II B

(BANK GUARANTEE FORMAT FOR EMD)

(To be submitted when the form of EMD submission is BG)

(On Non-judicial stamp paper of INR100.00)

Bank Guarantee

**The General Manager(IT),
Airports Authority of India,
CHQ, Rajiv Gandhi Bhawan,
Safdarjung Airport,
New Delhi 110 003,
INDIA**

Dear Sir,

We _____ (full name of the banker) hereby refer to the tender for(name of work) between the Airports Authority of India as purchaser and M/s _____ (fill in the name of tenderer) as tenderer providing in substance for(name of work) as particularized in said tender, to which specific reference is made. Under the terms of said tender, the tenderer is required to provide a bank guarantee in a form acceptable to the purchaser for the amount of INR.....(amount in figures)(Rupees) on account of EMD.

In view of the foregoing and pursuant to the terms of the said tender, which tender is referred to and made a part thereof as fully and to the same extent as if copied at length hereon, we hereby absolutely and unconditionally guarantee to the purchaser, performance of the terms and conditions of the said tender. The guarantee shall be construed as an absolute, unconditional and direct guarantee of the performance of the tender without regard to the validity, regularity or enforceability of any obligation of the parties to the tender.

The purchaser shall be entitled to enforce this guarantee without being obliged to resort initially to any other security or to any other remedy to enforce any of obligations herein guaranteed any may pursue any or all of its remedies at one or at different times. Upon default of the tender, we agree to pay to the purchaser on demand and without demur the sum of INR.....(amount in figures)(Rupees) or any part thereof, upon presentation of a written statement by the purchaser that the amount of said demand represents damages due from the tenderer to the purchaser by virtue of breach of performance by the tenderer under the terms of the aforesaid tender. The determination of the fact of breach and the amount of damages sustained and or liability under the guarantee shall be in the sole discretion of the purchaser whose decision shall be conclusive and binding on the guarantor.

It is mutually agreed that the purchaser shall have the fullest liberty without affecting in any manner our obligation hereunder with or without our consent to vary any of the terms of the said tender or to extend the time for performance by the tenderer, from time to time any of the powers exercisable by the purchaser against the tender and either to forebear or on force any of the terms and conditions relating to the said tender and we shall not be relieved from our liability by reasons of any variation of any extension being granted to the tender or for any forbearance act or commission on the part of the purchaser or any indulgence by the purchaser to the tenderer or by any such matter or thing

whatsoever which under the law relating to the sureties would but for this provision have effect of so relieving our obligation.

This guarantee is confirmed and irrevocable and shall remain in effect until _____ (the validity shall be six months from the date of opening of Tender) and such extended periods which may be mutually agreed to. We hereby expressly waive notice of any said extension of the time for performance and alteration or change in any of the term and conditions of the said tender.

Very truly yours,

(Authorized Signatory of the Bank)

ANNEXURE-III

(LIST OF SUPPORT STAFF WITH QUALIFICATION BACKGROUND)

(To be submitted with Technical bid)

Name of Work: - "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi"

Tender No.: "AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24"

Sr. No.	Name of the Employee	Qualification		Experience (No. of years)	Remarks
		Educational	Professional		
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

AUTHORIZED SIGNATURE _____

NAME OF THE SIGNATORY _____

NAME & ADDRESS OF THE TENDERER

OFFICIAL SEAL _____ Date _____

ANNEXURE-IV**(DETAILS OF MAKE/ MODELS OFFERED AGAINST THE TENDER)****(To be submitted in the Technical Bid)****Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi****Tender No.: AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24**

Sr. No.	Item Description	Make Offered	Model Offered
1	Modular UPS System with Modular Batteries		
2	In-Row Intelligent Cooling Racks for Server Room with Cold Aisle Containment facility		
3	DCIM system		
4	Fire Detection & Alarm System		
5	Gas Based Auto Fire Suppression System		
6	High Sensitivity Smoke Detection System		
7	Access control System		
8	IP Based CCTV System		
9	Rodent Repellent System		
10	Water Leak Detection System		
11	Racks (Server) along with Removable Cable manager rings to be installed at rear side of each rack		
12	Racks (Network) along with Removable Cable manager rings to be installed at rear side of each rack		
13	Intelligent Rack PDUs along with Temperature and Humidity Sensors for each rack		
14	75" Big Display System		
15	TOR Switch		
16	Visitor Management System		
17	BusWay Trunking system		
18	Cables including Optical Fibre and Cat 6 and their Termination Points, Cable Trays, Conduits and Circuit Breakers , Earthing , Blanking panels to cover unutilized Rack space for effective cooling.		

Annexure-IV A

(DETAILED BILL OF MATERIAL)

OFFERED AGAINST THE SPECIFICATION AS PER ANNEXURE-VII

(To be submitted in the Technical Bid)

Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi

Tender No.: AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

Sr. No.	Item Description	U.O.M	Quantity	Detailed Bill of Material
1	Modular UPS System with Modular Batteries	Nos	2	
2	In-Row Intelligent Cooling Racks for Server Room with Cold Aisle Containment facility	Nos	4	
3	DCIM system	Lot	1	
4	Fire Detection & Alarm System	Lot	1	
5	Gas Based Auto Fire Supression System	Lot	1	
6	High Sensitivity Smoke Detection System	Lot	1	
7	Access control System	Lot	1	
8	IP Based CCTV System	Lot	1	
9	Rodent Repellent System	Lot	1	
10	Water Leak Detection System	Lot	1	
11	Racks (Server) along with 2 Qty Removable Cable manager rings to be installed at rear side of each rack	Nos	12	
12	Racks (Network) along with 2 Qty Removable Cable manager rings to be installed at rear side of each rack	Nos	4	
13	Intelligent Rack PDUs along with Temperature and Humidity Sensors for each rack	Nos	32	
14	75" Big Display System	Nos.	4	
15	TOR Switch	Nos	4	
16	Visitor Management System	Lot	1	
17	BusWay Trunking system	Lot	1	
18	Cables including Optical Fibre and Cat 6 and their Termination Points, Cable Trays, Conduits and Circuit Breakers , Earthing, Blanking panels to cover unutilized Rack space for effective cooling.	Lot	1	

ANNEXURE-V

(FORMAT FOR INTIMATION OF FORCE MAJEURE OCCURRENCE)

**The General Manager (IT),
Airports Authority of India,
Safdarjung Airport, New Delhi - 110003**

**Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport,
New Delhi**

Tender No. : - AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

Subject: Intimation regarding Force Majeure Case:

Sir,

Pursuant to Clause No.12 - FORCE MAJEURE of Section III, it is for your kind information that a case of force majeure has since occurred. Details are given below:

Date of occurrence	Detail of Incident	Activity affected	Likely Delay	Requested Extension

We are entitled to an extension in the date of completion as requested above. Bar Chart with revised schedule of activities is attached. Please approve the extension in the time. Evidence of the date of occurrence is also enclosed.

It is certified that performance of the Contract has been interfered with. It is also certified that the incident has not occurred due to our own action and that there has not been any lack of action by us in preventing the occurrence.

We are only claiming the extension in the date of completion of the activity (ies) and not claiming the loss incurred in the course of the incident.

Yours truly,

(Project Manager)

Enclosures:

1. Revised Bar Chart.
2. Evidence of the occurrence of the Force Majeure case (..... sheets)

ANNEXURE-VI**(APPLICATION FOR EXTENSION OF TIME)****Part-I**

1. Name of the Contractor
2. Name of the work as given in the agreement
3. Agreement No.
4. Contract Amount
5. Date of Commencement of work as per agreement
6. Period allowed for completion of work as per agreement
7. Date of completion stipulated in agreement
8. Date of actual completion of work
9. Period for which extension is applied for.
10. Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.

Sl No	Name of Hindrance	Date of occurrence of hindrance	Date of over of hindrance	Period of hindrance	Overlapping Period	Net extension applied for	Remarks if any
1	2	3	4	5	6	7	8

Total period for which extension is now applied for on account of hindrances mentioned above.

MonthDays

11. Extension of time required for extra work.
12. Details of extra work and the amount involved:

Total value of extra work	Proportionate period of extension of time based on estimated amount put to tender on account of extra work.
(a)	(b)

13. Total extension of time required for 10 & 11.

Submitted to the Project Manager_____.

Signature of Contractor

Dated

Part II

(For Official Use)

1. Date of receipt of application from _____ Contractor for the work of _____ in the office of the General Manager (IT) _____.
2. Recommendations of the project Manager as to whether the reasons given by the contractor are correct and what extension, if any, is recommended by him. If he does not recommend the extension, reasons for rejection should be given.

Dated:

Signature of the Installation In-charge

(To be filled in by the Project Manager)

1. Date of receipt in the Office:
2. Project Manager's remarks regarding hindrances mentioned by the contractor.
 - (i) Serial No
 - (ii) Nature of hindrance
 - (iii) Date of occurrence of hindrance
 - (iv) Period for which hindrance is likely to last
 - (v) Extension of time applied for by the contractor
 - (vi) Overlapping period, if any, giving reference to items which overlap
 - (vii) Net period for which extension is recommended
 - (viii) Remarks as to why the hindrance occurred and justification for extension recommended.
3. Project Manager's Recommendations. The present progress of the work should be stated and whether the work is likely to be completed by the date up to which extension has been applied for. If extension of time is not recommended, what compensation is proposed to be levied as per the agreement.

Signature of Project Manager

Signature of Accepting Authority

ANNEXURE-VII

(EQUIPMENT / PRODUCT SPECIFICATIONS & COMPLIANCE STATEMENT)

(To be submitted with Technical bid)

(As per relevant 10.1.2 of section-II of Tender Document)

Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi"

Tender No.:- AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

1. SCOPE OF WORK OF NON-IT ITEMS OF DATA CENTRE

GENERAL REQUIREMENTS

Major Design Considerations should be:

- Design data centre required for highest availability of 99.982 %
- UPS Power & Precision Cooling should be modular to achieve higher Datacentre efficiency.
- To have data centre infrastructure which is scalable.
- To have a data centre which should have the lowest TCO (Total cost of ownership).
- The quantities defined against each item are for reference purpose. Bidders have to propose the required quantities for each items on the basis of their assessment during site survey.

Broad Scope of Work includes, but not limited to:

SITC of UPS, In row cooling racks, Racks, DCIM(Datacenter Infrastructure Monitoring system), iPDU(Intelligent Rack PDU), BBT(Busbar trunking system), electrical works, LT panels, CCTV, Access control, WLD, rodent, Fire alarm and detection , VESDA , Fire Suppression , Passive networking , LED displays etc. including operations and maintenance for 5 years .

2. TECHNICAL SPECIFICATIONS OF NON-IT EQUIPMENT

(Item No. 1 of Schedule A)

MODULAR UPS FOR CRITICAL IT LOAD WITH BATTERY SOLUTION (Qty : 2 Nos)

Rating/Sizing: Minimum 80 (N+1) KVA (Scalable up to minimum 120 KVA):

UPS System design concept is 2N based on redundancy and availability, with true double conversion - online system. There shall be 1 redundant module in each UPS. The Module size should be in the range of 20 to 30 KVA each.

Sr. No.	Description
Technical Specification	
1	Efficiency online mode to be ≥ 96 % along with PF Correction to Unity at Input System AC-AC Efficiency: 1) Normal operation: $>95\%$ at 40% to 100 % load.

	2) Battery operation:>95% at 40% to 100 % load.
2	UPS should handle 100% unbalanced load Operating ambient temperature: 0°C to 40°C without any derating in kVA/kW Capacity.
3	Electrical Characteristics Input:
	Input: 380/ 400/ 415 VAC - Three Phase four wires + ground
	Input Voltage Range: +/- 15% (On Full Load)
	Rated Input frequency: 50 or 60 Hz, user configurable
	Frequency tolerance: 45 to 55 Hz
	THDi (Total current harmonic distortion) < 5% at 100% rated load
	Input Power Factor must be at least 0.97 at load >25%
4	Electrical Characteristics Output:
	Crest factor: 3:01
	Rated Output voltage: 380 V; 400 V; 415 V
	Output voltage variation, steady state: $\pm 1\%$ (balanced load); $\pm 2\%$ (unbalanced load)
	Output Frequency variation: ± 0.1 Hz
	Output Power Factor Rating: 0.8 leading to 0.8 lagging without any derating in kVA/kW capacity.
	Output voltage harmonic distortion: <3% at 100% non-linear load, <2% at 100%linear load
5	Overload capability:10 min: 125%, 60 seconds: 150%
6	The UPS shall be provided with minimum IP20 ingress protection
7	Noise level should be less than 65 db on normal condition at 1 meter distance.
8	It should be possible to add or replace battery modules without switching the load to bypass source. Notification should be provided on the UPS integrated display for addition or removal of Battery modules.
9	Battery System to be equipped with cell, module, bank level battery management system and to be monitored by Data Centre Infrastructure Management
10	Each UPS battery shall be sized for 30 minutes backup at 80(N+1) kVA load at a power factor of 0.90
11	Rectifier to be IGBT based and Inverter to be IGBT based (3 level or better) (Switching losses Shall be Less than 30% on IGBTs)
12	The UPS should have built in facility through which it can be switched off immediately through local switch or remote Emergency Power Off switch wherein the load is disconnected from the UPS under emergency condition. Restarts are possible after manual inspection and removing the conditions of emergency and resetting the Emergency Power Off switch
13	It shall be possible to insert & remove (Plug In-Plug Out) sub power module from the UPS frame while the UPS is in Online Double Conversion Mode of operation i.e., Sub Power modules shall be swappable without putting the UPS in bypass/ battery operation.

14	Failure of any sub power module in an individual UPS Frame shall not lead to entire Frame Capacity Down but only the failed sub power module capacity shall go down. i.e. In case of Failure of any one Sub Power module, the rest of the available power module in the frame shall continue to operate in normal double conversion mode of operation with reduced capacity. Power Module must be hot swappable. Static bypass switch should be for the Full capacity UPS and bypass voltage range should be 380 V; 400 V; 415 V.
15	The Modules should have Redundant variable speed fans and be capable of maintaining the system in event of single fan failure
16	The UPS shall be provided with Phase Sequence detection at Input i.e. In case of Phase reversal at Input- UPS shall provide the suitable alarm at the display & operate on Battery Mode without any load drop.
17	Back feed protection required (Inbuilt or External) at Mains as well as Bypass
18	The offered UPS shall be provided with IEC certification / UL Certification
19	UPS should have a wide choice of communication interface through SNMP / Modbus protocol using the RS232 / RS485 / Ethernet port.
20	UPS to have hot swappable power modules, hot swappable intelligence minimum 80(N+1)KVA with dual electrical distribution cables and panels to racks and should be in minimum size of 20 KVA - 30KVA power module Capacities. Failure of any intelligence controller within the UPS frame should not result in failure of any power module.
21	The UPS shall be designed minimum 3 Level Inverter design or better technology which shall lead to minimum stress on IGBT (Switching losses Shall be Less than 30%) and High reliability
22	It shall be possible to interchange the sub power modules among each other in the frame or from any of the other similar frames without the need of shutdown or programming required by the OEM / Service Team.
23	Life cycle monitoring of critical components such as AC/DC Capacitors, cooling fans. These consumable items must also be covered in warranty as well as CAMC.
24	Modes of Operation: i) Normal: The UPS system shall continuously supply power to the critical load as per IEC 62040-3 Class 1 Online Mode of Operation. Battery: Upon failure of the utility AC power source, the critical load shall be supplied by the inverter, which, without any interruption, shall obtain its power from the battery. ii) Recharge: Upon restoration of the utility AC power source (prior to complete battery discharge), the PFC rectifier shall power the inverter and simultaneously recharge the battery. iii) Static bypass: The static bypass switch shall be used to transfer the load to the bypass without interruption to the critical power load. This shall be accomplished by turning the inverter off. Automatic re-transfer or forward transfer of the load shall be accomplished by turning the inverter on. Maintenance bypass: In maintenance bypass the load is supplied with

	unconditioned power from the manual maintenance bypass input switch provided in a separate enclosure with each UPS. iv) Status Monitoring: The UPS should monitor and annunciate the status of individual battery modules or bank level and perform temperature compensated charging depending on environment temperature. Notification should be provided on the UPS integrated display for add or removal of Battery modules. As part of the UPS, a system static bypass module shall be provided. The system static bypass shall be swappable and provide no break transfer of the critical load from the inverter output to the static bypass input source during times where maintenance is required, or the inverter cannot support the critical bus. Such times may be due to prolonged or severe overloads, or UPS failure. The UPS and static bypass module shall constantly monitor the auxiliary contacts of their respective circuit breakers, as well as the bypass source voltage, and inhibit potentially unsuccessful transfers to static bypass from taking place
25	Each UPS battery shall be sized for 15 minutes backup for a Data Centre of load 80(N+1) KVA which will be expandable to 120 KVA. AC/DC capacitor service life shall be minimum 10 years
26	As a requirement of UL 1778, back feed protection in the static bypass circuit shall also be incorporated in the system design.
27	OEM Certification: -ISO9001, ISO 14001, ISO 27001:2013, ISO45001:2018, Product should have a minimum end of service life (EOSL) of 10 yrs. from the date of PSAT.

(Item No. 2 of Schedule A)**In-Row Cooling Racks (Qty: 4 Nos.)**

Sr. No.	Description
Technical Specification	
1	Refrigerant: R 410 a
2	Dx based Cooling Unit with Scroll /Digital Scroll /Inverter brushless scroll compressor(Compressor should be mandatorily be in Outdoor unit)
3	The air-conditioning unit should have minimum of 300 mm in width and should match the height of 42 u racks in alignment.
4	Cooling coil should be of copper and aluminum fins
5	Unit return air temperature: 35 Deg C / 30%RH (Scalable to 37 Deg C)
6	Air Flow Direction: Horizontal-in front of the racks
7	Air Quantity: 120 CFM/KW minimum
8	Rack Inlet Temperature: 22 +/- 1 deg C
9	Ambient air design temperature: as per ASHRAE as per ASHRAE N=20 data
10	Humidifier Type: Electronic Controlled Infrared/ Immersed Electrode with Electronic Expansion Valve
	Heater should be of min. 3-6 kW capacity, fin tubular construction of stainless steel.
	Thickness of Heater casing should be min. 20 gauge.

11	There should be provision for integration of the units with Fire Alarm system for tripping of the units during fire emergencies
	Condensate pump management should be with a pump assembly with float with the unit. Float will work for condensate pump control and should generate pan overflow alarm and pumping capacity should be min. 6 meters.
12	The cooling units should be UL/CE certified considering the safe operations and units being installed next to the Server Racks inside the Data Centre
	Unit should have min. 6 EC fans with hot swappable features and capable to modulate speed from 20% to 100%.
	Outdoor unit should have DC brushless compressor in order to avoid risk of lubricant spillage/Fire hazard during maintenance work inside the Data Centre.
13	The unit will be equipped with stainless steel electric heaters, to allow temperature control during dehumidification cycles
14	Nominal cooling capacity of a PAC: minimum 35 KW/ 10 TR.
15	Unit should include Network management for integration with BMS as well as DCIM.
16	The filters should be minimum 20% efficient as per ASHRAE Standard, UL Class 2. Filters should be EN779 G4/Indian equivalent like BIS or NABL efficient
17	Positions of Indoor units shall be done so to reduce the distance of return air path from hot aisle to hot-air in-take of cooling units. Cooling units shall be positioned as closer to the heat load, so that any kind of recirculation of air can be avoided i.e. next to the IT racks.
18	Controller with microprocessor: The control system will include a microprocessor that will be programmed to manage all the functions of the air-conditioner. The controls shall be of microprocessor based programmable PID logic controllers. Status Report of the latest 100 events/messages of the unit should be available.
19	Alarms: The microprocessor controller should be capable to activate critical multiple alarms some of which are given below but not limited to I. Dirty filter sensor: this sensor is needed to optimize filter operation, so they can be replaced only when necessary II. Flood sensor: this sensor is needed if there is condensate water spillage outside unit III Unit Communication Lost Alarm, Sensor Communication Lost alarm, Increasing/ Decreasing temperature Alarm (as per specified threshold), Condensate PUMP full alarm, Increasing/ Decreasing Humidity alarm (as per specified thresholds), Condenser Fault Alarm, PAC on UPS Power Alarm, Input Voltage less than specified threshold alarm, any other alarms necessary for data center operations and management, etc.
20	In-row units should have provision of dual power source with ATS(Automatic Transfer Switch) to ensure the seamless operation, thereby providing reliability and stability to the system.

21	Units should be capable for having provision of RS485 card or SNMP card
22	OEM Certification: -ISO9001, ISO 14001, ISO 27001:2013, ISO45001:2018; Product should have a minimum end of service life (EOSL) of 10 yrs. from the date of PSAT.
23	All Cooling units should be capable of integration with the DCIM (Datacentre Infrastructure Management Tool).

COLD AISLE CONTAINMENT SYSTEM

S. No.	Description of Parameter	Acceptable range for parameters
		The cold aisle zone is the space between two rows of IT equipment racks with cold air being supplied between the two rows of racks (or one row of racks and an architectural wall) and the IT equipment exhausts hot air away from the aisle. In this enclosed space cooling unit supply air is collected inside of the Containment. The cool air is supplied to the IT equipment while the IT equipment exhaust air is pushed outside the Containment and returned to the cooling unit. Cold Aisle should be minimum 1200mm.
1		
1.1	Door Type and Size	Swing Double door of total size 1200 mm x 2100 mm
1.2	Door Material	Polycarbonate Fire retardant UL sheets with 4 mm thickness. Plastic transparency 80% - 85%. Non-Scratch resistant.
1.3	Door Frame	Aluminum/MS Frame with Black Anodized / Black Powder coated.
2		
2.1	CAC Door Closing Kit	Automatic door closure system for swing door should be Heavy duty, Aluminum anodized / MS body, Self-Closing without electricity required. Pneumatic and Spring Technology, No Noise, Adjustable Speed.
3		
3.1	General	Customized Fire-Retardant Rigid UL V-0 Polycarbonate 3 mm sheet cut in accordance to the rack (Size 42 U) for the said cold aisle enclosure with support taken from the false Ceiling.
3.2	Roof accessories Material	Polycarbonate Fire retardant UL-V-0 sheets with minimum 3 mm thickness. Plastic transparency 80-85 %. Non-Scratch Resistant.
3.3	CAC Auto opening Panel	Top panel slides open within <10 seconds after getting signal from gas suppression system for opening in case of fire alarm. The bidder shall ensure supply of all the equipment required to connect and integrate fire system for this functionality.
3.4	Top panel Frame	Aluminum/MS Frame with Black Anodized / Black Powder coated.

3.5	CAC sealing	A fire-retardant gasket shall be provided on all equipment to frame touch points to mitigate loss of cold air loss or allow hot air infiltration.
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(Item No. 3 of Schedule A)**DCIM (Datacentre Infrastructure Management) SYSTEM**

Sr. No	Technical Specification
1	Integration and alarms management with DCIM
2	Ability to gather and integrate data from Data Centre equipment's and accessories via SNMP, IP, Modbus and BACnet protocols.
3	Monitoring Solution shall be open to integration with present and future systems with minimal change in the existing system setup.
4	Monitoring Solution shall have a self-check mechanism to monitor its own performance continuously and alert on degradation.
5	System alarms shall be generated from the system conditions and shall not be restricted to the following parameters: Communication fault, power fault, ground fault, low voltage, loop communication etc.
6	Monitoring Solution shall have configurable polling interval for monitored parameter. Monitoring Solution shall have inbuilt mechanism to send notification through Web Portal and email.
7	Monitoring Solution shall have inbuilt mechanism to store monitored performance data of each parameter for 1 year or higher. Monitoring Solution shall have inbuilt mechanism to enable data backup of the parameters and configurations.
8	Monitoring Solution shall collect and integrate the energy consumption data of all the components. Software solution proposed should support user to deploy HA with 100% guaranteed uptime.
9	Monitoring Solution shall continuously monitor the following UPS parameters (for both the UPS): •UPS-Availability •UPS-Load •Battery-Health •Battery-Capacity •Input-Frequency •Input-Voltage •Output-current • Output Frequency and Voltage
10	Monitoring Solution shall provide alarms generated by the access control systems on the centralized management console and also provide reports of access granted or denied. Monitoring Solution shall provide live monitoring of the cameras.
11	Monitoring Solution shall integrate with cameras and access control system on standard interfaces/protocol.

12	Monitoring Solution shall integrate with the fire alarm system and provide the alarms generated by the system on the centralized Dashboard
13	Provision should be there to generate trends and alarms of each point defined and integrated based on time and date range selection for a minimum period of 1 year.
14	The Graphics of the alarm generation should be such that colour is different for different event/ alarm/ trouble types based on priority levels.
15	The solution shall provide a PUE/ DCiE dashboard.
16	Monitoring Layer: Proposed DCIM solution shall be designed with a top-level 10/100MbT Ethernet network, using the BACnet/IP / Lon Works/IP, SNMP, and/or Modbus TCP protocol.
17	Third Party system Integration: DCIM platform shall be capable of pushing monitored device information to any Third-Party NMS system using SNMP INFORM/REQUEST/Restful API procedures and to third party BMS system using Modbus TCP out channel and support Web services programming interface.
18	Email Server Integration: DCIM Monitoring Layer server/VM system shall allow integration of AAI email server via SMTP channel.
19	Alarm Status Tracking: DCIM Monitoring layer shall have Alarm filters in the Monitoring dashboard. The solution provides alert compression and advanced alerting algorithms including deviation from normal and time over threshold to help reduce false positive alarms.
20	Trend Analysis: Shall offer Graphical trending analysis for historical data pertaining to day, week, month, year and user defined durations.
21	Rule Creations for Threshold Alert: DCIM solution shall allow for custom logics for creating Rules of Escalation and Email alerts for various devices based on alarm severity and priority.
22	Auto Timed Reporting DCIM Monitoring Layer: Shall allow for Auto Timed/ Scheduled Report Emailing to selected audience on required key performance indicators. These Reports shall be mailed to relevant users as CSV format, PDF formats, excel formats.
23	Reports: - Monitoring Solution shall have inbuilt mechanism to generate standard and customized reports. - Provide features to generate a history report for an alarm point state. - The reports have to be provided in at least the following file formats: CSV, Excel, PDF. - The solution shall have the capability to support tools for report customization.
24	Manufacturer Authorization letter to be submitted along with technical bid.
Details of Specifications: The proposed 100% web based DCIM should have following modules:	
Sr.No	Description
1	Inventory Manager

2	Cooling Capacity Planning
3	Space Capacity Planning
4	Power Capacity planning
5	Risk Simulation of Power and cooling devices.
6	Proposed DCIM system should be modular and support perpetual licensing which provides users flexibility to purchase and expand enhanced modules according to future need. The DCIM should be able to run on a physical, virtualized server and Cloud Based Expansion. Data Centre Infrastructure Management (DCIM) Solution tool has to integrate all critical power and cooling devices into an existing DCIM solution on one single platform for effective monitoring of Data Centre operation.
7	The solution should have a symbol, which shall include physical dimensions, rated capacities, consumption of space, power and cooling and any other associated manufacturer's data.
8	Proposed DCIM solution should support complex business process mapping based on requirement. Example: - commission, de-commission, add and modify
9	Thermal heat map - should visualize thermal data in the form of heat maps in a 3D rendering of the floor view. And should allow to view actual rack heat load and to help balancing and optimizing the system and generate reports
10	DCIM should have capability to customize the dashboard to a certain degree, depending on their desired monitoring priorities as per AAI requirement.
11	The solution shall support all levels of role-based access control and fine grain authorization for each functional department
12	Space, power and cooling capacity management: End to End DC facility view to analyze data such as rack capacity, maximum rack space available, weight, and available space in racks/ dc floor to improve capacity.
13	DC design capability: Upload floor plan images and utilize drag-and-drop functionality to place equipment within the floor plan including detailed rack elevations with rack load, space utilization, relationship rules and inventory monitoring built in.
14	At minimum DCIM should provide these reports (hourly, daily, weekly, monthly, and quarterly, yearly): However, there should be an option to customize the reports as per the end user requirement anytime. Device communication status Report, Total UPS load, Used UPS load, total cooling capacity, used cooling capacity, Total/Used/Available U space (floor level & at rack level), Ambient and Inlet temperature, Energy Efficiency PUE/ DCiE , rack level power consumption report, Alarm reports, quick access to information such as current capacity, asset lists and exact device location.
15	The solution will provide provisions to recommend the best location for a server in the rack layout, utilizing available network ports, space, cooling, and power capacity to optimize capacity utilization.

16	Proposed DCIM shall an option to provide mobile device capability preferably iOS/Android solution through web browsers and apps for cloud-based solution if opted for future migration.
17	The proposed solution should have an option for well-established integration support with a physical asset management solution to detect physical assets at rack level & precise u level location
18	Critical equipment of Data Centre like UPS, Inrow Cooling, DCIM and Racks should be from Same & Single OEM for seamless integration and better service support.
19	Bidder/ OEM to provide a complete Comprehensive list of parameters (Equipment wise) that can be monitored through proposed DCIM solution in the Table below.
20	Cybersecurity: - The Proposed DCIM vendor to follow an ISO 30111/UL-conformant vulnerability handling process, which includes standardized methods for handling cybersecurity incidents with respect to the following parameters: Receive information regarding a potential vulnerability, evaluate the potential vulnerability and, if confirmed, identify affected products, Mitigate the vulnerability, Disclose the vulnerability. The proposed DCIM vendor should have a 24x7x365 cyber security Lab/portal, to check latest security updates, vulnerabilities, affected products along with predefined procedures to report & mitigate security risks for affected products for complete warranty & CAMC Tenure.
21	The security portal should be able to facilitate, at a minimum the following tasks at no cost / no additional services: Security Notifications, Report vulnerabilities, Vulnerability management policy, Report Security Incident, Feedback loop to the SecOps team, Firmware PKIs, Date of vulnerability identified, threat description, affected products, knowledge bases to fix security incidents
22	Authentication and Encryption: The communication between the client and the Monitoring Application shall be secured via a Secure Sockets Layer (SSL) 256-bit Triple-DES (Data Encryption Standard) encoded connection. The application database is protected using RSA 2048 bits certificate password encryption. Software Vulnerability Fixes published by DCIM OEM should be based on the results from at least 3 different 3rd party/OEM/Self authorized cyber security auditor, vulnerability scanning authorities which are certified with DOD RMF IT (Former DIACAP) or FIPS140 compliance processes, to run against DCIM application as well as other relevant security vulnerability information related to the product.
23	OEM Certification: - ISO9001, ISO 14001, ISO 27001:2013, ISO45001:2018

S. No	Equipment	Comprehensive List of parameters that can be monitored
1	Both the UPS (Critical Load and	

	continuous cooling UPS)	
2	PAC System	
3	Racks	
4	Fiber/ Copper cabling	
5	iPDU	
6	CCTV System	
7	Access Control System	
8	Addressable Fire Alarm System	
9	Gas Based Fire Suppression System	
10	Aspirant Smoke detection System	
11	Rodent Repellent System	
12	Water Leak Detection System	
13	Busway Trunking System	

(Item No. 4 & 5 of Schedule A)**FIRE DETECTION & ALARM SYSTEM & GAS BASED AUTO FIRE SUPPRESSION SYSTEM**

The electrical Installation work shall be carried out in accordance with Indian Standard Code of Practice. It shall also be in conformity with the current Indian Electricity rules and regulations and requirements of the Local Electricity Supply Authority and Fire Insurance regulations, so far as these become applicable to the installation. The work in general shall be carried out as per following Specifications.

- a. IS / IE rule / IE Acts
- b. AAI General Specifications for Internal and external Electrical Works.
- c. CPWD General Specifications for Electrical Works, Part – I and part – II: 2007.
- d. NFPA.
- e. UL/LPCB/FMI/EN-54.
- f. National Building Code of India.
- g. Chief Controller of Fire and Explosive (CCOE).
- h. Local Fire Authority.

All the codes and standards mean the latest publication. Wherever not specified, the installation shall generally follow the Indian Standard code of practice, in absence of which the relevant British Standard code of Practice shall be followed.

Wherever these specifications call for a higher standard of material and or workmanship than those required by any of the above mentions regulations and specification then the specification here under shall take precedence over the said regulations and standards.

The following standards, rules and regulations with up to date amendments shall be applicable:

- a. CPWD general specification for electrical works part – VIII – 2013.
- b. NFPA 2001 – standard on clean agent fire extinguishing system.
- c. NBC part – IV – 2016: Fire safety system.
- d. IS 15683 – portable fire extinguisher – performance and construction.
- e. Local fire authority.
- f. The standard listed as well as other applicable cost standards and sound engineering
- g. Practices shall be used as minimum calculation standard.

Technical Requirements of Fire Detection and Alarm System

Sr.No	Description
1	The control panel shall be a microprocessor based two loop addressable unit, LCD display, designed and manufactured to the requirements of EN54 Part 2/ UL or their Indian Equivalent standard for the control and indicating component and EN54 Part 4/ UL or their Indian Equivalent standard for the internal power supply.
2	The fire alarm system shall be integrated with the access control system to deactivate all door locks in case of emergency.
3	Instructions/ signals from the panel should also shut down the PACs in case of fire.
4	The fire alarm system should also be integrated with the DCIM through SNMP CARD/Modbus/BACnet interface or equivalent standard interface to get all the alerts and alarm on the DCIM
5	Each Loop with 250 device capacity capable of handling the following detectors and devices.
6	Analogue Addressable Photo Type Smoke Detector with Detector base operating temperature range of -9°C to 50°C and humidity range up to 95% RH for Server Farm Area
7	Analogue Addressable Multi Criteria type Smoke Detector with Detector base operating temperature range of -9°C to 50°C and humidity range up to 95% RH for Utility area
8	Intelligent Analogue Addressable Smoke Detector, UL/ULC/FM approved software Programming only.
9	Addressable single action pulls down type Manual call point.
10	Addressable Monitor Modules
11	Addressable Control Modules
12	75-80 DB Sounder
13	Integration with PAC and DCIM System
14	Integration with Fire Alarm System of the Building, so that Alarm is generated in the building fire alarm system as well whenever alarm is generated in this device.
15	All cables should be FRLS type (Flame Retardant Low Smoke). All conduits should be metal type.
16	Manufacturer Authorization letter to be submitted along with technical bid.

Technical Requirements of Gas Based Fire Suppression System (NOVEC 1230)

Sr.No	Description
1	The Clean Agent Fire Suppression system cylinder, CCOE approved seamless cylinders, discharge hose, fire detectors and panels and all other accessories required to provide a complete operational system meeting applicable requirements of NFPA 2001 (2018 Edition) Clean Agent Fire Extinguishing Systems, NFPA 70 National Electric Code, NFPA 72 National Fire Alarm Code or ISO standards shall be considered to ensure proper

	performance as a system with UL/FM/VDS approvals and installed in compliance with all applicable requirements of the local codes and standards as specified above in heading H.
2	Provide all engineering design and materials for a complete agent suppression system including storage cylinders with steel bracket, extinguishing agent, detection tube, cylinder valve and associated accessories including but not limited to adaptors, pressure switch, tube fittings etc, required for complete operation of system.
3	All necessary safety requirements such as warning signs, discharge alarm shall be part of system.
4	The necessary nomenclature such as pressurization level, agent volume and gross/ net weight of cylinder shall be clearly marked on cylinder.
2	The minimum criterion for the selection of the Clean Agent will be on the following parameters •Zero Ozone Depleting Potential. •Global Warming Potential not exceeding one. •Atmospheric Lifetime not less than 5 days. • comply with NFPA 2001 standard (2018 Edition)
3	The system shall be properly filled and supplied by OEM (Original Equipment Manufacturer).
4	Be efficient, effective and does not require excessive space and high pressure for storage.
5	The system shall be designed taking the minimum design concentration as per NFPA 2001(Latest Edition) guidelines & as applicable to class 'A' & C risks/ fires. The NOVEC 1230 Gas agent shall be stored in seamless steel cylinders and dry nitrogen shall be added to provide additional energy to give the required rapid discharge. At the normal Operating pressure of 42bar/25 bar at 21Deg C, the agent is a liquid in the container. Note: bidder should design the system keeping in mind the cylinder space available at site and distance from cylinder bay to the farthest rack placed at site and pressure at the nozzle as per NFPA guidelines.
6	NFPA2001 states that the design concentration of a clean agent post discharge shall be maintained for a sufficient period of time to ensure there is no re-ignition of fire once suppressed. NFPA 2001 and 12A require an enclosure integrity test as part of the acceptance procedure for all clean agent systems. This includes halocarbon and inert agents. This comprehensive test and calculation predict the leakage area corresponding to the retention time of the agent in the enclosure on discharge. Most specification state it shall be ten minutes.
7	The cylinders shall have a digital pressure gauge which should be Capable of integration with the DCIM tool for remote monitoring.
8	Manufacturer Authorization letter to be submitted along with technical bid

(Item No. 6 of Schedule A)**HIGH SENSITIVITY SMOKE DETECTION SYSTEM**

Technical Specifications:	
Sr.No	Description
1	The panels shall be mounted inside the risk protected and there shall be a network of air sampling pipe work.
2	The High Sensitivity Smoke detection consists of highly sensitive Laser-based Smoke Detectors with aspirators connected to networks of sampling pipes. The alarms shall be generated once the laser sensor receives smoke at a pre-determined obscuration level to activate and alert, Fire and alert signal.
3	The signal shall be extended to the Fire Alarm monitor Modules / DCIM through Volt free contacts for further investigation.
4	It shall be possible to connect an interface card for open Protocol output to DCIM system for online Monitoring with Software level integration.
5	An optional remote Display unit shall be provided to monitor each detector, and a Programmer shall be supplied to configure the system.
6	The system shall include all equipment's, appliances and labour necessary to install the system, complete with highly sensitive LASER-based Smoke Detectors with aspirators connected to network of sampling pipes.
7	The Bidder shall also make provision in the Aspirating Smoke Detectors to trip PAC system.
8	Manufacturer Authorization letter to be submitted along with technical bid
Codes and standards:	
1	The entire installation shall be installed to comply one or more of the following codes and standards: NFPA Standards, British Standards, BS 5839 part: 1 or Their Indian Equivalent standards.
Approvals:	
1	All the equipment shall be tested, approved, and/or listed by: LPCB (Loss Prevention Certification Board), UK FM Approved for hazardous locations Class 1, Div 2 UL (Underwriters Laboratories Inc.), US ULC (Underwriters Laboratories Canada)
2	The System shall consist of a highly sensitive LASER-based smoke detector, aspirator, and filter.
3	It shall have a display featuring LEDs and Reset/ Isolate button. The system shall be configured by a programmer that is either integral to the system, portable or PC based.
4	The system shall allow programming of: Multiple Smoke Threshold Alarm Levels Time Delays. Faults including airflow, detector, power, filter block and network as well as an indication of the urgency of the fault. Configurable relay outputs for remote indication of alarm and fault Conditions.
Performance Requirements:	
1	Shall provide very early smoke detection and provide multiple output levels corresponding to Alert, Action, and Fire. These levels shall be programmable and shall be able to set sensitivities ranging from 0.025 – 20% obscuration / meter Shall report any fault on the unit by using configurable fault output relays or via the graphics Software.

2	Shall monitor for filter contamination. Shall incorporate a flow sensor in each pipe and provide staged airflow faults.
Materials and Equipment:	
1	Both Light Scattering and Particle Counting shall be utilized in the device as follows: The Laser detection Chamber shall be of the mass Light Scattering type and capable of detecting a wide range of smoke particle types of varying size.
2	A particle counting method shall be employed for the purposes of preventing large particles from affecting the true smoke reading.
3	Monitoring contamination of the filter (dust & dirt etc.) to notify automatically when maintenance is required.
4	The Laser Detection Chamber shall incorporate a separate secondary clean air feed from the filter; providing clean air barriers across critical detector optics to eliminate internal detector contamination.
5	The detector shall not use adaptive algorithms to adjust the sensitivity from the set during commissioning.
6	A learning tool shall be provided to ensure the best selection of appropriate alarm thresholds during the commissioning process.
Detector Assembly:	
1	The Detector, Filter, Aspirator and Relay Outputs shall be housed in a mounting box and shall be arranged in such a way that air is drawn continuously from the fire risk area by the Aspirator and a sample passed through the Dual Stage Filter and then to the detector.
2	The detector shall be LASER-based and shall have an obscuration sensitivity range of 0.025 – 20% obs/m.
3	The detector shall have four programmable smoke alarm thresholds across its sensitivity range with adjustable time delays for each threshold between 0 - 60 seconds. The detector shall also incorporate the facility to transmit a fault through a relay.
4	The detector shall have a single pipe inlet that shall contain an ultrasonic flow sensor. High flow fault (urgent and non-urgent) and low flow fault (urgent and non-urgent) can be reported.
5	The filter shall be a two-stage disposable filter cartridge. The first stage shall be capable of filtering particles in excess of 20 microns from the air sample. The second stage shall be ultra-fine, removing more than 99% of contaminant particles of 0.3 microns or larger, to provide a clean air barrier around the detector's optics to prevent contamination and increase service life.
6	The aspirator shall be a purpose-designed rotary vane air pump. It shall be capable of allowing/ supporting for a single pipe run / multiple sampling pipe runs with a transport time of less than 90 seconds.
7	Detectors shall be capable of supporting a single pipe run of 25m with a maximum transport time of 120 seconds or as appropriate standards dictate.
8	The Assembly shall contain relays for fire, Action and fault conditions.
9	The relays shall be software programmable (latching or non-latching). The relays shall be rated at 2 A at 30V DC.

10	Remote relays shall be offered as an option and either configured to replicate those on the detector or programmed differently.
11	The Assembly shall have built-in event and smoke logging. It shall store smoke levels, alarm conditions, operator actions and faults. The date and time of each event shall be recorded. Each detector (Zone) shall be capable of storing up to 18000 events.
Displays on the Detector Assembly:	
1	The detector will be provided with LED indicators.
2	Each Detector shall provide the following features at a minimum: Alert, Alarm, Fire corresponding to the alarm thresholds of the detector.
3	Smoke Dial display represents the level of smoke present. Fault Indicator. Disabled indicator.
4	Buttons supporting the following features shall be accessible to authorized personnel: Reset – Unlatches all latched alarm and faults. Disable – Disables the fire relay outputs from actuating and indicates a fault.
Sampling Pipe:	
1	The sampling pipe shall be smooth bore with an outside diameter of 25mm and internal diameter of 21mm should be used.
2	The pipe material should be suitable for the environment in which it is installed, or should be the material as required by the specifying body.
3	All joints in the sampling pipe shall be air tight and made by using solvent cement, except at entry to the detector The pipe shall be identified as Aspirating Smoke Detector Pipe along its entire length at regular intervals not exceeding the manufacturer's recommendation or that of local codes and standards.
4	All pipes should be supported at not less than 1.5m centres, or that of the local codes or standards. The far end of each trunk or branch pipe shall be fitted an end cap and drilled with a hole appropriately sized to achieve the performance as specified and as calculated by the system design
Sampling Holes	
1	Sampling Holes of 2mm, or otherwise appropriately sized holes, shall not be separated by more than the maximum distance allowable for conventional detectors as specified in the local codes & standards. Intervals may vary according to calculations.
2	Each sampling point shall be identified in accordance with Codes or Standards. Consideration shall be given to the manufacturer's recommendations and standards in relation to the number of Sampling Points and the distance of the Sampling Points from the ceiling and roof structure and forced ventilation systems.

(Item No. 7 of Schedule A)**ACCESS CONTROL SYSTEM**

S. No.	Description
1	The Integrated Access Control System's (ACS) primary function shall be to regulate access through specific doors, gates or barriers to secured areas of the facility.

2	An Intelligent System Controller (ISC) shall link the ACS software to all other field hardware. It shall provide full distributed processing for access control and alarm monitoring operations. Controller should be 8 doors, 20,000 cards capacity, and 5000 events. Interface on RS232, RS485 and TCP/IP.
3	A Dual Reader Interface Module (DRIM) shall be available for each controlled door and provide the ability to connect up to two card readers or entry devices
4	Smart card readers and biometric finger print reader at every Critical door for Entry and Exit. Cards and other consumable items will be covered under warranty as well as CMC.
5	Enterprise Version Server Software for Access control capability to service Minimum 1 concurrent clients, Inclusive of One Server & One Client License (both perpetual)
6	Shall be capable to communicate with centralized command software and integrable with DCIM
7	Software shall Programmable functions, controller downloads and uploads, multi- level local and global anti-pass-back, integration with fire systems, grouping of escape routes, door security clearance, import and export utilities, etc.
8	Alarm recognition and treatment
9	Scheduled times for door clearance
10	DCIM should be able to send emails to selected users.
11	Multiple card formats and facility codes
12	Flexible commands for card users such as temporary access level (shift changes) and provisional cards, card lock, penalties, card and event tracking, Double custody of access cards, etc.
13	SITC for Panic Bar with alarm (if Panic bar is used for exit) from exit doors.
14	Manufacturer Authorization letter to be submitted along with technical bid

(Item No. 8 of Schedule A)
IP BASED CCTV SYSTEM

S. No.	Description
1	The Offered Solution shall ensure seamless integration for better support. However keeping in mind the future scalability, the offered solution should be ONVIFS compliant.
2	<u>4-megapixel (1920 x 1080) resolution Indoor Camera for Inside of Data Center:</u> 4-megapixel (1920 x 1080) resolution or better; 1/2.9" 2.19M CMOS or better Image sensor; Lens- 3.2 ~ 10mm varifocal lens or better; Min 30fps @all resolutions (H.264); H.264, MJPEG codec supported; Multiple streaming and User Access 6 users at unicast; Auto Day & Night; WDR -120dB or better; Alarm Trigger: Tampering, Motion detection, Line crossing detection, Intrusion detection, scene change detection, Dynamic analysis, Network disconnect, IP address conflict, Storage exception;

	Network Storage: NAS (Support NFS, SMB/CIFS), ANR; Image Setting: Rotate Mode, Saturation, Brightness, Contrast, and Sharpness adjustable by client software or web browser; Triple Stream: Support; PoE: IEEE 802.3af; Protocols: IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, SNMP, DNS, TCP, UDP, IGMP, ICMP, DHCP etc; Security: HTTPS (SSL) login authentication, Digest login Authentication, IP address filtering, User access log, 802.1x Authentication Communication Interface: 1 RJ45 10M/100M Ethernet port, 1 RS-485 interface. Standard: ONVIF, CGI etc; Micro SD/SDHC memory slot Min support 32GB; Hallway view; IR Range: 20m or better;
3	<u>4 MP (Full HD) Outdoor D/N Camera for Outdoor Units (For outside of Data Center):</u> 4 Mega Pixel resolution (1920 x 1080) or better; 1/1.9" Progressive Scan or better Image Sensor; 10-1500 mm Minimum working distance; Focus Mode: Auto, Semiautomatic, Manual; Shutter Time: 1 to 1/30000s; Day & Night: IR Cut Filter; Range: Pan:360 Degree, Tilt: 25 to 90 Degree (Auto Flip); Speed: Pan Manual Speed: 0.1 to 155 Degree/second, Pan Preset Speed: 220 degree/second, Tilt manual Speed: 0.1 to 120 Degree/second, Tilt Preset speed: 200 degree/second; Number of Preset: minimum 275; PTZ functions: Park actions, scheduled task, auto smart tracking, 3D intelligent positioning system; Detection: Face detection, intrusion detection, Region entrance detection, region exiting detection, Audio exception, line crossing detection; Alarm I/O: 7 alarm input and 2 alarm output; Analytics: Face detection, Intrusion detection, Line crossing detection, Region entrance, Region exiting, Audio exception detection, Motion detection, Dynamic analysis, tampering alarm, Network disconnect, IP address conflict, Storage exception; Alarm Action: Pre-set, Patrol, Pattern, Micro SD/SDHC card recording, Relay output, Notification on Client, Send Email, and Upload to FTP, Trigger Channel; Ethernet: 10 Base-T/ 100 Base-TX, RJ 45 Connector; Frame rate: 25fps @ max resolution; Image Compression: H.264, MJPEG; Protocols: IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, SNMP, DNS, TCP, UDP, IGMP, ICMP, DHCP etc; Network Storage: Should support min. 8 NAS storage; On board storage: Built-in Micro SD storage slot, with min 128 GB, automatically failover to local SD card. Auto transfer facility to main storage when network is restored; Standards: Open-ended API, support ONVIF etc for easy third party integration;

	Protection Level: IP66, IK10, TVS 4,000V lightning protection, surge protection and voltage transient protection; Mount/Bracket: OEM manufactured suitable mount/bracket
4	<u>NVR (Network Video Recorder)</u> Video Input: 64 camera inputs or Higher, Up to 12MP-32 MP resolution supported HDMI Output: 2 or more HDMI interface @ 1920 × 1080P resolution. VGA output: 1 VGA @1920×1080P resolution In/Out bandwidth: 400Mbps or more Remote Connection: 30 Recording resolution: upto 12 MP- 32MP Live View/ Playback resolution: upto 12 MP Synchronous playback: 32-channel or better SATA: 16 SATA interfaces for 16 HDDs External Storage: iSCSI storage Capacity: Up to 10TB capacity for each HDD Raid level: RAID 5/6 HDD: 24 TB usable space in RAID 6 format (SATA) Number of arrays: 16 or more Functions: hot swappable HDD, VCA search for behaviour analysis, ultra-high speed playback, smart playback, sub period playback Network interface: 3x 10M, 100M, 1000M self-adaptive Ethernet interface: multiple IP, load balancing, network redundancy; 4x 1000 Mbps optic fiber interfaces Serial interface: RS-232; RS-485; Keyboard USB interface: 3 USB with at least 2 - 3.0 USB Alarm in/out: 8/4 Failover support- N+N / N+1 Chassis: rack mountable
5	There should be provision of integration of CCTV system with DCIM tool in order to monitor the Camera, NVR, HDD status remotely
6	Storage capacity to store more than 120 days backup
7	Rated voltage: 220-240 VAC 50/60Hz.
8	Manufacturer Authorization letter to be submitted along with technical bid

Access Switch

S.No	Access Switch Specification
1	Architecture
	Shall be 19" Rack Mountable.
	The switch should have 1x USB-C Console Port , 1x OOBM and 1x USB Type A Host port
	8GB SDRAM and 16 MB flash and 8 MB Packet buffer size

	The switch should support stacking on uplink port or dedicated stack module and should have Stacking Performance of minimum 40 Gbps. The switch should support minimum 8 switch in stack
	The Switch should support 32000 MAC address
	The switch should have minimum 2K Ipv4 Unicast Routes ,1K Ipv6 Unicast Routes ,1K Igmp Groups ,1K Mld Groups ,5K Ipv4 ingress Entries and 2K Ipv4 egress ACL Entries.
	Switch -ports
	The should have 24x ports 10/100/1000 BASE-T ports and 2x 1/10 SFP+ ports populated with 1Gig SFP+ from day one.
	OS should be in modular architecture
	Switch should be PoE switch with power budget 370W. Switch should support PoE/PoE+
2	IPv6 feature
	IPv6 host enables switches to be managed in an IPv6 network
	Dual stack (IPv4 and IPv6) transitions from IPv4 to IPv6, supporting connectivity for both protocols
	MLD snooping forwards IPv6 multicast traffic to the appropriate interface
	IPv6 ACL/QoS supports ACL and QoS for IPv6 network traffic
	IPv6 routing supports Static and OSPFv3 protocols
	RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping
3	High Availability And Resiliency
	The switch should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 40 Gbps. The switch should support minimum 8 switch in stack
	The Switch should support uni-directional Link Detection (UDLD) to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops in STP- based networks
	The Switch should support IEEE 802.3ad LACP supports up to 32 LAGs, each with up to 8 links per LAG and provide support for static or dynamic groups and a user-selectable hashing algorithm
	The Switch should support IEEE 802.1s Multiple Spanning Tree provides high link availability in VLAN environments where multiple spanning trees are required and legacy support for IEEE 802.1d and IEEE 802.1w
4	Management
	The Switch should support Built-in programmable and easy to use REST API interface
	The Switch should support On-premises and cloud- based management
	The Switch should support Zero-Touch Provisioning (ZTP) simplifies installation of switching infrastructure using DHCP-based
	The Switch should have Scalable ASIC-based wire speed network monitoring and accounting with no impact on network performance.
	The Switch should support Industry-standard CLI with a hierarchical structure

	The Switch should support Management security restricts access to critical configuration commands, provides multiple privilege levels with password protection, and local and remote syslog capabilities allow logging of all access
	The Switch should support SNMP v2c/v3 provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions sFlow (RFC 3176)
	The Switch should support Remote monitoring (RMON) with standard SNMP to monitor essential network functions. Supports events, alarms, history, and statistics groups as well as a private alarm extension group; RMON, XRMON, and sFlow provide advanced monitoring and reporting capabilities for statistics, history, alarms and events
	The Switch should support TFTP and SFTP support offers different mechanisms for configuration updates;
	The Switch should support Debug and sampler utility support ping and traceroute for IPv4 and IPv6
	The Switch should support Network Time Protocol (NTP) synchronizes timekeeping among distributed time servers and clients
	The Switch should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP) advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications
	The Switch should support Dual flash images provides independent primary and secondary operating system files for backup while upgrading
	The Switch should support Assignment of descriptive names to ports for easy identification
	The Switch should support Multiple configuration files which can be stored to a flash image
	The Switch should support Ingress and egress port monitoring enable more efficient network problem solving
	The Switch should support Unidirectional link detection (UDLD) monitors the link between two switches and blocks the ports on both ends of the link if the link goes down at any point between the two devices
	The Switch should support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
5	Multicast
	The Switch should support IGMP Snooping to allow multiple VLANs to receive the same IPv4 multicast traffic, lessening network bandwidth demand by reducing multiple streams to each VLAN
	The Switch should support Multicast Listener Discovery (MLD) enables discovery of IPv6 multicast listeners; supports MLD v1 and v2
	The Switch should support Internet Group Management Protocol (IGMP) and Any-Source Multicast (ASM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3
6	Layer 2 Switching
	The Switch should support 4094 VLAN IDs

	The Switch should support Jumbo packet to improves the performance of large data transfers and support frame size of up to 9198 bytes
	The Switch should support IEEE 802.1v protocol VLANs to isolate select non-IPv4 protocols automatically into their own VLANs
	The Switch should support Rapid Per-VLAN Spanning Tree (RPVST+) to allow each VLAN to build a separate spanning tree to improve link bandwidth usage.
	The Switch should support MVRP to allow automatic learning and dynamic assignment of VLANs
	The Switch should support VXLAN encapsulation (tunnelling) protocol for overlay network that enables a more scalable virtual network deployment
	The Switch should support Bridge Protocol Data Unit (BPDU) tunnelling to Transmits STP BPDUs transparently
	The Switch should support Port mirroring duplicates port traffic (ingress and egress) to a monitoring port and support minimum 4 mirroring groups
	The Switch should support STP supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
	The Switch should support Internet Group Management Protocol (IGMP) Controls and manages the flooding of multicast packets in a Layer 2 network
7	Layer 3 Routing
	The Switch should support Open shortest path first (OSPF) to deliver faster convergence.
	The Switch should support OSPFv2 for IPv4 routing and OSPFv3 for IPv6 routing
	The Switch should support Static IP routing provides manually configured routing
	The Switch should support Static IPv4 and IPv6 routing to provide simple manually configured IPv4 and IPv6 routes
	The Switch should support IP performance optimization to provide a set of tools to improve the performance of IPv4 networks including directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities
	The Switch should support Dual IP stack to maintain separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design
8	Convergence
	The Switch should support IP multicast snooping (data-driven IGMP) to prevent flooding of IP multicast traffic
	The Switch should support LLDP-MED (Media Endpoint Discovery) to define a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones

	The Switch should support Auto VLAN configuration for voice RADIUS VLAN uses a standard RADIUS attribute and LLDP-MED to automatically configure a VLAN for IP phones
9	Security
	The Switch should support integrated trusted platform module (TPM) for platform integrity. This ensure the boot process started from a trusted combination of switches.
	The Switch should support Access control list (ACL) support for both IPv4 and IPv6 to allow for filtering traffic to prevent unauthorized users from accessing the network, or for controlling network traffic to save resources. Rules can either deny or permit traffic to be forwarded. rules can be based on a Layer 2 header or a Layer 3 protocol header
	The Switch should support ACLs filtering based on the IP field, source/ destination IP address/subnet, and source/ destination TCP/UDP port number on a per-VLAN or per-port basis
	The switch should support Enrolment over Secure Transport (EST) and Remote Authentication Dial-In User Service (RADIUS)
	The Switch should support Terminal Access Controller Access-Control System (TACACS+) delivers an authentication tool using TCP with encryption of the full authentication request to provide additional security
	The Switch should support Control Plane Policing sets rate limit on control protocols to protect CPU overload from DOS attacks
	The Switch should support multiple user authentication methods. Uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards
	The Switch should support Web-based authentication provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support IEEE 802.1X
	The Switch should support MAC-based client authentication
	The Switch should support Concurrent IEEE 802.1X, Web, and MAC authentication schemes per switch port accepts up to 32 sessions of IEEE 802.1X, Web, and MAC authentications
	The Switch should support Secure management access delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
	The Switch should support Switch CPU protection to provide automatic protection against malicious network traffic trying to shut down the switch
	The Switch should support ICMP throttling defeats, ICMP denial-of-service attacks by enabling any switch port to automatically throttle ICMP traffic
	The Switch should support Identity-driven ACL to enable implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user
	The Switch should support STP BPDU port protection to block Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks

	The Switch should support Dynamic IP lockdown with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing
	The Switch should support Dynamic ARP protection to blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
	The Switch should support STP root guard to protects the root bridge from malicious attacks or configuration mistakes
	The Switch should support Port security to allow access only to specified MAC addresses, which can be learned or specified by the administrator
	The Switch should support MAC address lockout to prevent particular configured MAC addresses from connecting to the network
	The Switch should support Source-port filtering to allow only specified ports to communicate with each other
	The Switch should support Secure shell to encrypt all transmitted data for secure remote CLI access over IP networks
	The Switch should support Secure Sockets Layer (SSL) to encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
	The Switch should support Secure FTP to allow secure file transfer to and from the switch and protect against unwanted file downloads or unauthorized copying of a switch configuration file
	The Switch should support Critical Authentication Role to ensure that important infrastructure devices such as IP phones are allowed network access even in the absence of a RADIUS server
	The Switch should support MAC Pinning to allows non-chatty legacy devices to stay authenticated by pinning client MAC addresses to the port until the clients logoff or get disconnected
	The Switch should support Management Interface Wizard to help secure management interfaces such as SNMP, telnet/SSH, SSL, Web.
	The Switch should support Security banner displays a customized security policy when users log in to the switch
	The Switch should support Green initiative for RoHS (EN 50581:2012) and WEEE regulations
10	Certification
	EN 60950-1:2006 EN 62368-1 UL 60950-1 CAN/CSA-C22.2 No. 60950-1-07 IEC 60950-1:2005 IEC 62368-1:2014 CNS-14336-1
11	Switch shall have OEM Warranty for one year

(Item No. 9 of Schedule A)
RODENT REPELLENT

Sr.No	Description
1	Configuration: Master console with necessary transducer and Cabling
2	Operating Frequency: Above 20 KHz (Variable)
3	Mini Exhaust Fan
4	Integration with DCIM (preferably be RS485 Modbus integration with DCIM)
5	Programmable Sweep Time & delay
6	Sound Output: 50 dB to 110 dB (Not audible to humans)
7	Power Supply: 230 V AC 50 Hz
8	Mounting: Wall Mounting
9	Coverage Area: All Voids of data center area including but not limited to: Ceiling void, floor void, room void etc.
10	Rat Repellent Mats/ Sticky pads must be placed at all the required locations in Data Center Area, as per the requirements of Data Center Incharge, during the warranty as well as CMC period.
11	Manufacturer Authorization letter to be submitted along with technical bid.

(Item No. 10 of Schedule A)**WATER LEAK DETECTION SYSTEM**

S.No.	Technical Specifications
1	This complete liquid leak detection system shall be based on a digital monitoring panel (monitoring panel), addressable sense cables, jumper cables and all required auxiliary equipment. This system shall detect and locate multiple leaks simultaneously as well as cable break faults. Each sense cable will digitally communicate fault information to the monitoring panel. The monitoring panel will be able to manage as much information on leaks as there are sections of cables installed.
2	Main Control Panel: The leak detection monitoring panel shall receive data processed and transmitted by each sense cable as well as raising the alarm on the type of fault: leakage fault with location to the nearest meter or continuity fault. Technical Characteristics The digital monitoring panel shall have the following technical characteristics: • The panel shall be able to monitor water, acids and hydrocarbon leaks sense cables. • It shall detect simultaneous leaks in a same circuit. • Maps shall be integrated to ease location of faults. • The panel shall have a touch screen display, be menu based to allow the set up and viewing of the system. • The panel shall be able to interface with BMS via volt free contacts and/or Modbus via serial or TCP/IP (IPv4, IPv6). • The panel shall have secure connection (Log-In Trap, HTTPS with TLS1.2, RFC 5280: X.509 (PKIC and CRL profile), IEEE 802.1X support, RADIUS and/or EAP-TLS). • The panel shall be equipped with configurable relays, as well as a specific relay for interrupting the power supply.

	• The panel shall have password security and be equipped with non-volatile memory. • The panel shall be able to store the history of the last five thousand events (beginning and end of faults). • The panel's reaction time to faults is adjustable cable by cable. • The panel will be supplied in a 19" wall-mounted or rack version. • The panel shall have UL and FM certifications. The digital monitoring panel shall be supplied from the same supplier as the sense cables. The monitoring panel shall be used to detect both water/acids leaks and hydrocarbon product leaks
3	System reactions in the event of a leak or fault on a sense cable: - Reactions on the monitoring panel: • An audible alarm is triggered, and the relays are activated. • The touch screen displays the date and time of the alarm, the type of fault and its location at the nearest meter. - Remote reactions: • Send information to a supervisor (BMS, computer) with a JBUS / Modbus IP communication protocol. • Sending e-mails and SNMP traps via the TCP/IP network Available Types of Interfaces Three different types of interfaces shall be available on the monitoring panel for sending alarms to a supervisor. • The monitoring panel shall be equipped with 9 relays: 8 fully configurable and 1 specific relay for power interruption. • A RS232 or RS422/485 output shall also be available to communicate in JBUS/MODBUS mode to a BMS. • An RJ45 output will be available for a TCP/IP connection.
4	Secure Connection The monitoring panel must guarantee a secure connection that complies with the certificates: • Log-In Trap (system locked after three failed login attempts) • HTTPS connections with TLS1.2 • X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (RFC 5280) Support • The panel shall offer IEEE 802.1X support (Port-Based Network Access Control) with all EAP (Extensible Authentication Protocol) methods based on username/password (Remote Authentication Dial In User Service, A.K.A. RADIUS) as well as the EAP-TLS method. The monitoring panel must be capable of connecting to other panels or satellite panels using either the IP address or the MAC address, even in IPv6
5	Sensor cable: The water sense cable shall consist of a helically-wound central core (data bus), on which PEHD (Polyethylene high-density) conductor wires are spiralled. The water sense cable will be 3, 7 or 15 metres long pre-connected with male-female plugs. This shall ensure a prompt detection as well as a short drying time after the risk is eliminated.

	The insulation and signal wires shall be made of flame-retardant polymer. The jacket of sense wires shall be made of conductive polymer on the ground wire. The active sense wire shall have special dust-proof construction and shall not be affected if in contact with any metal parts like cable baskets, flooring or ground braids. Each water sense cable's name shall be able to be set from the monitoring panel to ease the identification. On each water sense cable, a communication module which dialogues with the monitoring panel is integrated on the connector. It performs a triple function for each sense cable: • Detect and locate any liquid on the cable to the nearest meter, • Detect a cable break (continuity fault), • Communicate the information to the detection unit. The sense cable shall be flame-retardant. It will be fixed using fixing clips
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(Item No. 11 & 12 of Schedule A)**RACKS**

Sr. No	Description
1	Dimension of Server racks: 19" 42U of dimension 600 mm(W) x 1200 mm(D)
2	Dimension of Network racks: 19" 42U of minimum dimension 750/800 mm(W) x 1200 mm(D)
3	Each rack should be supplied with complete required accessories and vertical and horizontal cable managers to manage the cables in aesthetic look.
4	Each Rack to have a smart rack access control system should provide an extensive range of alarm like Temperature; Unauthorized access; Status of Lock (open/closed); Green period, Blocking period. It should have Biometric Access at front and rear door with 2 controllers per rack. The Mechatronic locks should eliminate the use of traditional mechanical key locks for racks. The rack door should auto-pop on actuation of electro-mechanical or mechatronic lock. Installation should be "plug and play" rather than having any wiring configuration and the communication between the controller and authenticating server should have inbuilt wireless communication. Four Eye Principle at software level. Triple authorization via transponder card and secret pin /numeric keypad numbers /biometric at rack level with a display should be implemented. The racks should be capable to be opened remotely using wireless communication and IOT based systems. The Mechatronic lock system (controller, lock, others) should have memory to store 10,000 user cards + 1,000 Pins + 1 Super User. The system / Software should allow specific user to be assigned to specific racks. The Software should integrate with Authentication system like Active Directory, Radius, etc.
5	Rack should have 100% assured compatibility with all equipment's conforming to DIN 41494 (General Industrial Standard for equipment) or Equivalent EIA /ISO / EN

6	The OEM must adhere to Quality Management system through ISO 9001:2015 and Manufacturing facility has to be certified for the same.
7	The OEM must adhere to Environmental and Occupational Health Management system through ISO14001:2004, & OHSAS 45001:2018 and Manufacturing facility has to be certified for the same
8	The OEM should adhere to Information Security Management system through ISO27001:2013 and Manufacturing facility has to be certified for the same
9	Products should be UL Certified
10	Manufacturer should certify that the products are RoHS Compliant.
11	The rack should comply with a minimum of IP 20 rating for protection against touch, ingress of foreign bodies and ingress of water.
12	Rack should support a static load of minimum 1600 kgs on the plinth castor and levelling legs.
13	Rack should have Front metal perforated door min. 65% perforation, back dual perforated doors and detachable side panels.
14	Rack should be with swing handle locking with Common Key
15	The Server Rack should be below 2000 mm in Height
16	The Network Rack should be below 2000 mm in Height
17	Rack should have Adjustable mounting depth.
18	Rack should have 4No's adjustable, 19" verticals with punched 10mm square hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offers greater mounting flexibility, with numbered U position.
19	OEM to provide rack ground point, Provision to further ground to Telecom Ground bus bar System.
20	Powder coated finish with seven Tanks pre-treatment process.
21	Grounding and bonding as per UL
22	The manufacturer should supply 2 Nos cable Vertical Cable Organizer with D rings for management.
23	2 Nos. Min. 80-110mm vertical cable channel at rear both ends
24	Rack should have provision for cable Entry Exit from Both top & Bottom.
25	Rack should have 1 Packet of mounting hardware, Pack of 20.
26	12 Numbers min. 12 Port IP KVM switch with attached 19" TFT/LED/LCD HD monitor, Mouse, keyboard with sufficient Cables for server Racks.
27	IP KVM should be capable of need based management software, multiplatform support: Windows 2012 and above, Mac, Linux, Unix, Sun., Network Interfaces: TCP/IP, HTTP, HTTPS, UDP, RADIUS, DHCP, SSL, ARP, DNS, 10Base-T/100Base-TX, auto sense, Ping, Advanced security features include password protection and advanced encryption technologies - 1024-bit RSA; 56-bit DES; 256-bit AES; and 128-bit SSL RADIUS server support, supports 3 bus sessions - 1 Local and 2 Remote administrators can Simultaneously access separate ports, RoHS Compliant/CE.
28	Manufacturer Authorization letter to be submitted along with technical bid

(Item No. 13 of Schedule A)
RACK IPDU

Sr.No	Description
1	Each rack should have 2 IPDUs. The IPDUs should be connected to two different UPS sources A and B individually. iPDU should have UL/CE architecture for minimizing the down time
2	iPDU chassis should be of CRCA
3	Energy measurement per phase, i.e. output requirement of an entire IT Rack shall be made available as part of the Rack PDU
4	Display of Energy consumption
5	iPDU should be of 3 phase 32A load as per site requirements
6	Intelligent PDU should have suitable IEC-60309 Industrial input plug
7	Intelligent PDU should have minimum 30 hybrid combination Outlets: minimum IEC C13 & IEC C19 X 24, to be made available in a form factor of 2.2" in width, with colour coded Outlets on the PDUs and/or labelled by breaker and input phase on 3 phase PDU to simplify deployment. The PDU shall be able to Provide an alternating phase design having each of the 3 phases organized into small outlet groups which alternate from top to bottom in order to facilitate better power cord management and promote better load balancing. All outlets should provide high retention to avoid accidental dislodging of power cords
8	iPDU should be equipped with secure Lock outlets/ Lockable power chord
9	iPDU should provide power information at Line level and CB (Circuit Breaker) level.
10	PDU should have coloured LCD Display for the display of the power information from Line
11	PDU should support configuration of user defined thresholds at CB (Circuit Breaker) and Inlet / Input levels and alerts at multi levels
12	PDU should have Circuit Breaker and outlets color coordinated to the appropriate input phase (L1–N, L2–N, L3–N). The Rack PDU is labeled to indicate the input-phase associated with each circuit breaker and its associated outlets. All Three Phase Rack PDUs rated above 16A shall use a three (3) color coding system (dark gray, light gray, and white)
13	The Rack PDUs shall be equipped with a Live Swappable NMC Module which eliminates the need to power down the Rack PDU and connected loads during replacement. PDU shall be provided with redundant ethernet port having one port of 1000BASE-T & second port of 10/100BASE-T
14	PDU should provide for power control of each individual sockets i.e. On / off Remotely along with Outlet power sequencing. PDU level power metering via remote access and local display for power visibility and notification of potential overload.
15	iPDU should be provided with Two environmental sensor ports allow for optional upto 8 sensors to be connected, supporting Temperature, humidity, Door switch, Rope fluid leak, dry contact.
16	The PDU should have a USB port on the display panel allows for file downloads to a USB flash drive and for local firmware upgrades.
17	PDU should have it's own web interface to monitor the parameters remotely.

18	Intelligent PDU should measure and monitor current per line, voltage, Apparent and Active power (kW), Power Factor (PF) and Energy consumption (kWh) in real time
19	Measuring and monitoring of Data and readings by the PDUs should be of billing grade accuracy i.e. +/- 1%
20	PDU should support integration with LDAP/LDAPs and AD for secure authentication apart from local user and user groups
21	PDU should support strong encryption, Password Policies for secure authentication. The PDU shall support authorization functions of RADIUS (Remote Authentication Dial-In User Service).
22	Customized and configurable user profiles to access, view and deny. The PDU shall have Multiple login feature which allows up to sixteen (16) users to be logged in simultaneously. With Manager having all privileges including Redfish.
23	PDU should support variety of access protocols including DHCP, HTTP, HTTPS, NTP, SSH, SNMP v1 and v3, SMTP, SYSLOG, RADIUS etc.
24	PDU should support sending / recording alerts to users via SNMP, SMTP, Syslog, etc.
25	PDU should support both IPv4 and IPv6 network protocols
26	PDU should support access control list based on IP and role in both IPv4 and IPv6 networks
27	PDU should support integration with DCIM for providing periodical data of power consumption
28	PDU should support configurable alarm thresholds that provide network and visual alarms to help avoid overloaded circuits. SNMP traps, Syslog messages, and e-mail notifications based on the severity level or category of the Rack PDU and system events.
29	To reduce the network services cost up to 32 Rack PDUs can be cascaded using one (1) IP address. Information and data from all Guest Rack PDUs is gathered from the Host Rack PDU.
30	PDU must be integrated with DCIM, and shall generate alerts on DCIM, AAI should be able to do monitoring of PDU through DCIM and view its different parameters. PDU shall have Standards i.e. UL 62368-1, CSA C22.2 No 62368-1, FCC part 15 Subpart B, CE, EN 62368-1
31	Rack & IPDU should be from Same and single OEM for Seamless integration and better service support.
32	Manufacturer Authorization letter to be submitted along with technical bid

(Item No. 14 of Schedule A)
75"(inches) Big Display SYSTEM

S.No	Particulars	Specifications
1	Make & Model	
2	Screen Size	75" Inch or Higher LED Display
3	Panel Technology	IPS Panel
4	Native Resolution	3840x2160 (UHD)4K

5	Brightness	600 NITS
6	Contrast Ratio	1300:1 Static or better
		1,000,000:1 Dynamic or better
7	Refresh Rates	60Hz or better
8	Orientation	Landscape
9	Viewing Angle (H x V)	178 x 178
10	Orientation	Portrait and Landscape
11	Connectivity - Input ports	
12	Digital Ports	4 X HDMI IN,
		1 x VGA Port
		1 Display Port IN
		1 Display Port Out
		4X USB Port, (2x2.0, 1X2.0, 1X Type C)
		1 Audio Input
		Inbuilt OPS Slot
13	External Control	RS232C -1, RJ45 -1 or more
14	USB	USB -3 or more
15	Output Ports	
16	Digital	Optical/AV or more & DP OUT x 1
17	Built Wi-Fi	Yes
18	Wireless	Bluetooth, WI-FI, Smart Share / Miracast
19	Signage features	Built in Solo Sign Edge Software
20	Audio Power	20W (10W x 2) or above
21	Power Supply	100 – 240 V, 50/60 Hz
22	Wall mount	Required
23	Accessories	Remote control, Standard cable, Wall Mount
24	Certifications	BIS Certificate

(Item No. 15 of Schedule A)**TOR Switch**

Sl.No	TOR Switch Technical Specifications
1	The switch shall support Macro Segmentation & Micro Segmentation from day 1
2	The switch should have modular operating system with micro-services or equivalent architecture providing superior fault tolerance and high availability and should support programmability through REST APIs and Python scripting or equivalent
3	The switch should be 1U 19" Rack Mountable and should have dual, redundant, field-replaceable, hot-swappable power supplies and field-replaceable, hot-swappable fans
4	The switch should have 24 ports of 10GbE/25GbE (SFP+/SFP28) populated with 10GbE from day one & minimum 2 ports of 40GbE/100GbE (QSFP+/QSFP28) populated with 40GbE from day one.

5	The proposed switch should have minimum 3.6 Tbps bidirectional switching capacity , All switching and routing shall be wire-speed performance
6	The proposed switch should have minimum 32GB DRAM, 64GB Flash/SSD Memory and 32MB Packet buffer
7	The switch should support switch virtualization feature for combining dual switches into single logical unit with active-active control planes and providing Multi-chassis Link aggregation (MC-LAG) for uplink/downlink connectivity
8	The switch should have minimum 90,000 MAC Address Table size , 100K IPv4 routes, 30K IPv6 Routes and 4K IPv4/IPv6 Multicast Routes, 4K IPv4/IPv6 ACLs
9	The switch should provide storm protection to limit unknown broadcast, multicast, or unicast storms with user-defined thresholds.
10	The switch should support DCB, PFC , ETS, DCBX , IGMPv1, v2, and v3 , MLDv1 and v2
11	The switch should support OSPF for IPv4 and IPv6 , BGP for IPv4 and IPv6, PBR
12	The switch should support Multicast Routing using PIM-SM/SSM , MSDP , VTEP , VXLAN with BGP-EVPN supporting Multicast and IPv6 over VXLAN/EVPN Overlay from day 1
13	The switch should support DHCP Server providing DHCP services (for IPv4 and IPv6) , ECMP & GRE, STP/RSTP/MSTP, ERPS
14	The switch should support SNMP and Remote monitoring (RMON), sFlow or equivalent for traffic analysis
15	The switch should provide advanced telemetry and automation features for monitoring, troubleshooting and improving network operations
16	The switch should support PTP/NTP, Port mirroring , RADIUS and TACACS+ for securing administrative access
17	All Switches, Transceivers and orchestrator shall be from the same OEM.
18	The switch shall have a minimum of five years hardware and software support, with 24*7 Support
19	Solution should have DDoS Protection deployed in each Rack from day 1
20	Solution should have IPSEC Capability deployed in each Rack from day 1
21	Solution should have NAT Capability deployed in each Rack from day 1
22	The OEM Shall be in the Leaders Quadrant of Gartner Report for Wired & Wireless LAN Infrastructure for minimum 5 Years
23	The switch shall have FIPS 140-2 validated cryptography for protection of sensitive information
24	Switch shall have OEM Warranty for one year

(Item No. 16 of Schedule A)**Visitor Management Software along with webcam and Shredder**

AAI (Airport Authority of India) is seeking a Visitor Management software solution to be deployed on the Desktops (to be provided by AAI) of Helpdesk Coordinators/Receptionists. The software must include the following features, though not limited to:

a. Perpetual Licensing: The software must be licensed perpetually, ensuring that it can be used indefinitely without the need for recurring license fees.

b. Visitor Pass Creation: The software should allow the Helpdesk Coordinator/Receptionist to

create visitor passes for individuals visiting the Data Centre Area. Essential information to be captured includes but not limited to:

- i. Visitor Name
- ii. Company Name
- iii. Person of Contact
- iv. In Time
- v. Expected Out Time
- vi. Laptop Serial Number (If Applicable)
- vii. Any other relevant details

c. Hardware Integration: The bidder is responsible for providing the necessary hardware required for the system to function effectively. This includes, but is not limited to, a webcam for capturing visitor photos.

d. Printing Capabilities: AAI will provide the printer required for printing the visitor passes. The software should seamlessly integrate with this printer for efficient pass generation.

e. Shredding Functionality: The bidder must also supply a shredder capable of securely shredding visitor passes after their visit is complete. This ensures that sensitive information is disposed of properly.

f. Reports and Data Storage: The Visitor Management software must have robust reporting capabilities, enabling the storage and generation of visitor data reports for the past three months. These reports should be exportable in various formats, including PDF, Excel, Word, CSV, and other standard formats. The software should efficiently compile and organize visitor information, including but not limited to:

- i. Visitor details (name, company, contact person, etc.)
- ii. Entry and exit timestamps
- iii. Purpose of visit
- iv. Visitor pass details
- v. Any additional information captured during the registration process

These reports should be easily accessible to authorized personnel and should support customization options to filter data based on specific parameters and timeframes. The ability to export reports in different formats allows for easy data sharing, analysis, and integration with other systems if required.

The Visitor Management software should be user-friendly, ensuring that Helpdesk Coordinators/Receptionists can easily manage visitor records and issue passes without complications. Additionally, the software should have appropriate security measures in place to safeguard visitor data and maintain the privacy of sensitive information.

(Item No. 17 of Schedule A)

Scope of Work and technical Specifications of BUSWAY TRUNKING SYSTEM

Scope of Work

This Scope of work covers the electrical characteristics and general requirements for an Electrical Bus Trunking System, hereafter referred to as Busway trunking System or BBT.

- a. BBT shall be designed for overhead power distribution of electrical power inside server room with Continuous Access where the plugin unit/ Tap off can be connected anywhere along the busway and which would allow insertion and removal of the plugin units without De-Energizing the busway-Hot swappable.
- b. Once installed, the BBT will provide Plug & Play, simple, versatile, fast and economic means of distributing power inside the server room and in between racks.
- c. The System should be maintenance free and sections of the bus bar should be joined without the use of Joint packs which need bolting and without the need of torqueing i.e., it should be a press fit design to join to sections.
- d. BBT should be provided for three phase power supply running over the server racks at the top with aesthetic look.
- e. There will be two bus bars running for each row of Data Centre connected to the PDU panel from UPS running in N+N mode.
- f. The one end of each bus bar shall be connected to critical load UPS through PDU Panel and other end shall distribute power between the racks with the help of iPDU's. Track Busway will be running above the fiber/ basket cable with aesthetic look.
- g. Copper earth of bus bars will be connected to an earth pit that is to be constructed outside where ODU of cooling units are to be installed.
- h. Each rack shall be proposed with 2 numbers of power feeds from two different sources.
- i. Balancing of circuits in three-phase installation shall be planned before the commencement of wiring.
- j. Colour Code of the Conductors: Colour code shall be maintained as black for neutral and green for earth (or bare earth).
- k. Manufacturer Authorization letter to be submitted along with technical bid

Three-phase BBT system with the following features:

- a. Extruded aluminium busway housing with copper conductors
- b. Power Feed
- c. Plug-in units for power distribution
- d. Monitoring
- e. Installation tool and joint kits
- f. Optional accessories
- g. Standards and Certification for 250 Amps
- h. The Track Busway shall be designed and manufactured to the following standards:
 - Electrical Testing Laboratories (ETL) (US/Canada) Certified to UL 857.
 - International Electro technical Commission (IEC) Standard, IEC 61439-1, edition 2.0 – Low Voltage Switchgear and Control gear Assemblies, Part 1: Type Tested and Partially Type Tested Assemblies
 - International Electro technical Commission (IEC) Standard, IEC 61439-6, edition 1.0 – Low Voltage Switchgear and Control gear Assemblies, Part 6: Particular Requirements for Busbar Trunking Systems (Busways).
 - CE (Europe) Certified to IEC 61439-1 and IEC 61439-6.
 - VDE (Germany) Certified to IEC 61439-1 and IEC 61439-6.

- NOM (Mexico) Certified to NOM-003
- National Electric Code (NEC) – Article 368 – Busways
- National Fire Protection Agency (NFPA) – 70, National Electric Code (NEC)
- National Electrical Manufacturers Association (NEMA) - AB1, Moulded Case Circuit Breakers and Moulded Case Switches
- National Electrical Manufacturers Association (NEMA) – KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600 VAC)

Technical Specifications

- a. System Voltage - 600V Earthing - 100% isolated earth Insulation Voltage -1000V
- b. Frequency – 50/60Hz
- c. Neutral Ampacity should be 200% of the active conductor
- d. KA Rating for 160A / 250A / 630 A should be a minimum of 10KA for 1 sec
- e. Busway shall operate with continuous load with no derating up to 40 degrees Celsius
- f. Relative humidity should be 0 to 95% non- condensing
- g. Busway sections should range from 0.6 Meters to 6 meters
- h. The bus bar conductors shall be continuous copper fabricated from high strength electrical grade Copper 99.99% Purity to ETP 99.9
- i. End feed should have power monitoring
- j. Connection to the End feed unit should using cables
- k. Tap-off Boxes should be capable of inserting safely when the busbar is live.
- l. Plugin Units to be polarized to prevent incorrect installation
- m. Plugin units shall not require any tools to mount it to the busway
- n. Plug-in units shall be configured by the manufacturer to balance the load based on quantity of plug-in unit types provided
- o. The busway shall be installed with the open access channel facing downward, or to the side for special applications. Special installation shall be agreed upon by the manufacturer
- p. End caps will be provided to install at the end of each run
- q. The closure strip is an accessory that can be cut and fitted to cover the bottom opening of the Track Busway housing to prevent dust and debris.
- r. Closure Strip can be field modified for fit.
- s. The bus bar should be available with options of colour identification to help differentiate/ identification of power sources from different power sources.
- t. IP3X
- u. Relative humidity: 0 to 95 percent, noncondensing
- v. Altitude: Sea level to 6600 feet (2000m)

(Item No. 18 of Schedule A) Cables including Optical Fibre and Cat 6 and their Termination Points, Cable Trays, Conduits and Circuit Breakers , Blanking panels(Qty-100) to cover unutilized Rack space for effective cooling.

FIBRE CABLING

S. No.	Tender Specification
1	OM4 MPO Fiber 2 connector Channel Performance
2	The losses should not exceed the following dB values for the various lengths mentioned below:
3	16 Meters: 0.9 dB for 850 nm and 0.87 dB for 1300 nm
4	26 Meters: 0.93 dB for 850 nm and 0.88 dB for 1300 nm
5	36 Meters: 0.96 dB for 850 nm and 0.89 dB for 1300 nm
6	The following applications lengths shall be supported by the OM4 2 connector channel performance
7	10GBASE-S = 500 meters
8	40GBASE-SR4 = 200 meters
9	40GBiDi = 155 meters
	24 Fiber MPO Trunk Cable (OM4, Multimode)
10	MPO trunk cable shall be with 2*12 fiber MPO connectors at both ends.
11	The fibres in the trunk cables shall be compliant TIA-492AAAD (OM4).
12	The fibre inside the trunk cable shall meet IEC 60793-2-10, type A1a.3b, standard for meeting enhanced macro bend loss (i.e. lower loss) performance levels.
13	The trunk cable jacket shall be LSZH (Low Smoke Zero Halogen) and compliant to IEC 60332-3, IEC 60754-2, IEC 61034-2
14	The color of the jacket shall be as per the standards (i.e. Aqua Color), no other color shall be permitted.
15	The polarity of the trunk cable shall follow Method B.
16	The performance of the trunk cables shall be very high. The insertion loss of the connectors shall not exceed 0.20 dB and the return loss shall be minimum 27 dB.
17	The Long term tensile strength shall be at least 200 N and short term tensile strength shall be 667 N.
	24 Fiber MPO Trunk Cable (OS2, Singlemode)
18	MPO trunk cable shall be with 2*12 fiber MPO connectors at both ends.
19	The fibers in the trunk cables shall be compliant G.652.D and G.657.A2 (Bend Insensitive)
20	The trunk cable jacket shall be LSZH (Low Smoke Zero Halogen) and compliant to IEC 60332-3, IEC 60754-2, IEC 61034-2
21	The color of the jacket shall be as per the standards (i.e. Yellow Color), no other color shall be permitted.
22	The polarity of the trunk cable shall follow Method B.
23	The performance of the trunk cables shall be very high. The insertion loss of the connectors shall not exceed 0.35 dB and the return loss shall be minimum 65 dB.
24	The Long term tensile strength shall be at least 200 N and short term tensile strength shall be 667 N.
	2x12F MPO to 24F LC Aqua, Method B, OM4 Cassette/Module
25	The cassette shall have 2 nos. of 12 MPO connectors at the rear of the cassette. The front shall have 12 duplex (24 simplex) LC ports.

26	The cassette shall be OM4 and should have an identification of Aqua color at the front or rear of the cassette.
27	The insertion loss shall not be more than 0.35 dB.
28	The cassette shall be companied with dust caps or any other method for protection against dust for unused ports.
	2x12F MPO to 24F LC Blue, Method B, OS2, Singlemode Cassette/Module
29	The cassette shall have 2 nos. of 12 MPO connectors at the rear of the cassette. The front shall have 12 duplex (24 single) LC ports.
30	The cassette shall be OS2 (Singlemode) and should have an identification of Blue color at the front or rear of the cassette.
31	The insertion loss shall not be more than 0.60 dB.
32	The cassette shall be companied with dust caps or any other method for protection against dust for unused ports.
	1U Fiber Panel (Type 1)
33	Shall have 4 slots which various fiber configurations.
34	Shall have a fiber management trough in the front for patch cord management.
35	The rear should have a cable support bar for proper dressing of the incoming cables at the back.
	1U Fiber Panel (Type 2)
36	Shall have 4 slots which various fiber configurations.
37	Shall have a fiber management trough in the front for patch cord management.
38	Shall have knockouts on the rear side for incoming trunk cables and for properly securing the cables to avoid any stress during sliding the panel out.
39	Shall be sliding type for easy access for management.
	2U Fiber Panel (to be used for locations where high number of MPO trunks are to be terminated)
40	Shall have 12 slots which various fiber configurations.
41	Shall be able to configure 144 Duplex ports in the panel.
42	Shall have a fiber management trough in the front for patch cord management.
43	Shall have knockouts on the rear side for incoming trunk cables and for properly securing the cables to avoid any stress during sliding the panel out.
44	Shall be sliding type for easy access for management.
	OM4 LC to LC, Fiber Patch Cord, 1.6 mm Duplex, LSZH
45	Shall have LC connectors on both sides
46	The fibers in the patch cord shall be compliant TIA-492AAAD (OM4).
47	The jacket shall be LSZH (Low Smoke Zero Halogen) and shall be compliant to IEC 60332-3, IEC 60754-2, IEC 61034-2.
48	The performance of the trunk cables shall be very high. The insertion loss of the connectors shall not exceed 0.15 dB and the return loss shall be minimum 35 dB.

	OS2, Singlemode, LC to LC, Fiber Patch Cord, 1.6 mm Duplex, LSZH
49	Shall have LC connectors on both sides
50	The fibers in the patch cords shall be compliant to G.652.D and G.657.A2
51	The jacket shall be LSZH (Low Smoke Zero Halogen).
52	The performance of the patch cords shall be very high. The insertion loss of the connectors shall not exceed 0.25 dB and the return loss shall be minimum 55 dB.
	CAT 6A U/UTP Channel Requirements
53	NEXT - Minimum 3 db above the standards; Should support a minimum of 4 connector Channel with a minimum 3 dB. guaranteed NEXT
54	The Category 6A system should support channels that are shorter than 15 meters for 2, 3, 4 connector channels without any minimum length requirements. This is essential in a Data Center environment. 4 Connector ETL Test Report for the same to be submitted.
	CAT 6A U/UTP Horizontal Cable
55	The Cable should meet ANSI/TIA 568C.2 Category 6A Specifications
56	The cable should consist of Eight 23 AWG copper conductors. Copper Clad Aluminum or any other combinations are not allowed
57	The nominal Outside diameter should not be more than 0.285 inches
58	The cable shall be Low-Smoke Zero Halogen (LSZH) and must comply with the following Fire Safety standards IEC 60332-3-22, IEC 60754-2 and IEC 61034-2.
59	The horizontal cable shall have a unique print string on the cable jacket. This unique identifier shall also be used for on-line reference to a full set of factory tests that were performed on a sample from the same mater reel. The on-line reference must be available on the SCS vendor public website, such that it can be accessed at any time. This is to ensure genuineness of the product.
60	The cable and cordage shall be "True UTP" components that do not include internal or external shields, screened components or drain wires. No Special Grounding requirements.
	Category 6A U/UTP Information Outlets
61	The 8-pin modular (RJ-45) jacks shall comply with IEC 60603-7-4
62	The Category 6A outlets shall be backward compatible with Category 6 and 5E cords and cables.
63	The information outlet shall have a Current Rating of 1.5 A at 20°C
64	The information outlet will have insertion life of 750 cycles minimum.
	CAT 6A LSZH U/UTP RJ45 Patch Cords
65	The system must support patch cord lengths of 1 meter minimum and equipment cords of 2 meter minimum and The Patch cords shall be solid core construction for better performance.
66	Cords shall be equipped with 8-pin modular plugs on each end.
67	Nominal cordage diameter shall not exceed 7.24 mm.
68	The patch cord shall be Low-Smoke Zero Halogen (LSZH) and

	must comply with the following Fire Safety standards IEC 60332-3-22, IEC 60754-2 and IEC 61034-2.
69	The cordage shall be UTP components that do not include internal or external shields, screened components or drain wires.
	CAT 6A 24 port Jack Panel
70	Shall be 24 port panel capable of terminating 24 CAT 6A U/UTP cables.
71	Shall be UL Listed
72	When configured in worst-case 100 meter channels with full cross-connects and consolidation points with the other products proposed in this tender, the panel shall be capable of delivering the minimum guaranteed channel performance
73	The panel shall be equipped with a removable rear mounted cable management bar and front and rear labels
74	Operating Temperature Range = 14°F to 140°F (-10°C to 60°C) Storage Temperature Range = -40°F to 158°F (-40°C to 70°C)
	1, 2 & 4 Port Face Plate
75	Shall be available in 1 port, 2 port and 4 port square versions.
76	Color: White
77	Face Plate shall be 3 inches by 3 inches ,The dimensions of the faceplate have been included so that the furniture cutting can be standardized.
78	Flammability Rating: UL 94 V-0 Safety Standard: UL Listed
79	Shall be compatible with CAT 5e/CAT 6/CAT 6A information outlets.
	Fiber Pathway System
80	The Fiber pathway should be UL listed, proof of the same shall be submitted
81	Basic components shall include horizontal and vertical straight sections, horizontal and vertical elbows, downspouts, junctions and numerous support hardware and flex-tube kits.
82	The fiber raceways system shall be available in 2x2, 2x6, 4x4, 4x6, 4x12 and 4x24 inch dimensions.
83	Should be available in Yellow color
84	All components shall be UL94V-0 flame resistant and shall not contain any PVC material. The Straight Sections and Molded Fittings shall be UL 2024 compliant as well.

CIRCUIT BREAKERS: The panel to be installed in UPS room and the bus bars plus outgoing of all devices shall be protected by different types of circuit breakers.

I. Air Circuit Breaker (ACB):

- a. The air Circuit Breakers shall be Draw out type conforming to I.S: 13947 (Part 2) 1993.
- b. The ACB shall be complete with solid state overload, short circuit and earth fault protection with adjustable settings.

- c. Each ACB shall have 4 "NO" and 4 "NC" potential free auxiliary contacts, in addition to those required for its internal operating mechanisms.
- d. There shall be suitable indicators for OPEN/CLOSE/SERVICE/TEST and spring charged positions.
- e. It shall be possible to close the door in Test position.
- f. Castle Key and/or other interlocking devices shall be provided as required.

II. Moulded Case Circuit Breakers (MCCB):

- a. The MCCB shall have TP + NL and be suitable for simultaneous manual opening and closing with rotary operating handle.
- b. The ON/OFF/TRIP positions shall be clearly marked and easily visible to an operator and confirm to latest IS: 13947-1993.
- c. There shall be fixed/adjustable tripping devices with inverse time characteristics for overload and short circuit protection.
- d. Suitable Interlocking mechanism shall be provided, where required.

III. Miniature Circuit Breakers (MCB):

- a. The MCB shall have quick make/ break contacts with a heat resistant housing, having high Impact strength and confirm to IS 8828-1996.
- b. The MCB shall permit overload for short duration, as required for Inductive loads and the breaking capacity shall not be less than 10 KA at 415 Volt A.C.
- c. It shall be equipped with overload and short circuit protection devices and shall be suitable for DIN mounting

CABLES/CONDUITS AND MARKINGS

Cables of different types and sizes as per the submitted design for connecting all required components from source to load or vice-e-versa with termination at both ends.

All outdoor cables shall be Aluminum core or better and all indoor cable shall be copper core. The bidder shall submit a cable schedule as per the following format.

Sr.	From	To	Max Amp	Cable Ampacity	Cable Size	No of Cores	Core Type	Runs	Type of insulation	Length (mtr)	Qty (No)

- a. The bidders are strongly advised to maintain data consistency between Electrical Single line diagram, Cable schedule and Bill of quantity at all times in the submitted solution document. The Electrical Single line diagram shall be prepared in detail showing all the components. All the components should be uniquely labelled.
- b. All cabling inside the server hall will be laid over head or under false floor by bidder as per the site provisions.
- c. From the UPS Output panel till end feed unit of FRLS (Flame Retardant Low Smoke) copper flexible cable will be used on the cable tray.
- d. All conduits inside the server hall will be MS (Mild Steel) type. No PVC conduit will be accepted. However, the conduits if laid inside the wall can be PVC with FRLS type.
- e. All cables must be tagged with a unique name with proper circuit number, details of load, machine name etc. marked on it. The electrical cable will also be marked with the color coding

(R/Y/B) showing one of the phases from the three-phase power supply. Tagging has to be on both ends. Color code shall be maintained as black for neutral and green for earth (or bare earth). The tag should be long lasting and durable.

- f. All cable entry to the panels should be with double compression glands. The glands must be chosen as per the cable core metal. Cable installation shall be as per IE rules considering pull strength, bending radius and insulation class.
- g. All outdoor cables shall be XLPE and all indoor cables should be FRLS (Flame Retardant Low Smoke) Type.
- h. All wiring in the support area shall be concealed. Sub-mains must be laid in PVC raceways buried under the floor or above roof by bidder as per the site provisions.
- i. UPS output cabling should have double neutral. Single core copper cable shall be used.
- j. Cable end point insulation has to be by heat shrink sleeve. Taping will not be allowed.
- k. All cables should be FRLS type (Flame Retardant Low Smoke). All conduits should be metal type, except wherever specified otherwise.

CABLE TRAYS FOR POWER, TELECOM AND DATA CABLING

- a. Various pathways such as cable trays, Raceways, junction boxes, ladder trays, and Cable baskets required to be there for the entire facility of data center Area. The said pathways will run above the server racks i.e above the containment POD.
- b. Cables shall be taken to the Data Centre from the UPS room by false ceiling. All cables should be tagged.
- c. Inside the Data Centre all cables must run on a cable tray.
- d. Cable tray shall be factory made with pre-galvanized finish.
- e. Cable fills in any tray should not be more than 70%.
- f. All cabling and wiring shall be neatly dressed and tagged with a unique identity.
- g. Existing shaft for the power cable should be used for taking cables from outside to inside the floor or roof. While working on the shafts, adequate care shall be taken not to disturb other cables running inside it.

WIRING:

- a. All along the Data Centre area, wiring color codes should be used for single phase, three phase and Ground. All wires and cables must be tagged with a unique identity.
- b. No joint of cable or wires is allowed without a proper factory-made jointing kit.
- c. All the power cables to the Precision cooling system system will be laid under the false floor/ roof by bidder as per the site provisions.
- d. Busbar trunking systems to supply power for IT loads will be installed above the racks in an aesthetic design and look.

EARTHING OF EQUIPMENT'S INSTALLED IN DATA CENTRE AREA

All electrical components shall have proper earthing arrangement by connecting two earth tapes from the frame of the component ring and will be connected via several earth electrodes. The neutral to earth voltage in all electrical points of all equipment's should be less than 0.5 volts. All metallic objects on the premises that are likely to be energized by electric currents should be effectively grounded. The purpose of this specification is to provide reliable electrical grounding to equipment. The contractor should propose the number of earth pit as per site requirement and layout.

- a. Earthing shall be in conformity with provision of rules 32, 61, 62, 67 & 68 of Indian Electricity rules 1956 and as per IEC62561 and IEEE 80. The entire applicable IT infrastructure in the Data Centre shall be earthed.
- b. Earthing should be done inside the Data Centre for the entire power system and provisioning should be there to earth UPS systems, Power distribution units, AC units etc. so as to avoid a ground differential.
- c. Earth pits of different types, grounding bus bars/strips, Equi-potential grid for the critical area.
- d. Neutral Earthing for the source equipment shall be done with maintenance free copper earth station with grounding electrodes and necessary materials.
- e. Body earthing of all equipment shall be done with maintenance free copper earth station with grounding electrodes and necessary materials.
- f. The main earthing rings shall be done as per practice laid in Indian Standard.
- g. All electrical equipment shall be connected to the earth bus at two points.
- h. Earthing will also be provided for body touch along with electrical circuits.
- i. The earth pits will be designed and constructed for the Data Centre by the bidder. The space for the earth pit is designated by AAI. All earth pits irrespective of Copper or GI have to be chemical type. Health Assessment of earth pits shall be evaluated by the OEMs & if required new Earth pits can be created.
- j. The Data Centre area should have a grounding mesh in terms of Copper strip or braided copper wire laid on the ground under the false flooring a matrix fashion to provide an equipotential grid for all the equipment.
- k. The earth strips should be copper for copper pits and GI for GI pits. All the earth strips should be insulated.
- l. All the earth pits should be covered with required standard of earth pit covers with recommended load bearing specifications of OEM.
- m. Earth pits should be connected at ground for redundancy and equi-potential.
- n. The complete earth works like excavation, refilling & RCC covers of the desired standard will be in the bidder's scope.
- o. The cost shall include excavation, backfilling, compaction, construction of chambers, tools and tackles for excavation & all required civil works. Testing earth resistivity and electrode resistance (Maintenance free earthing)
- p. Maintenance free earth pits to be used.
- q. The scope covers supply, installation testing and commissioning of Earth pit. The bidder has to consider the required material like sand, chemical compound, heavy-duty lid to cover the earth pit, bolt and nut, bus bar etc.
- r. The Maintenance Free Earth system shall consist of a) Earth electrodes b) Highly conductive and eco-friendly back fill compound, c) Earth termination clamps to facilitate connections to the equipment.
- s. The Earth electrode shall conform to the following specifications: The electrode shall be a solid steel rod made of high tensile low carbon steel and coated with molecularly bonded copper on the outside as per UL 467 or Indian Equivalent Standard.
- t. Highly conductive and Eco friendly backfill material.
- u. The backfill material shall be highly conductive and should be certified as non-polluting and safe for use near potable ground water systems. The backfill Material shall be carbon based

and of low resistance, non-corrosive, highly conductive carbon based powdered material that improves grounding effectiveness, especially in areas of high soil Resistivity such as rocky and sandy areas. This material shall be suitable to be installed in either slurry or dry form.

- v. The earth termination clamp shall be made of copper and shall be suitable for terminating 25 x 5 mm copper flat strips. Care should be taken to tighten all bolts and nuts to ensure a proper connection
- w. Installation of Earth system: The earth electrode shall be installed in a bore made by auguring 3 or 4 inches hole up to the required depth. Wherever auguring is not feasible, pit shall be made and suitable size of PVC pipe shall be used to fix the electrode. At the Centre of the hole the electrode shall be driven and around the electrode the highly
- x. Conductive and eco-friendly backfill material shall be filled. The highly conductive and eco-friendly backfill material can be poured in either dry or slurry form. The PVC pipe shall be removed simultaneously as the backfill compound is poured.

(Item No. 19 of Schedule A)

MIGRATION FROM EXISTING TO NEW DC SETUP

Scope of Work of Migration of Infrastructure

1. Migration of existing IT infrastructure – Servers, Storages, LAN / SAN Switches, Core Switches, etc. shall be shifted to the newly designed data centre, post completion of Non-IT works related to datacentre facility. For this migration activity bidder / SI has to procure/Provide migration services. The devices are to be migrated from two locations viz. Hanger Building Safdarjung Airport datacentre and RGB Server Room New Delhi to new site/location at D Block, Udaan Bhawan Safdarjung Airport New Delhi.
2. The bidder/SI should ensure successful planning and execution of Migration/Relocation of existing IT components from existing to new location within defined downtime window and ZERO DATA LOSS. The bottom-line consideration for a good migration strategy is zero disruption of business services. This objective drives a deeper and thorough understanding of all major sub-systems of source and target data centre.
3. The bidder/SI shall be responsible for migration/ relocation of IT equipment's. Before start of migration / Relocation activity OEM/SI/bidder shall test and ensure the availability of all critical services / systems and data at both source & target data centre. Since Data Centre setup is critical from the perspective of business operations and should be available throughout; the bidder/SI shall guarantee maximum of 144 hours of Downtime window and zero data loss during the process of migration / relocation of this Data Centre.
4. The Bidder/SI team of successful bidder will analyse the Data centre of AAI and will prepare a draft plan for migration. The plan will be approved by AAI Project in charge. The plan will also include the rack wise deployment of equipment's at new location.
5. Bidder/SI team must be available on-site before and during the migration activity and must work with AAI IT team hand in hand for preparing plan for migration including the network setup. The same plan will be executed on the day of migration by the bidder/SI Engineer.
6. AAI will shut down the application services and will hand over the data centre to Bidder/SI team for migration / relocation. The Bidder/SI team will power off all the equipment's of data centre in such a way that there shall be no loss of any data (including virtual machines, configurations

etc, whatever is considered necessary and will be required). The migration has to follow ZERO data loss policy.

7. The backup of data (including virtual machines, configurations etc, whatever is considered necessary and will be required) is also under the scope of Bidder/SI.
8. Backup of all the Application & Databases to be taken by the AAI IT team and also separate backup of all the Application & Databases shall be taken by the Bidder/SI team. Restoration of the Application and Databases if required are to be done by Bidder/SI team without any extra cost further any tools / utilities / software required for the recovery will be provided by AAI IT Team.
9. [The Bidder/SI has to take the necessary insurance required for migration of equipment's. The existing inventory list to be migrated to new datacenter is attached at Annexure XIX.](#)
10. The De-installation service that is physical health check-up before shutdown, de-configuration from the current setup, system shutdown and de-cabling with tags is under the scope of the Bidder/SI. The Bidder/SI also has to prepare an inventory of the items which is to be migrated from Existing data centres to the new location in the below mentioned format:

S.NO.	Item	Make Model	Quantity	Serial Nos

11. The Packing of the items should be carried out by the professional packers certified/provided by Bidder/SI. The equipment's must be packed with three layers i.e. bubble sheet, Styrofoam and corrugated sheet. Wooden crate packing would be done on top of the bubble sheet packing to ensure no damages to the equipment during transit. Individual Wooden crate for each equipment to be used, with frame and PLY board on top. All boxes have to be added SHOCK sensor and TILT sensor, post final packing. Assets tagging is to be done for each individual item/box. Bidder/SI representative shall supervise the proper packing of equipment and shall certify the same to AAI, in the format which will be shared with the L1 bidder. All the material necessary for packing is to be arranged by Bidder/SI. After the packing Bidder/SI also has to certify the inventory list prepared in the plan.
12. The transport vehicle required for transporting the packed material has to be provided by Bidder/SI. The manpower and trolley etc required for loading the material in the transport vehicle has to be arranged by Bidder/SI. Transportation of the equipment's/materials will be done, as per the standard guidelines as per best industry practice for handling specific equipment to avoid any damage due to mishandling.
 - Close container vehicle to be used.
 - Once loaded, it should be locked in presence of AAI Project In charge and shall be opened in front of AAI Project in charge.
 - Boxes must not be stacked inside vehicle.
 - All boxes are to be strapped inside vehicle with belts to ensure safety.
13. Mode of transport will be road. All the required tools trolley, hydraulic forklift manual fork lift, High load CRANE or hydraulic crane etc to minimize manual handling and ensuring safety of equipment, has to be arranged by Bidder/SI.
14. Material has to be transported to the neighbouring building. The Bidder/SI team whoever submits the NDA document (refer Annexure XIII) will be allowed to visit the current Data centres and the new location, on the date which will be emailed to them.

15. The team will have to unpack the servers from the wooden crate under the supervision of Bidder/SI Project in charge. Removal of any debris is under the scope of bidder. The packing material used to be taken back by bidder POST movement of equipment's (including all wooden Crates/Pallets etc).
16. The pre-installation review has to be done by the Bidder/SI team. The installation of all IT hardware (migrated/relocated) will be done by Bidder/SI team. They will assemble and test all the equipment's. They will be responsible of power on, start-up testing and bringing up the operating system (existing in the system before power off). The Bidder/SI team has to bring the server/virtual machine/storage/switches etc in the same state as it was before power off. So that AAI can start the application services.
17. Bidder/SI will be responsible for warranty/ AMC recertification of all migrated equipment's from all the OEMs. That is if Bidder/SI migrates the data centre which has equipment's of OEM A, B, C, D and after migration when the system is up, the Bidder/SI has to provide recertification from all A, B, C, D OEM's.
18. It is to be noted that AAI is moving towards the TOR network architecture for the new data centre hence Bidder/SI team will also be responsible to employ professional services of any other OEM necessary and if required for reconfiguration of network at the new site (D Block, Udaan Bhawan Safdarjung Airport New Delhi). The make model of core switch already present at AAI site is Cisco 9k-9504 and the procurement of TOR switch is to be done through this tender. The procured TOR switch should be integrable with the core switch of make model "Cisco 9k-9504".
19. The networking setup, LAN details will be done by Bidder/SI with the help of professional services of their networking team. Lease line connectivity will be done by ISP. (Core switch to be migrated is of Make Model Cisco 9k-9504) and also using the professional services for the new IT network device like TOR switch. Bidder/SI also has to connect the servers to storage with the help of migrated SAN switches using the SAN cables.
20. The required insurance has to be procured by Bidder/SI, with respect to the equipment's to be migrated. And any of the equipment gets damaged during migration then the same with equivalent/higher Make/Model has to be replaced by the bidder under insurance without any financial implications to AAI. The replaced equipment's must have the same or higher technical specifications. The data OS, VM, configuration etc in the new equipment has to be deployed or configured by the Bidder/SI Engineer. The new equipment must be ready to host the AAI application in minimal time as possible.
21. Any requirement of configuration changes, IP address changes, LAN/SAN cabling (Fibre Cable) changes, cable redressing, Data backup/ restore, zoning and storage mapping etc is also under the scope of Bidder/SI.
22. The date and time for migration / relocation will be decided by AAI, and same will be informed to the Bidder/SI. Bidder/SI is responsible for seamless end to end planning and coordination of migration / relocation activity.
23. Bidder/SI has to follow the approved procedure and plan for migration/ relocation to ensure that all the services are successfully restored in the target data centre within the stipulated timelines.
24. All the permissions/ permits/ authorizations approval from the concerned authorities as and when required will be taken care by Bidder/SI well in advance.

3. SCOPE OF MANAGED OPERATION & MAINTENANCE (O &M) SERVICES

- 3.1** The Operations & Maintenance will start from the date of commissioning of Non-IT items in datacentre for the period of 5 years.
- 3.2** SI shall provide the standard warranty of 1 year and Comprehensive AMC of 4 years for all the new equipment's, hardware & software etc. supplied as a part of this project.
- 3.3** During the O&M period bidder shall maintain the systems and repair / replace at the installed site, at no charge, all defective components that are brought to the bidder's notice.
- 3.4** Support should not become void, if AAI buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the bidder. However, the support will not apply to such supplemental hardware items installed.
- 3.5** Bidder shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met.
- 3.6** Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).
- 3.7** The SI shall repair or replace worn out or defective parts including all plastic parts of the equipment at his own cost including the cost of transport.
- 3.8** The DCIM tool should be managed by the SI for the complete contract period and shall be used for regular monitoring of the infrastructure.
- 3.9** Proactive monitoring of the entire Physical infrastructure installed through integrated DCIM Tool.
- 3.10** Monitoring, recording and reporting usual and unusual movements in and around the premises.
- 3.11** Material inward/ outward control as per policies set by AAI.
- 3.12** Monitoring and managing safety and surveillance equipment like CCTV, Access Control, Fire detection and Suppression etc.
- 3.13** The selected bidder shall also maintain records of all maintenance of the system and shall maintain a logbook on-site that may be inspected by AAI.
- 3.14** Ensure availability of the physical Infrastructure including UPS, Cooling, CCTV, Access Control, Intelligent Rack PDUs, Racks, Fire detection and suppression systems, Rodent Repellent systems, Water leak Detection Systems and other components included as part of physical Infrastructure related services.
- 3.15** The container of modular batteries of UPS will be covered under 1 year standard warranty and 4 years CAMC. The batteries inside the container will be under 2 year standard warranty and system integrator shall replace the same after every 2 years free of cost to AAI.
- 3.16** The NOVEC 1230 gas used in fire suppression system will be treated as consumable item and will be covered under CAMC and shall be refilled as and when required by the system integrator free of cost to AAI.
- 3.17** All consumable items shall be covered under CAMC.
- 3.18** The SI shall have back-to-back arrangement with the OEMs.
- 3.19** The SI shall maintain documentation for installation, testing, commissioning of any system/sub-systems that is installed or upgraded.

3.20 Preventive Maintenance Services

- 3.20.1 Check, Repair/Replace any loose contacts in the cables/connectors & connections on a regular basis.
- 3.20.2 Preventive maintenance by OEM to be conducted after every three months or as directed by AAI for UPS, Inrow Cooling Racks, BBT, Rack PDU (including inspection, testing, satisfactory execution of diagnostics and necessary repairing of the equipment and submit the quarterly report). For rest of the equipment's engineer from SI O&M team will perform the activity and submit the quarterly report.
- 3.20.3 Cleaning and removal of dust, dirt etc. from the interior and exterior of the equipment on a daily basis.

- 3.21** Competent Data Centre Infrastructure O&M team (4 L1 technicians in 24X7 operation basis along with one DCIM L2 engineer during regular shift), should be available at On-site to manage the entire infrastructure and operation to provide warranty / operational support on 24x7x365 basis. In case support staff is not available or is on leave, the bidder is required to provide the alternative personnel with same or higher technical capabilities of the non-available personnel.

O & M resource minimum qualification

S. No	Role	Min. Qualification, Experience & Certifications	Relevant Count
1	Electrical Technician(L1)	Diploma in Electrical or equivalent with 3 Years relevant experience in HT/LT Panels/ Transformers/ Modular UPS/ PDU/ In row cooling racks etc.	4
2	DCIM Engineer (L2)	B.E./B.Tech. in Electrical/Electronics and Communication or equivalent with 5 Years relevant experience in Data Centre Infrastructure management.	1

- 3.22** The bidder shall have to provide PF, ESI/Medical Insurance details of manpower/support staff deployed.

- 3.23** The bidder is required to furnish proof of salary distribution,ESI-PF distribution demonstrating compliance with the Government of India's minimum wage regulations for skilled and semi-skilled manpower. L1 technicians will be considered semi-skilled, and L2 personnel will be designated as skilled. If the quoted monthly compensation for L1 and L2 personnel falls below the government-prescribed wages for their respective categories, the deficit will be withheld from the total cost of line items 1-18. This deducted amount will then be disbursed quarterly over the four-year CAMC period following the completion of the one-year warranty.

4. NON-IT Infrastructure Design consideration

- 4.1** All UPS (i.e., Source A and Source B) shall be connected to 2 nos. UPS output panels, which will feed to iPDUs through Bus bar Trunks.
- 4.2** All the critical panels should have surge suppression device to arrest the switching surges.

- 4.3** UPS output panels of single phase will be connected to the Bus Bars of three phases in such a way that power load to each phase should be approximately equal with assumption that each rack shall consume the same power.
- 4.4** The power cables from the LT panel (provided by AAI) to UPS shall be moved on overhead cable trays. Bidder has to factor all the necessary accessories like cable trays, cables and end terminations in designing the solution.
- 4.5** The network cables from MUX room to the server farm area shall be moved on overhead cable trays. Bidder has to factor it while designing the solution.
- 4.6** The drainage system shall be provisioned for drainage of water from the server farm area to outside of the building.
- 4.7** AAI will provide earthing till LT Panel. SI has to extend the earthing of electrical components supplied by him through it.
- 4.8** Areas to be covered by IP Based CCTV System are Reception Area, Mux Room, Server Area, both cold and hot aisle, NOC Room, SOC room, IBMS Room, UPS Room 1 & 2, LT Panel room, place of ODU installation, etc. There should be no dark spot in the area defined for the Data Centre. The minimum quantity required for the IP based CCTV system is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution
- 4.8.1 IP Indoor Dome Camera : Qty : 15 Nos.
- 4.8.2 IP65 enclosure bullet Outdoor D/N Camera : Qty : 1 Nos.
- 4.8.3 Network Video Recorder (NVR) : Qty: 1 Nos.
- 4.8.4 24 port PoE L2 Fully Managed Switch : Qty : 1 Nos.
- 4.8.5 Co-axial cable or Cat-6 cables and PVC conduct shielded : Qty : 4 boxes of 305 metres each.
- 4.9** Areas to be covered by Access control System are Reception Area, Mux Room, Server Area entry and exit, NOC Room, SOC room, IBMS Room, UPS Room 1 & 2, LT Panel room. The minimum quantity required for the Access Control system is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution
- 4.9.1 2 door Intelligent Controller along with power supply : Qty : 5 Nos.
- 4.9.2 Smart/Proximity Card based Reader along with power supply : Qty : 14 Nos.
- 4.9.3 Finger Biometric based Reader along with power supply : Qty : 4 Nos
- 4.9.4 Smart/Proximity Cards : Qty : 100 Nos.
- 4.9.5 600Lbs Single Leaf Electromagnetic locks : Qty : 8 Nos.
- 4.9.6 1200Lbs Double Leaf Electromagnetic locks : Qty : 1 Nos.
- 4.9.7 Push to Exit Buttons : Qty : 9 Nos
- 4.9.8 Manual Break Glass Unit : Qty : 9 Nos
- 4.9.9 Access Management Software : Qty : 1 Lot
- 4.9.10 8 core x 0.75 Sq mm, multi strand, copper, sheilded,Screened cable between the access controller and Card reader : Qty : 250 Mtrs.
- 4.9.11 4 Core x 0.75 Sq mm, multi strand, copper, sheilded cable between the access controller and EM Lock/ door sensor /Push Button : Qty :150 Mtrs.
- 4.9.12 25 mm PVC Conduit : Qty : 450 Mtrs.
- 4.9.13 Cat 6 cable : Qty : 2 boxes of 305 Mtrs each

- 4.10** Areas to be covered by Fire Detection & Alarm System are Mux Room, Server Area, NOC Room, SOC room, IBMS Room, UPS Room 1 & 2, LT Panel room. The minimum quantity required for the Fire Detection & Alarm System is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution
- 4.10.1 Microprocessor based intelligent addressable main fire alarm panel: Qty- 1 Nos
 - 4.10.2 Intelligent analog addressable photothermal detector: Qty - 30 Nos
 - 4.10.3 Addressable Manual Call Points (Break Glass type): Qty - 5 Nos
 - 4.10.4 Conventional Sounder / Hooter : Qty - 4 Nos
 - 4.10.5 Addressable Monitor Module (Input Module) with Surface / wall mounting box & required accessories : Qty - 5 Nos
 - 4.10.6 Addressable Control Module (Output module) with surface/ wall mounting box & required accessories : Qty - 1 Nos
 - 4.10.7 Addressable Fault / Loop isolator module with Surface mounting backbox & required accessories: Qty - 4 Nos
 - 4.10.8 Response indicators for false ceiling Detectors with required accessories. : Qty - 15 Nos
 - 4.10.9 24V DC power pack with battery backup. (for Strobe cum Sounders.) : Qty - 1 Nos
 - 4.10.10 2C x 1.5 Sq.mm Copper Armoured Multi stranded FRLS cable : Qty: 500 Mtrs.
- 4.11** Areas to be covered by Gas Based Auto Fire Suppression System are MUX Room, Server Area, UPS Room 1 & 2, LT Panel room. Bidder shall supply sufficient cylinders with gas with proper redundancy. The minimum quantity required for the Gas Based Auto Fire Suppression System is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution
- 4.11.1 120 Litre Fire suppression cylinders : Qty : 8 Nos.
 - 4.11.2 80 Litres Fire suppression cylinders : Qty : 4 Nos.
 - 4.11.3 42 Bar FK 1230 (FK-5-1-12) Gas : Qty : 1080 Kgs.
 - 4.11.4 Electric Cum Manual Actuator : Qty : 3 Nos.
 - 4.11.5 Pneumatic Actuator : Qty : 9 Nos.
 - 4.11.6 Discharge Nozzles : Qty : 15 Nos.
 - 4.11.7 Master Cylinder Adapter Kit : Qty : 3 Nos.
 - 4.11.8 Flexible discharge Hose : Qty : 12 Nos.
 - 4.11.9 Manifold Check Valve : Qty : 3 Nos.
 - 4.11.10 Flexible Actuation Hose : Qty: 9 Nos.
 - 4.11.11 M.S. Container strap : Qty : 24 Nos.
 - 4.11.12 Manifold Discharge Pressure Switch : Qty : 3 Nos.
 - 4.11.13 Manifold with Mounting and all accessories : Qty : 3 Set
 - 4.11.14 Seamless pipes as per ASTM A 106 Gr. B. Sch. 40 for Cylinder : Qty : 3 Set
 - 4.11.15 Hooter Cum Flasher : Qty : 3 Set
 - 4.11.16 Abort Switch : Qty : 3 Set
 - 4.11.17 Release switch : Qty : 3 Set
 - 4.11.18 Gas Release Panel : Qty: 3 Nos.
 - 4.11.19 Battery 12VDC 7.2Ah : Qty : 3 Nos.
- 4.12** Area to be covered by High Sensitivity Smoke Detection System is Server Area, UPS Room 1 & 2 , MUX room and LT Panel room. The minimum quantity required for the High

Sensitivity Smoke Detection System is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution

4.12.1 Aspiration smoke detection system panel along with power supply : Qty : 3 Nos

4.12.2 Capillary set with nozzle : Qty : 16 Nos

4.12.3 Sampling Points : Qty: 16 Nos

4.12.4 Aspiration Tubes with 25mm dia : Qty : 200 Mtr.

4.12.5 Electronic Hooter with mounting arrangement : Qty : 3 Nos

4.12.6 2 core x 1.0 sq.mm Armored cable : Qty : 80 Mtrs.

4.13 Areas to be covered by Rodent Repellent System are Mux Room, Server Area, NOC Room, SOC room, IBMS Room, UPS Room 1 & 2, LT Panel room. The minimum quantity required for the Rodent Repellent System is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution

4.13.1 Master Console panel including support bracket : Qty : 2 Nos

4.13.2 Transducers : Qty : 36 Nos.

4.13.3 Rodent Cable Qty: 350 Mtrs.

4.13.4 25" PVC conduit including all accessories. :Qty : 250 Mtrs.

4.14 Areas to be covered by Water Leak Detection System are Mux Room, Server Area, NOC Room, SOC room, IBMS Room, UPS Room 1 & 2, LT Panel room. The minimum quantity required for the Water Leak Detection System is defined below, however if during site survey, the required quantity increases and any other accessory is required same has to be incorporated by the bidder in its solution

4.14.1 4 zone Water Leak detection panel with Modbus Connectivity and battery : Qty : 1 Nos

4.14.2 Water leak detection cable sensor : Qty : 100 Mtrs.

4.14.3 Electronic Hooter : Qty: 1 Nos

4.15 Emergency evacuation laminated charts of A3 size shall be displayed at all important locations. Illuminated exit signs shall be installed on all possible points.

5. Project Scope

5.1 General Scope of Project

The essential tasks outlined for the selected bidder in establishing and managing the AAI Datacenter are categorized as follows:

- a) Designing and proposing a solution for new Datacenter in accordance with the requirements specified in this RFP.
- b) Supplying, installing, testing, and commissioning the non-IT infrastructure for the proposed Data Centre.
- c) Executing the relocation of IT items from existing data centers to the newly proposed data center.
- d) Providing operations and maintenance services for the entire non-IT infrastructure for a duration of 5 years from the date of Go-live.

For detailed technical specifications and functional requirements of various non-IT components (but not limited to), please refer to annexure VII. The System Integrator is

accountable for implementing end-to-end solutions to meet the RFP requirements, as defined in this document. If any component or services are not explicitly mentioned in this document, the SI must take them into consideration without any additional cost to AAI. The project scope encompasses the design, supply, installation, testing, and commissioning of non-IT items specified in the RFP, the relocation of IT items, and the subsequent operation of the entire system for a period of five years' post sign-off.

A) Design Phase:

- a. During the design phase, the System Integrator (SI) is required to develop a solution that fulfills all the specified requirements in this RFP.
- b. All equipment/components supplied by the SI must adhere to the technical specifications and design considerations outlined in this document.
- c. The design document and project plan must be submitted to AAI for review before the commencement of the installation activity.

B) Supply Phase:

- a. The SI is required to provide the equipment/material in accordance with the Make/Model as proposed in their technical solution.
- b. The SI must submit the item delivery plan.
- c. Material must be delivered Door to Door (DTD), and it is the SI's responsibility to ensure the utmost care during the transit of dispatched material.
- d. All materials supplied against the project must be covered under insurance.
- e. The custody of all materials delivered to the site remains with the SI until installation and acceptance sign-off by AAI.

C) Installation Phase:

- a. The SI is required to adhere to OEM standards and guidelines during the installation of equipment.
- b. The SI must comply with all safety requirements during the installation of equipment.
- c. The arrangement of all required tools, accessories, and other support for installation must be handled by the SI.

D) Testing and Commissioning:

- a. Equipment testing must adhere to OEM standards.
- b. The SI is responsible for arranging all necessary equipment, tools, and resources, including manpower, required for conducting testing of the AAI Data Center. All associated costs for testing and commissioning are to be covered by the SI.

E) Relocation of IT Items:

- a. Following the commissioning of NON-IT items, the SI is required to initiate the relocation of existing IT equipment such as Servers, Storage, Network switches, Routers, etc.
- b. Till the relocation activity is completed which involves migration of devices and making it up and running from the new datacenter, all the hardware and software faults are to be addressed by successful bidder with support from OEM.

- c. Once the relocation activity is completed and the equipment is up and running from the new datacenter, the devices will be kept under observation for 24 hours and after successful working, it will be handed over back to the existing AMC/warranty partner that is bidder/SI will be responsible for warranty/ AMC recertification of all the migrated equipments from all the OEMs and existing AMC partners.
- d. The SI is obligated to submit a detailed plan for the relocation activity, before commencing the activity.
- e. The comprehensive scope of work for the relocation activity is provided in Annexure VII.

F) Operation & Maintenance:

- a. The O&M phase commences upon completion of installation of all non-IT components as specified in the RFP.
- b. SI is obligated to provide comprehensive onsite maintenance, including support services for all hardware and software. This entails a back-to-back arrangement with the respective OEM ensuring timely availability of spare parts for equipment repair throughout the contract period at no additional cost to AAI.
- c. The SI is required to adhere to the Service Level Agreements (SLA) as defined in Annexure VII.
- d. Onsite manpower requirements must align with the criteria outlined in this RFP.

5.2 Pre-Bidding: Site Survey

Bidders is required to survey before the submission of their technical & commercial proposal. All the Bidders shall perform Site-survey of the project location followed by the preparation & submission of Bid. Bidder has to assess all the prerequisites for the NON-IT works. The bidders are strongly advised to perform the site survey and study the environment at their own cost and to get first-hand information, so that the solution should fulfil future requirements of the supply, implementation, and operation of AAI DC.

5.3 Instruction to Bidder for Project Implementation

- 5.3.1 The Selected Bidder has to carry out the complete Supply, Installation and commissioning of required Non-IT Infrastructure and relocation of existing IT infrastructure to new datacenter along with operation and maintenance for 5 years as per the solution.
- 5.3.2 The Selected Bidder is expected to adhere to all technical and functional specification for Non-IT Infrastructure. Any change or additional design required as per guidelines, in proposed solution document has to be achieved as per established delivery timelines.
- 5.3.3 A detailed project plan for the implementation of project is to be provided during the Kick-off meeting. A work breaks down structure with all the milestones for the entire commissioning timeline has to be provided by the selected bidder.
- 5.3.4 The bidder would be required to submit detailed Design documents with all necessary design drawings for all Non-IT infrastructures before actual execution of the works.

- 5.3.5 A supply schedule for all materials with make and model is to be prepared and submitted in line with the work break down structure of the project plan.
- 5.3.6 All materials have to be dispatched as per expected delivery timelines with no additional dispatch or delivery costs. Any deviation from the expected timelines of delivery is to be intimated in advance for appropriate actions and reason.
- 5.3.7 The materials supplied by the bidder in tender should be brand new and as per the tender specifications/requirements.
- 5.3.8 During installation of any equipment, SI shall not cause any damage to AAI office premises. However, if any damage occurs, the bidder shall restore it to the original state at his own cost up to the satisfaction of the AAI. Trenches, Path/Road-cutting etc. if applicable should be back-filled and restored to the original condition immediately after laying of the conduit/cable at no extra cost. SI shall also plug conduits and entrance holes where the cabling has been installed with suitable sealing material. The Bidder shall lay all the cables whether power or networking with proper casing.
- 5.3.9 Bidder shall perform the work in a conscientious manner as per the OEM and best industry practices and in compliance to the applicable regulatory norms.

5.4 Partial Site Acceptance Test

- 5.4.1 The SI shall request for Partial Site Acceptance Test (PSAT), after completion of installation of NON-IT Items like UPS, Inrow Cooling, Fire Alarm system etc. in connection with the timelines provided in the tender.
- 5.4.2 Inspection for Partial Site Acceptance Test (PSAT) will be conducted by the AAI committee in accordance with the timelines, scope of work as mentioned in the RFP and the solution documents proposed by the SI and submitted to AAI.

5.5 Final Site Acceptance testing (FSAT)

- 5.5.1 The final site acceptance testing will be conducted post the completion of relocation of existing IT items activity.
- 5.5.2 All the equipment's included in the scope of relocation will be tested on hardware and application level by the concerned teams.
- 5.5.3 Inspection for Final Site Acceptance Test (FSAT) will be conducted by the AAI committee in accordance with the timelines, scope of work as mentioned in the RFP and the solution documents proposed by the SI and submitted to AAI.

6. REPORTING

Sr. No.	Frequency of Reports	Types of reports
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1	Daily reports	Following reports must be submitted to all respective stakeholders in softcopy on daily basis: 1. Daily Shift Handover report containing availability of all Non IT components, Temperature & Humidity compliance report, Daily check lists (as defined by AAI) 2. Report on downtime with their reason and RCA report if demanded by AAI.
2	Weekly reports	Following reports must be submitted to all respective stakeholders in softcopy on weekly basis: 1. Weekly Preventive Maintenance reports for all Non IT Components by bidder's O&M team.
3	Quarterly reports	Following reports must be submitted to all respective stakeholders in softcopy on Quarterly basis: 1. Summary of component wise Data Centre uptime reports for all components with their SLA status. 2. Quarterly Preventive Maintenance reports for UPS, Inrow Cooling Racks, BBT, Rack PDU from their respective OEMs. 3. Quarterly Preventive Maintenance reports for all other Non IT Components by bidder's O&M team. 4. Summary of action taken by SI against Audit observation submitted by any agency appointed by AAI. 5. Closure of Audit finding reports and their status, resolution time for closed Audit observation, pending cases with reason.
4	MIS reports	The SI shall be responsible for submitting reports, but not limited to, as specified above in a format decided by AAI. The following is only an indicative list of MIS reports which should be in conjunction to the reporting features highlighted in RFP. The bidder should submit reports to respective stakeholders involved in the project and hardcopy may have to be submitted as when required or asked by AAI.

7. SERVICE LEVEL AGREEMENT (SLA) FOR O&M

7.1 Overview

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the selected bidder to AAI for the O&M duration of contract. AAI will regularly review the performance of the services being provided by the selected bidder and impose penalties if any deficiency is found in the services.

7.2 Support issue categories

The issues occurring with each equipment supplied by the selected bidder have been broadly classified into two categories

- a) Critical malfunctions encompassing hardware or software problems that result in a complete cease of the equipment's functionality.- P1
- b) Partial malfunctions involving hardware or software issues that cause the equipment to operate below its optimal capacity or with limited functionality. – P2

Following table defines the SLA for each equipments with respect to above defined categories of issues

S.No	Equipment	Category of Issue	No. of hours upto which no penalty will be charged	Penalty % (Calculated on Quartely AMC amount of the faulty item) per device per issue
1	Modular UPS	P1	24	6
		P2	8	2
2	In Row cooling racks	P1	24	6
		P2	4	2
3	Intelligent Rack PDU	P1	48	2
		P2	24	1
4	Fire Alarm System	P1	6	4
		P2	2	1
5	Gas Based Fire suppression system	P1	8	4
		P2	2	1
6	DCIM	P1	10	2
		P2	4	1
7	High Sensitivity Smoke Detection system	P1	8	4
		P2	2	1
8	Access Control system	P1	24	4
		P2	24	1
9	Video Surveillance system/IP based CCTV system	P1	10	3
		P2	24	1
10	Rodent Repellant system	P1	48	2
		P2	24	1
11	Water Leak Detection system	P1	24	2
		P2	10	1
12	LED Display system	P1	24	2
		P2	10	1
13	TOR Switch	P1	12	3
		P2	4	1
14	Visitor Management system	P1	48	2
		P2	24	1
15	Bus Way Trunking system	P1	4	6

		P2	2	2
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Compliance & Reporting Procedures					
S. No	Service Description	Measurement parameter	Target	Penalty	Remarks
1	Submission of Weekly/ Quarterly reports	The bidder shall submit the various MIS reports as per frequency defined in this RFP.	As per frequency defined in this RFP.	For Weekly report: INR 1000 per instance per Deliverable/ report For Quarterly report: INR 5000 per instance per Deliverable/ report.	The penalties will be deducted from the quarterly payments made during the period of warranty and CMC.

7.3 Manpower availability service levels

The resources deployed by bidder onsite for carrying out and providing FMS services shall necessarily be on direct payroll of the bidder organization and should not be outsourced / subcontracted in any circumstances.

The resources working onsite in addition to their designated week offs will be given 24 days prior intimated leaves (2 leaves per month is allowed). If a resource proceeding on leave or becoming absent is replaced with a resource approved by authority, then such substitution will not be treated as absence. Penalty will be calculated per day on Monthly basis and will be deducted from the respective quarterly payment made during the period of warranty and CMC.

S. No	Role	The penalty for non-availability of resources will be calculated on a pro-rata basis, in accordance with the daily cost specified in the Purchase Order, excluding taxes. In addition to this pro-rata cost, a separate penalty, as defined below in Rupees, will be applicable for each resource per shift.
1	DCIM Engineer(L2)	2500
2	Electrical Technician (L1)	2000

7.4 The total penalties on the contract will be capped maximum to 10 % of the total contract order value including the CMC charges. However, penalties levied for resource absence on a pro-rata basis will not be constrained by the limit outlined in this clause.

8. Project Milestone, Timelines, Payment Schedule & Liquidated Damages

Timeline	Milestone	Activity Detail	Project Milestone Non-IT	Payment Against Total	LD/Penalties
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				Capex of Non-IT	
G0	Project Award	Issue of Purchase order i.e. (Start Date of the project). Letter of acceptance by successful bidder within 7 days of PO.	G0	N. A	N.A
G1 = G0 + 30 days	Project Initiation	Agreement to be signed within 15 days from the issue of PO. PBG @ 10 % of the total contract value including the CMC cost to be submitted in 30 days from the issue date of PO	G1	N. A	On the non-submission of PBG in 30 days, a 0.5 % per week against the total contract value of the project subject to maximum of 10 % of the total contract value.
G2 = G1 + 7 days	Project Kick off & Mobilization	Kick-off meeting along with all stakeholders, to happen within 7 days from the G1. Detail Project plan to be submitted by bidder before Kickoff meetings.	G2 = G1 + 7 days	N.A	N.A
G3 = G0 + 4 Months	Delivery of Line items 1 to 18 as per Annexure IV A	Completion of Delivery of Line items 1 to 18 as per Annexure IV A.	G3 = G0 + 4 Months	60 % of the Cost of Line Items 1 to 18 of Schedule A quoted by L1 bidder along with 100 % of GST on on successful sign off on post-delivery inspection report	LD will be 0.5 % per week for the SITC price of uncompleted delivery of item beyond 4 months from the date of PO.

				issued by AAI.	
G4 = G3 + 4 months	Installation & commissioning of all items supplied Followed by Partial Site Acceptance testing of Non-IT System.	AAI nominated committee to carry out the partial site acceptance testing and, on their recommendation, AAI will issue sign off on Partial Site Acceptance report. The O&M phase for the installed items will start from the date of sign off of Partial site acceptance test report.	G4 = G3 + 4 Months	30 % of the Cost of Line Items 1 to 18 of Schedule A quoted by L1 bidder after signing off of Partial Site Acceptance test.	LD will be 0.5 % per week for the SITC price of uncompleted installation and commissioning of item which was completed beyond 4 months from the project milestone G3 as per the partial site acceptance report.
G5 = G4 + 1 year	O&M phase and warranty period	Payment made post submission and acceptance of all set of deliverables mentioned in Scope of Work for O&M phase.	G5 = G4 + 1 year	The annual cost of Manpower with GST will be paid in Quarterly arrears.	Penalties of Warranty period (Manpower non-availability + Infrastructure downtime under warranty + Reports) will be deducted from any payment due to the bidder.

G6 = G4 + 2 month	Relocation of existing IT items and commissioning of same. Followed by Final Site Acceptance testing	AAI nominated committee to carry out the final site acceptance testing and, on their recommendation, AAI will issue sign off on Final Site Acceptance report.	G6 = G4 + 2 Month	10 % of Cost of Line Items 1 to 18 of Schedule A along with 100 % of the total RELOCATION cost (Line Item No. 19 of Schedule A) with GST as per Final Site Acceptance test report	LD will be 0.5 % per week for the Relocation price with GST if the complete relocation and sign off of final acceptance testing report is completed beyond 2 months from the partial site acceptance sign off.
G7 = G5 + 4 years	O& M phase start of CMC period of line items 1-10 & 13-17 of Schedule A	Payment made post submission and acceptance of all set of deliverables mentioned in Scope of Work for O&M phase.	G7 = G5 + 4 years	The respective year CMC price annual manpower price for the respective year payable in equal instalments at the end of quarter.	Penalties will be imposed as per SLA defined.

Annexure-VIII
(DETAILS OF THE VENDOR FIRM/ COMPANY)

S. No.	<u>Details of the Vendor Firm/ Company</u>				
1	Name of the Company:				
2	Name of the Directors as per MoA:				
3	Name of the Authorized signatory:				
4	Email Address:				
5	Phone/Fax:				
6	Email Address for correspondence:				
7	Detail of EMD	Name of the Bank	Amount	Whether Scanned EMD Copy submitted on the portal	
8	Turn Over of the company for the last three years	FY-2020-21	FY-2021-22	FY-2022-23	Annualized
9	GST No.				
10	PAN				
11	Date of Incorporation of the Company as per MoA (Copy Attached /Uploaded)				
12	Proof of Execution of works	Name of the work	Po ref. with date	PO Amt.	Remarks
12.1	Similar Work Experience 1				
12.2	Similar Work Experience 2				
12.3	Similar Work Experience 3				
13	Date of completion of Certificates of the above said works	Name & Desig. Of Signatory	Address	Contact number	Email Address
13.1	Similar Work Experience 1				
13.2	Similar Work Experience 2				
13.3	Similar Work Experience 3				
14	Tender-specific authorization letters from OEM as per tender requirement	Product	OEM with Address	Name of Signatory	Contact Number with Email Address
14.1					
15	Power of Attorney	Yes or No			

	(Stamp Paper of INR 100/-) in favor of signatory (attached)		
16	Acceptance letter as per Annexure-I (Attached/ Uploaded)	Yes or No	
17	List of Client references Attached /Uploaded	Yes or No	

ANNEXURE-IX

(INTEGRITY PACT)

(On Non-judicial stamp paper of INR100.00)(2 copies)

(Physical as well as soft copy to be submitted at the time of bid submission)

PRE CONTRACT INTEGRITY PACT

This Pact made thisday of between Airports Authority of India, a body corporate constituted by the Central Government under the Airports Authority of India Act,1994 and having its Corporate Office at Rajiv Gandhi Bhawan, New Delhi, and offices atin India, hereinafter called the Authority (which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman, or Member, Executive Directors, Airport Directors, officers. Or any of them specified by the Chairman in this behalf, and shall also include its successors and assigns) of the one part

AND

.....represented by of the other part, hereinafter called the "Bidder/Contractor" (which term shall unless excluded by or is repugnant to the context be deemed to include its heirs, representatives, successors and assigns of the Bidder/ Contractor)

WHEREAS the Authority intends to award, under laid down organizational procedures, tender/ contract for The Authority, while discharging its functions on business principles, values proper compliance with all relevant laws and regulations, and the principles of natural justice, ethics, equity, fairness and transparency in its relations with the Bidders/ Contractors. WHEREAS the Authority is desirous to make its business mechanism more transparent, thus to ensure strict adherence of the aforesaid objectives/goals, the Authority hereby adopts the instrument developed by the renowned international non-governmental organization "Transparency International" (T.I.) headquartered in Berlin (Germany). The Authority will appoint an Independent External Monitor (IEM) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above. AND WHEREAS the Bidder is submitting a tender to the Authority for In response to the NIT (Notice Inviting Tender) dated Contractor is signing the contract for execution of

NOW, therefore,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to Enabling the Authority to obtain the desired said stores/equipment/execution of works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling Authority to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Authority will commit to prevent corruption, in any form, by its officials by following transparent procedures. The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

1. Commitments of the Authority;

1.1 The Authority undertakes that no official of the Authority, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.2 The Authority will, during the pre-contact stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information

to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

1.3 All the officials of the Authority will report to the appropriate authority office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2.0 In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the Authority with full and verifiable facts and the same is prima facie found to be correct by the Authority, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Authority and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Authority the proceedings under the contract would not be stalled.

3. Commitments of Bidders/Contractor.

The Bidder/Contractor commits itself to take all measures necessary to prevent corrupt practice, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

3.1 The Bidder/Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Authority, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

3.2 (i) The Bidder/Contractor further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Authority or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Authority for showing or forbearing to show favour or 120isfavor to any person in relation to the contract or any other contract with the Authority.

3.2 (ii) The Bidder /Contractor has not entered and will not enter with other bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specification, certifications, subsidiary contracts, submission or non-submission of bids or any actions to restrict competitiveness or to introduce cartelization in the bidding process.

3.3 The Bidder/Contractor shall, when presenting his bid, disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.

The Bidder/Contractor shall when presenting his bid disclose any and all the payments he has made or, is committed to or intends to make to agents/brokers or any other intermediary, in connection with this bid/contract.

3.5 The Bidder/Contractor further confirms and declares to the Authority that the BIDDER is the original manufacturer/integrator/ authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Authority or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

3.6 The Bidder/Contractor, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Authority or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

3.7 The Bidder/Contractor will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

3.8 The Bidder/Contractor will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

3.9 The Bidder / Contactor shall not use improperly, for purposes of competition or personal gain ,or pass on to others, any information provided by the Authority as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder / Contractor also undertakes to exercise due and adequate care lest any such information is divulged.

3.10 The Bidder/Contractor will inform to the Independent External Monitor.

i) If he receives demand for an illegal/undue payment/benefit.

ii) If he comes to know of any unethical or illegal payment/benefit.

iii) If he makes any payment to any Authority's associate(s)

3.11 The Bidder/Contactor commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

3.12 The Bidder/Contactor shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

3.13 If the Bidder/Contractor or any employee of the Bidder/Contractor or any person acting on behalf of the Bidder/ Contractor, either directly or indirectly, is a relative of any of the officers of the Authority, or alternatively, if any relative of an officer of the Authority has financial interest/stake in the Bidder's/Contractor's firm, the same shall be disclosed by the Bidder/Contractor at the time filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

3.14 The Bidder/Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Authority.

3.15 That if the Bidder/ Contractor, during tender process or before the award of the contract or during execution of the contract/work has committed a transgression in violation of section 2 or in any other form such as to put his reliability or credibility as Bidder/Contractor into question, the Authority is entitled to disqualify him from the tender process or to terminate the contract for such reason and to debar the BIDDER from participating in future bidding processes.

4. Previous Transgression

4.1 The Bidder/Contractor declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify Bidder's exclusion from the tender process.

4.2 The Bidder/Contractor agrees that if it makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason and he may be considered for debarment for future tender/contract processes.

4.3 That the Bidder/Contractor undertakes to get this Pact signed by the subcontractor (s) and associate(s) whose value of the work contribution exceeds INR .5 Crores. (Rupees zero point five Crores.) and to submit the same to the Authority along-with the tender document/ contract before contract signing.

4.4. That sub-contractor(s)/ associate(s) engaged by the Contractor, with the approval of the Authority after signing of the contract, and whose value of the work contribution exceeds INR 0.5 Crs. (Rupees Zero point five Crs.) will be required to sign this Pact by the Contractor, and the same will be submitted to the Authority before doing/ performing any act/ function by such subcontractor(s)/ associate(s) in relation to the contract/ work.

4.5 That the Authority will disqualify from the tender process all Bidder(s) who do not sign this Pact or violate its provisions or fails to get this Pact signed in terms of section 4.3 or 4.4 above.

4.6 That if the Contractor(s) does/ do not sign this Pact or violate its provisions or fails to get this Pact signed in terms of Section 4.3 or 4.4 above. Authority will terminate the contract and initiate appropriate action against such Contractor(s).

5. Earnest Money, Security Deposit, Bank guarantee, Draft, Pay order or any other mode and its validity i/c Warranty Period, Performance guarantee/Bond.

While submitting bid, the BIDDER shall deposit an EMD/SD/BG/DRAFT/PAY ORDER ETC I/C WARRANTY PERIOD, PG/BOND, VALIDITY ETC, which is as per terms and conditions and details given in NIT / tender documents sold to the Bidders.

6. Sanctions for Violations/Disqualification from tender process and exclusion from future Contacts.

6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the Authority to take all or any one of the following actions, wherever required:- (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue. (ii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER. (iii) If the Authority has disqualified / debarred the Bidder from the tender process prior to the award under section 2 or 3 or 4, the Authority is entitled to forfeit the earnest money deposited/bid security. (iv) To recover all sums already paid by the Authority, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than

India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the Authority in connection with any other contract or any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest. (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest. (vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the Authority resulting from such cancellation/rescission and the Authority shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

(vii) To debar the BIDDER from participating in future bidding processes for a minimum period of three years, which may be further extended at the discretion of the Authority.

To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract. (ix) In case where irrevocable Letters of Credit have been received in respect of any contract signed by the Authority with the BIDDER, the same shall not be opened. (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

(xi) That if the Authority have terminated the contract under section 2 or 3 or 4 or if the Authority is entitled to terminate the contract under section 2 or 3 or 4, the Authority shall be entitled to demand and recover from the contractor damages equivalent to 5% of the contract value or the amount equivalent to security deposit or performance bank guarantee, whichever is higher.

(xii) That the Bidder / Contractor agrees and undertakes to pay the said amount without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish to the satisfaction of the Authority that the disqualification / debarment of the bidder from the tender process or the termination of the contract after award of the contract has caused no damage to the Authority.

6.2 The Authority will be entitled to take all or any of the actions mentioned at para

6.1(i) to (xii) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

6.3 That if the Bidder/Contractor applies to the Authority for premature revocation of the debarment and proves to the satisfaction of the Authority that he has installed a suitable and effective corruption prevention system and also restored/recouped the damage, if any, caused by him, the Authority may, if it thinks fit, revoke the debarment prematurely considering the facts and circumstances of the case, and the documents/evidence adduced by the Bidder/Contractor for first time default.

6.4 That a transgression is considered to have occurred if the Authority is fully satisfied with the available documents and evidence submitted alongwith Independent External Monitor's recommendations/suggestions that no reasonable doubt is possible in the matter.

6.5 The decision of the Authority to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent External Monitor(s) appointed for the purpose of this Pact.

Allegations against Bidders/Contractors/ Sub-Contractors/ Associates:

That if the Authority receives any information of conduct of a Bidder/ Contractor or Sub-Contractor or of an employee or a representative or an Associates of a Bidder, Contractor or Sub- Contractor which constitute corruption, or if the Authority has substantive suspicion in this regard, the Authority will inform the Vigilance Department for appropriate action.

8. Independent External Monitor(s),

8.1. That the Authority has appointed competent and credible Independent External Monitor(s) for this Pact.

8.2 The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact. He will also enquire into any complaint alleging transgression of any provision of this Pact made by the Bidder, Contractor or Authority.

8.3. That the Monitor is not subject to any instructions by the representatives of the parties and would perform his functions neutrally and independently. He will report to the Chairperson of the Board of the Authority.

8.4 That the Bidder / Contractor accepts that the Monitor has the right to access without restriction to all project documentation of the Authority including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation including minutes of meeting. The same is applicable to Sub – Contractors and Associates. The Monitor is under obligation to treat the information and documents of the Authority and Bidder/ Contractor / Sub- Contractors/ Associates with confidentiality.

8.5. That as soon as the Monitor notices, or believes to notice, a violation of this Pact, he will so inform the management of the Authority and request the management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit his recommendations/ suggestions. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

8.6 That the Authority will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the Authority and the Contractor / Bidder. The parties offer to the Monitor the option to participate in such meetings.

8.7 That the Monitor will submit a written report to the Chairperson of the Board of the Authority within 2 weeks from the date of reference or intimation to him by the Authority and, should the occasion arise, submit proposals for correcting problematic situations.

8.8 That if the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti- Corruption Laws of India and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Department, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.9 The word 'Monitor' would include singular and plural.

9. Facilitation of Investigation.

In case of any allegation of violation of any provisions of this Pact or payment of commission, the Authority or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such Examination.

Law and Place of Jurisdiction.

That this Pact is subject to Indian Law. The place of performance and jurisdiction is the Corporate Headquarter /the Regional Headquarter / office of the Authority, as applicable.

11. Other Legal Actions

11.1 That the changes and supplements as well as termination notices need to be made in writing.

11.2 That if the Bidder / Contractor is a partnership or a consortium, this Pact must be signed by all the partners and consortium members or their authorized representatives.

12. Pact duration (Validity)

12.1 That this Pact comes into force when both the parties have signed it. It expires for the Contractor 12 months after the final payment under the respective contract, and for all other Bidders 3 months after the contract is awarded.

12.2. That if any claim is made / lodged during this period, the same shall be binding and continue to be valid despite the lapse of this Pact as specified herein before, unless it is discharged/determined by Chairman of the Authority.

12.3 That should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. Company Code of Conduct

Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behavior) and a compliance program for the implementation of the code of conduct throughout the company.

14. The parties hereby sign this Integrity Pact at _____ on _____

Buyer	BIDDER
Name of the Officer	CHIEF EXECUTIVE OFFICER
Designation	
Deptt./Ministry/PSU	
Witness	Witness
1. _____	1. _____
a) _____	b) _____

ANNEXURE-X

(PROFORMA OF UNDERTAKING REGARDING DEBARMENT/ BLACKLISTING)

[TO BE SUBMITTED WITH PRE-QUALIFICATION BID]

[TO BE GIVEN ON COMPANY'S LETTERHEAD]

To,
General Manager (IT)
Airports Authority of India,
Rajiv Gandhi Bhawan,
Safdarjung Airport, New Delhi 110003.

Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delh

Tender No.:

I / We (name and post of authorized signatory) on behalf of (Name of Firm) do here by solemnly affirm and declare as follows:

1. Our firm is not restrained / debarred/ blacklisted by Airports Authority of India (AAI) / Ministry of Civil Aviation (MoCA)/ Dept. of Expenditure (DoE), Ministry of Finance and the debarment/ blacklisting/ restraintment is not in force as on last date of opening of RFP (Envelop – I, normally called as technical bid).
2. None of Proprietor / Partners / Board Members / Directors of M/s (Name of Firm) has remained Proprietor / Partner/ Board Member/ Director in any firm which stands debarred /blacklisted/restrained by AAI/ MoCA/ DoE and the department/ blacklisting/ restraintment is not in force as on last date of opening of RFP (Envelope-I, normally called as technical bid).
3. Our firm understands that if our firm either debarred before the date of opening of RFP (first bid, normally called as technical bid, in case of two packet/two stage bidding) or debarred before the date of contract by AAI/ MoCA/ DoE (Department applicable for all Ministers/ Departments), our bid is liable to be rejected at that stage.
4. Our firm understands that at any stage, if above statements are found to be false, our firm shall be liable for debarment from bidding in AAI, apart from any other appropriate contractual legal action including debarment/ blacklisting/ restraintment, termination of the contract etc. as demand fit.

Dated:

[Signature and name of the
authorized signatory of the firm]

Place:

ANNEXURE-XI

(POWER OF ATTORNEY FORMAT FOR THE AUTHORIZED PERSON(S))

(Bidder shall submit irrevocable power of attorney on a non-judicial stamp paper of INR100/- Signed by authorized signatory as per Memorandum of Articles authorizing the persons, who are Signing this bid on behalf of the company)

BY THIS POWER OF ATTORNEY executed on _____ we _____
_____ a Company incorporated under the Provisions of companies Act, 1956 having its Registered Office at _____ (hereinafter referred to as the "Company") do hereby severally appoint, constitute and nominate _____ official(s) of the Company, so long as they are in the employment of the Company (hereinafter referred to as the "Attorneys") to sign agreement and documents with regard Bid No. _____ due on _____ invited by Airports Authority of India, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi – 110 003 for **"Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi"** and to do all other acts, deeds and things the said Attorneys may consider expedient to enforce and secure fulfilment of any such agreement in the name and on behalf of the Company **AND THE COMPANY** hereby agrees to ratify and confirm all acts, deeds and things the said Attorneys shall lawfully do by virtue of these authorities hereby conferred.

IN WITNESS WHEREOF, this deed has been signed and delivered on the day, month and year first above written by Mr. _____ Authorized Signatory, duly authorized by the Board of Directors of the Company vide it's resolution passed in this regard.

By order of the Board

For _____
(_____)

Authorized Signatory

Witness:

- 1.
- 2.

Attorney Signature of Mr. _____

Attorney Signature of Mr. _____

(Attested)

(_____)

Authorized Signatory

ANNEXURE-XII

(DETAILS OF STATUTORY TAXES)

S. No.	S. No. of item as per Schedule – A	Item Description	GST (percent) In figure	GST (percent) In words	Any Other Tax – 1 (percent) In figure	Any Other Tax – 2 (percent) In figure

ANNEXURE-XIII

(NON-DISCLOSURE AND CONFIDENTIAL AGREEMENT)
(Non-Disclosure Agreement) (On Non-judicial stamp paper of INR100.00)

STRICTLY PRIVATE AND CONFIDENTIAL

This Agreement is made on the <<dd/mm/yyyy>>

BETWEEN

<< Name of the Contractor>> a company incorporated under the laws of India and having its corporate office at<< Address of the Contractor>> (hereinafter referred to as<<Contractor>>

AND

Airports Authority of India, a Government of India, Public Sector Undertaking constituted under the Airports Authority of Act 1994 having its office and principle place of business at its corporate headquarter at Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi 110003 (hereinafter referred to as "AAI".

WHEREAS <<Contractor>> and AAI (hereinafter referred to as "the Parties") wish to engage in discussions with each other regarding potential business arrangements between the parties vide AAI PO/WO/Tender No. <<Details of PO/WO>> hereinafter referred to as "the Purpose").

NOW THEREFORE, to enable such discussions to proceed, each party ("Disclosing Party") understands that certain Confidential Information, as defined below, may need to be disclosed to the other Party ("Receiving Party")

All information and data relating to the purpose which is obtained, whether in writing, pictorially, in machine readable form or orally in connection with the discussions (including but without limitation, financial information, know-how, processes, ideas, (whether patentable or not), schematics, trade secrets, technology, customer lists (potential or actual) and other customer-related information supplier information, sales statistics, market intelligence, marketing and other business strategies and other commercial information of a confidential nature.

This Agreement, but does not include Confidential Information which is or becomes publicly available, other than as a result of a breach of this Agreement, or becomes lawfully available to either party from a third party free from any confidentiality restriction or any information required to be disclosed under any relevant law or regulation provided the affected party is given prompt notice of such requirements and the scope of such disclosure is limited to the extent possible or order of court provided that the Disclosing Party is given prompt notice of such order and (where possible) provided the opportunity to contest it.

IN CONSIDERATION of each Party's Confidential Information, each Party agrees to the following terms and conditions:

That the Receiving party shall use the Confidential Information only for the purpose. The Receiving Party shall treat the Confidential Information with the same degree of care and protection, as it would use with respect of its own Confidential Information.

That the Receiving Party shall not disclose any of the Confidential Information to any third Party, nor shall it use the Confidential Information for any purpose other than stated in clause 1 and except to the extent required by law, without the prior written consent of the Disclosing Party.

The Receiving Party shall not copy or reproduce in any way (including without limitation, store in any computer or electronic system) any Confidential Information or any documents containing Confidential Information without the Disclosing Party's consent.

The Receiving Party shall take all necessary steps and precautions to protect the Confidential Information against any un-authorized access and not to divulge any such Confidential Information or any Confidential Information derived there from to any third person.

The Receiving Party shall immediately upon request by the Disclosing Party deliver to the Disclosing Party all material including all copies (if any) made under clause 3.

The Receiving Party shall not use the Confidential Information directly or indirectly to procure a commercial advantage over the Disclosing Party both during and after the completion of the purpose. The Receiving party acknowledge that damages are not a sufficient remedy for the Disclosing party for any breach of any of the Receiving Party's undertakings herein provided and the Receiving Party further acknowledges that the Disclosing Party is entitled to specific performance or injunctive relief (as appropriate) as a remedy for any breach or threatened breach of those undertakings by the Receiving Party, in addition to any other remedies available to the Disclosing Party in law or in equity. No failure or delay by either party in exercising or enforcing any right, remedy or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise or enforcement of any right, remedy or power preclude any further exercise or enforcement thereof or the exercise or enforcement of any other right, remedy or power.

The Receiving Party does not acquire any intellectual property rights under this Agreement or through any disclosure hereunder, except the limited right to use such confidential Information in accordance with this Agreement. No warranties of any kind are given with respect to the Confidential Information disclosed under this Agreement or any use thereof except as may be otherwise agreed to in writing.

The Disclosing Party understands that the Receiving Party may currently, or in future, be developing information internally or receiving information from third parties that may be similar to that received from the Disclosing Party. Accordingly, nothing in this Agreement shall be construed as representation or inference that the Receiving Party will not develop any technology, information, know-how, processes or products, or have technology, information or products developed for it, that, without violation of this Agreement, compete with or are the same or similar to the technology, information, know-how, processes or products contemplated by the Disclosing party's Confidential Information.

Any dispute or difference arising at any time between the Parties hereto in relation to any undefined terms contained herein will be resolved through mediation between the senior management of the parties by each party appointing a person from their respective senior management as mediators. If the parties are unable to resolve the dispute within 30 (thirty) days through mediation between them, then the parties shall refer to the dispute to arbitration. The arbitrator shall be mutually decided between the parties. The arbitration shall be conducted under Indian Arbitration and Conciliation act of 1996. The place of arbitration shall be in New Delhi, India. The language of such arbitration shall be English.

The laws of the Republic of India shall govern the validity, construction and performance of this Agreement.

Nothing in this Agreement shall prejudice any Party's rights to seek injunctive relief in the courts of any competent jurisdiction.

This Agreement supersedes all prior discussions and writings with respect to the subject matter hereof, and constitutes the entire agreement between the parties with respect to the subject matter hereof. No waiver or modification of this Agreement will be binding upon either party unless made in writing and signed by a duly authorized representative of each Party and no failure or delay in enforcing and right will be deemed a waiver. In the event that any of the provisions of this Agreement shall be held by a court or other tribunal of competent jurisdiction to be unenforceable, the remaining portions hereof shall remain in full force and effect.

This Agreement may be terminated at any time by a party giving thirty (30) days prior written notice to the other party, provided that the obligations respecting the Confidential Information already provided hereunder shall survive any termination of this Agreement for a period of 2 years from the date of execution of this Agreement.

This Agreement has been made in order to keep the conditions of non-disclosure and confidentiality between <<Contractor>> & AAI for the documents and information to be provided by AAI to <<Contractor>> in connection with the award of work by AAI to <<Contractor>> for <<Name of work>> vide AAI WO/PO /Tender no<<Details of WO/PO>> IN WITNESS WHERE OF this Agreement has been executed by the duly authorized representative of each party on the day and year first above written.

For Contractor

Signed :
Name :
Designation :

For Airports Authority Of India

Signed :
Name :
Designation :

Annexure XIV**(PUBLIC PROCUREMENT LINKED WITH LOCAL CONTENT (PP LC) ORDER 2017)**

Public procurement (Preference to Make in India policy 2017) (PP-LC) has been notified and effected vide order dated 15-06-2017 of Govt. of India to encourage and promote manufacturing and production of goods and services in India with a view to enhancing income and employment.

In order to implement 'Make in India' public procurement policy 2017 (PP-LC) following shall be considered and applicable uniformly for procurement of goods and service including turn-key works, across all disciplines in Airports Authority of India (AAI). **Also include the order No. P-45021/2/2017-PP(BE-II), Dated 04th June 2020 "Public Procurement (Preference to Make in India), order 2017-Revision regarding."**

1. LOCAL SUPPLIER:-

Local Supplier' means a supplier or service provider whose product or service offered for procurement meets the minimum local content i.e. 50 % of total value of the product or services.

2. LOCAL CONTENT:-

'Local content' means the amount of value added in India in the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent.

FORMAT FOR CALCULATION OF LOCAL CONTENT IN GOODS / SERVICES:

	Name of the bidder	
	Item name & sl.no. BOQ	
A	Total value of the item procured excluding net domestic indirect taxes	INR
B	Value of imported content in the item including Custom Duties	INR
C	Local content i.e. amount of value added in India [A-B]	INR
D	Percentage of Local content $\frac{C}{A} \times 100$	%

For the purpose of local content salary / professional fees paid in Indian Rupees (INR) to India- based foreign employees will be treated as local content, if they are ordinarily resident in India for a longer period (6 months or more). However, salary / professional fees paid to foreign professionals coming to India on short term basis, or payments made in foreign currency, will not be treated as local content.

3. DEFINITION OF L1:-

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

4. MARGIN OF PURCHASE PREFERENCE:-

'Margin of purchase preference' means the maximum extent to which the price quoted by a local supplier above the L1 for the purpose of purchase preference, shall be 20 %, which shall be firm during particular procurement transaction.

5. Manufacture under license/ technology collaboration agreements with phased indigenization:-

5.1 If the product developed abroad, is being manufactured in India with the stipulated percentage (50%) of local content, under license from foreign manufacturer who holds intellectual property right and having technology collaboration agreement/ transfer of technology agreement with Indigenous manufacturer, is acceptable under this policy. Nodal Ministry may also reduce the requirement of stipulated local content subject to clear phasing of increase of local content.

5.2 Local content being manufactured in India but supplied by overseas bidder who has venture and bona-fide agreement with Indian manufacturer under License /Technology Collaboration agreements with phased Indigenization, the payment can be made in foreign currency to non-local bidder also subject to adjustment of taxes as applicable and prevailing regulation of RBI & Government of India. It can also be given in Indian National Rupees [INR] to local manufacturer through bona-fide bidder, subject to implementation of prevailing regulation of Government of India & RBI.

6. Verification of local content: -

a) The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.

b) In case of procurement for a value in excess of INR 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

7. A local supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or (ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more than 50% of the value of the item being supplied has been added in that country. Local supplier/ bidder shall mean those entities which meet any of these tests with respect to India.

8. PURCHASE PREFERENCE (LINKED WITH LOCAL CONTENT) (PP-LC) AND ITS IMPLEMENTATION:

-

According to Make in India policy 2017, Purchase preference shall be given to local suppliers in all the procurement, in the manner as given in following clauses, if nothing otherwise notified by MOCA.

8.01 It is presumed that sufficient local capacity and local competition exist in country for procurement of goods where the estimated value of procurement is INR50 lacs or less but above INR5 lacs, & only local supplier shall be eligible.

8.02 In-procurement of goods, up-to and less than INR 5 lacs, shall be exempted from implementation of public procurement linked with local content policy to the bidder being small purchases. However, it shall be ensured by procuring entities that procurement is not split for purpose of avoiding the provisions of this policy.

8.03 In-procurement of goods where the estimated value of procurement is more than INR 50 lacs and which are not divisible in nature, the following procedure shall be followed.

a) Among all qualified bids, the lowest bid will be termed as L1, if L1 is from a local supplier, the contract for full quantity will be awarded to L1.

b) If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price failing within the margin of purchase preference of 20 % of L-1 price, and the contract shall be awarded to such local supplier subject to matching the L1 price.

c) In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price then the contract may be awarded to the L1 bidder.

Annexure-XV

(COMPETENT AUTHORITY AND PROCEDURE FOR REGISTRATION)

Annex I: Competent Authority and Procedure for Registration

- A. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)*.
- B. The Registration Committee shall have the following members*:
- i. An officer, not below the rank of Joint Secretary, designated for this purpose by DPIIT, who shall be the Chairman;
 - ii. Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;
 - iii. Any other officer whose presence is deemed necessary by the Chairman of the Committee.
- C. DPIIT shall lay down the method of application, format etc. for such bidders as stated in para 1 of this Order.
- D. On receipt of an application seeking registration from a bidder from a country covered by para 1 of this Order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.
- E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.
- F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.
- G. Registration shall not be granted unless the representatives of the Ministries of Home Affairs and External Affairs on the Committee concur*.
- H. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by Central Government and its agencies/ public enterprises etc. but also for procurement by State Governments and their agencies/ public enterprises etc. No fresh registration at the State level shall be required.

- I. The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.
- J. For national security reasons, the Competent Authority shall not be required to give reasons for rejection / cancellation of registration of a bidder.
- K. In transitional cases falling under para 3 of this Order, where it is felt that it will not be practicable to exclude bidders from a country which shares a land border with India, a reference seeking permission to consider such bidders shall be made by the procuring entity to the Competent Authority, giving full information and detailed reasons. The Competent Authority shall decide whether such bidders may be considered, and if so shall follow the procedure laid down in the above paras.
- L. Periodic reports on the acceptance/ refusal of registration during the preceding period may be required to be sent to the Cabinet Secretariat. Details will be issued separately in due course by DPIIT.

[*Note:

- i. In respect of application of this Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government and paragraph G above shall not apply. However, the requirement of **political and security clearance as per para D shall remain and no registration shall be granted without such clearance.**
- ii. Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc. and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

Annexure-XVI

(REQUEST LETTER: TRANSMISSION OF BANK GUARANTEE COVER MESSAGE)

Date: _____

The Manager,
(Bank),
(Branch)

Sub: Inclusion of unique identifier code of AAI while transmitting BG cover messages where beneficiary bank is ICICI Bank (IFSC-ICIC00000007)

Dear Sir/ Ma'am,

I/ We, _____, request you to include unique identifier _____ in field 7037 of the SFMS cover messages IFN COV 760 (for BG issuance) and IFN COV 767 (for BG amendment) while transmitting the same to the beneficiary bank (ICICI Bank-IFSC-ICIC00000007)

Thanking you,

(Vendor)

ANNEXURE-XVII
(PROFORMA OF LAND BORDER SHARE COMPLIANCE CERTIFICATE)

To,
The General Manager (IT),
Airports Authority of India,
Safdarjung Airport, New Delhi - 110003

Tender No : AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

Name of Work: Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi

Subject – Compliance Certificate

With reference to the aforementioned references, I would like to state that I have read the GoI OM. F.No 6/18/2019-PPD Dated 23.07.2020 clause regarding restrictions on procurement from a bidder of a country which shares a land border with India.

I certify that we are not from such a country or, if from such a country, has been registered with the Competent Authority. [Strike Out whichever is not applicable]"

I hereby certify that we fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Yours faithfully,

Date: _____

Signature with Company stamp

ANNEXURE-XVIII
(PROFORMA OF SELF-CERTIFICATION FOR LOCAL CONTENT)

Name of Work: Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi

Tender No: AAI/CHQ/ITD/Data_Center_D-Block_Migration/01/2023-24

We _____ Statutory auditor or Cost Auditor of the Company (in case of Companies) or Cost Accountant or practicing Chartered Accountant of M/s _____ (Bidder Name) hereby solemnly affirm and declare as under:

1. That our bidder agrees to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Order, 2017 (hereinafter PPP-MII order) of Government of India issued vide Notification No. P45021/2/2017 -BE-II dated 04/06/2020, its revision dated 16/09/2020 and any subsequent modifications/Amendments, if any and
2. That the information furnished hereinafter is correct to the best of our knowledge and belief and we undertake to produce relevant records before the procuring entity/AAI or any other Government authority for the purpose of assessing the local content of goods/services/works supplied by them for "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi".
3. That the local content for all inputs which constitute the said goods/ services/ works has been verified by us and We are responsible for the correctness of the claims made therein.
4. That the goods/ services/ works supplied by our bidder for "Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi" meets the 'Minimum Local Content 'as defined in the PPPMII order & the overall Local Content is _____%.
5. That the value addition for the purpose of meeting the 'Minimum Local Content 'has been made at following location: -

S. No	Item Description	Location at which value addition has been made (Full Address)	Local Content %
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

S. No	Item Description	Location at which value addition has been made (Full Address)	Local Content %
13			

6. I / We also understand that false declarations will be in breach of the Code of Integrity under Rule 175(1) (i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
7. I agree to maintain the following information in the Company's record for a period of 10 years and shall make this available for verification to any statutory authority.
- Name and details of the Local Supplier (Registered Office, Manufacturing unit location, nature of legal entity)
 - Date on which this certificate is issued.
 - Goods/services/works for which the certificate is produced
 - Procuring entity to whom the certificate is furnished
 - Percentage of local content claimed and whether it meets the Minimum Local Content prescribed
 - Name and contact details of the unit of the Local Supplier (s)
 - Sale Price of the product
 - Ex-Factory Price of the product
 - Freight, insurance and handling
 - Total Bill of Material
 - List and total cost value of input used to manufacture the Goods/to provide services/in construction of works
 - List and total cost of input which are domestically sourced. Value addition certificates from suppliers, if the input is not in-house to be attached
 - List and cost of inputs which are imported, directly or indirectly

For and on behalf of..... (Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors)

<Inset Name, Designation & Contact No>

ANNEXURE-XIX**(INVENTORY FOR RELOCATION)**

S.No	Device Type	Qty	Location	Make/Model	Serial Nos
1	Rack Server	1	DC (SAP)	Huawei (H22H-05-S8AFF)	2102311XBK10L2000291
2	Rack Server	1	DC (SAP)	Huawei (H22H-05-S8AFF)	2102311XBK10L2000290
3	Rack Server	1	DC (SAP)	HPE ProLiant DL560 Gen9	SGH713WCRH
4	SAN Switch	1	DC (SAP)	StorageWorks 8/24 SAN Switch (300)	CZC715UCT
5	SAN Switch	1	DC (SAP)	StorageWorks 8/24 SAN Switch (300)	CZC715UCF6
6	Storage	1	DC (SAP)	Dell EMC VNX 5400	CKM00143102230
7	Load Balancer	1	DC (SAP)	CISCO UCS C240 M5)	WZP22491J6P
8	Load Balancer	1	DC (SAP)	CISCO UCS C240 M5)	WZP22491J6L
9	Management Server	1	DC (SAP)	CISCO UCS C220 M5)	WZP22480M9W
10	Fabric Interconnet	1	DC (SAP)	CISCO UCS FI 6332)	FDO23030F1N
11	Fabric Interconnet	1	DC (SAP)	CISCO UCS FI 6332)	FDO2241181J
12	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475QZ
13	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475NM
14	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475CD
15	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475GR
16	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH23037HAP
17	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475RC
18	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH230475RK
19	Blade Server	1	DC (SAP)	CISCO UCS B200 M5	FCH23037UF7
20	Blade Chassis	1	DC (SAP)	CISCO UCS 5108	FOX2303P080
21	VTL	1	DC (SAP)	HPE Storeonce 4900	SGH551XDK9
22	Storage	1	DC (SAP)	NetApp FAS 8200	952052004047, 952250000604
23	Network Switch	1	DC (SAP)	Cisco 9200L	JAE234910BA
24	FMC CISCO	1	DC (SAP)	Cisco 9200L	WZP23390S1Z
25	Network Switch	1	DC (SAP)	Cisco 2960X	FCW2225B314
26	Firewall	1	DC (SAP)	Cisco Firewall 4115	JMX2407L02R
27	Web Application Firewall	1	DC (SAP)	F5-WAF-I-5800	F5-LIGD-ZXCU
28	Network Core Switch	1	DC (SAP)	Cisco 9k-9504	FOX2346PE5J
29	SAN Switch	1	DC (SAP)	HPE SN3000B 16 GB 24/12 Fiber Channel Switch (6505)	CZC7342HAN
30	SAN Switch	1	DC (SAP)	HPE SN3000B 16 GB 24/12 Fiber Channel Switch (6505)	CZC7342HAG
31	SAN Switch	1	DC (SAP)	HPE SAN6600B 32GB 48/24	CZC014FWTL
32	SAN Switch	1	DC (SAP)	HPE SAN6600B 32GB 48/25	CZC941FM8W
33	Rack Server	1	DC (SAP)	Arin AR-E2000R	AR1022LUJN20300626

34	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WS
35	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WV
36	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WZ
37	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X3
38	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WX
39	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X1
40	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X5
41	Blade Enclosure	1	DC (SAP)	HPE 6_Synergy 12000 CTO Frame	SGH031W2J8
44	Rack Server	1	DC (SAP)	HPE-ProLiant DL180 Gen9	SGH624V59L
45	Rack Server	1	DC (SAP)	HPE-ProLiant DL180 Gen9	SGH624V59A
46	Rack Server	1	DC (SAP)	Huawei H22H-05-S8AFF	2102311XBK10L2000288
47	Rack Server	1	DC (SAP)	Huawei H22H-05-S8AFF	2102311XBH10L2000036
48	Rack Server	1	DC (SAP)	Huawei H22H-05-S8AFF	2102311XBH10L2000035
49	Network Switch	1	DC (SAP)	Aurba 5406 R	SG79G490D1
50	Network Switch	1	DC (SAP)	Aurba 5406 R	SG79G490C5
51	Load Balancer	1	DC (SAP)	A10 Thunnder 1030	TH10B43317141029
52	Load Balancer	1	DC (SAP)	A10 Thunnder 1030	TH10B43317141072
53	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010461
54	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010464
55	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010463
56	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010507
57	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010508
58	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010485
59	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010483
60	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010482
61	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010484
62	Rack Server	1	DC (SAP)	Fujitsu RX2530 M2	YM6B010462
63	Rack Server	1	DC (SAP)	Oracle Sparc T7-1	AK00401913
64	Rack Server	1	DC (SAP)	Oracle Sparc T7-1	AK00401914
65	Rack Server	1	DC (SAP)	HPE ProLiant DL380 Gen9	CN77250HSQ
66	Rack Server	1	DC (SAP)	HPE ProLiant DL380 Gen9	CN77250HSP
67	Storage	1	DC (SAP)	HP Store Virtual 4300	CZJ64203TD
68	RSA Server 1	1	DC (SAP)	Dell EMC Powerededge R440	779W833
69	RSA Server 2	1	DC(SAP)	Dell EMC Powerededge R440	879W833
70	Firewall	1	DC (SAP)	CISCO Firewall 4115	JMX2407L02R
71	Web Application Firewall	1	DC (SAP)	F5 WAF-I-5800	F5-LIGD-ZXCU
72	Network Core Switch	1	DC (SAP)	Cisco 9k-9504	FOX2346PE5J
73	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WS
74	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WV
75	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WZ
76	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X3
77	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1WX
78	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X1

79	Blade Server	1	DC (SAP)	HPE Synergy 480 Gen10	SGH031W1X5
80	Blade Enclosure	1	DC (SAP)	HPE- 6_Synergy 12000 CTO Frame	SGH031W2J8
81	Network Switch	1	DC(RGB)	Cisco Switch N540	FOC2711NK
82	Railtel MUX	1	DC(RGB)	Cariant 7090-92	CXQH7000176
83	LPT	1	DC(RGB)	RAILTEL DIS-PPM	1219-163
84	Routers	1	DC(RGB)	Cisco ASR 920(Prim)	CAT2433V0Y6
85	Routers	1	DC(RGB)	Cisco ASR 920(Sec)	CAT222AV3WZ
86	BCAS Switch(Prim)	1	DC(RGB)	Cisco 2960X	FCW2223B3PZ
87	BCAS Switch(Sec)	1	DC(RGB)	Cisco 2960X	FCW2223B3QE
88	Routers	1	DC(RGB)	Cisco ISR 4331(Prim)	FDO2224A18Q
89	Routers	1	DC(RGB)	Cisco ISR 4331(Sec)	FDO2224A198
90	Cisco FTD(Prim)	1	DC(RGB)	Cisco FPR 2100	JMX2223Y0BN
91	Cisco FTD(Sec)	1	DC(RGB)	Cisco FPR 2100	JMX2223Y0BR
92	Cisco Firepower	1	DC(RGB)	Cisco FMC 1000	FCH2221V2G0
93	Management SW(2960)	1	DC(RGB)	Cisco 2960X	FCW2223B3P5
94	NOKIA 7705 SAR-8	1	DC(RGB)	Nokia 7705 SAR-8	NS1611S0749
95	Proliant D120	1	DC(RGB)	HPE Proliant D120 Gen 10 Plus	SGH233VNF2
96	Mcafee(S/N-BOC7851271)	1	DC(RGB)	Mcafee Trellix NMS	BOC7851271
97	Network Router	1	DC(RGB)	Juniper Router SRX345	DS1622AN0044
98	TJ1270(PGCIL)	1	DC(RGB)	Tejas TJ1270MSPP	AG-1118-32-1011
99	NSM	1	DC(RGB)	McAfee NS9100	J072349025
100	NSM	1	DC(RGB)	McAfee NS9100	J072510044
101	Network Switch	1	DC(RGB)	Cisco C9200L-48T-4X-E	JAE23491S2U
102	Firewall	1	DC(RGB)	Fortinet 1100E	FG10E0TB19901260
103	Firewall	1	DC(RGB)	Fortinet 1100E	FG10E0TB19901302
104	Core Switch	1	DC(RGB)	Cisco N9k- 9504	FOX2218PFHX,FOX2228P9P2
105	Fortinet Firewall	1	DC(RGB)	Fortinet Firewall Manager 1000F	FMG1KFTA20900023
106	Rack server	1	DC(RGB)	Cisco C240 M5	WZP234316PE
107	Tejas RTR	1	DC(RGB)	Tejas TJ1270MSPP	
108	MTNL Telecom	1	DC(RGB)	ALPHION AONT-200	APHN01814054
109	ADVANTECH Devices	1	DC(RGB)	ADVANTECH FWA-1010VC	KSA2527146
110	Airtel MUX	1	DC(RGB)		
111	Rack server	2	DC(RGB)	DELL EMC R440	GV152S2,GV172S2
112	Rack server	1	DC(RGB)	DELL EMC R540	GF7M9W2
113	Tape Library	2	DC(RGB)	DELL EMC ML3	8G14FN2,DZ4R0V2
114	Anti APT	1	DC(RGB)	FireEye VX5500	FZ2225QA8JT
115	Webgateway	1	DC(RGB)	Trellix WBG-5000	G0D8333027
116	Webgateway	1	DC(RGB)	Trellix WBG-5001	G0D8333022
117	Thread Grid M5	1	DC(RGB)	Cisco Cisco TG-M5	WZP240105E0
118	Cisco SMA M695F	1	DC(RGB)	Cisco SMA M695F	WMP2424017R

119	Rack Server	2	DC(RGB)	Cisco UCS C240 M5	WZP23471UW9,WZP23480T70
120	Rack Server	2	DC(RGB)	CiscoUCS C220 M5(1+1)	WZP23521BW6,WZP23521BWD
121	Fire Eye (MGMT)	1	DC(RGB)	CM4500	FZ2036QA6YE
122	Fire Eye Sensor (Pri)	1	DC(RGB)	FIRE EYE NX 4500	FZ2038RA6ZT
123	Fire Eye Sensor (Sec)	1	DC(RGB)	FIRE EYE NX 4500	FZ2038RA6ZUssss
124	SIEM	1	DC(RGB)	Innspark SS-LC1X05	INN-SS-LC1U05
125	SIEM	1	DC(RGB)	Innspark SS-LC1X06	INN-SS-LC1U06
126	Fire Eye	1	DC(RGB)	FIRE EYE VX5500	FM2251QA01D
127	WLC (Pri)	1	DC(RGB)	Cisco 5520	FCH2223V1AC
128	WLC (Sec)	1	DC(RGB)	Cisco 5520	FCH2224V0TC
129	AAA Server	1	DC(RGB)	Cisco 3515	FCH2223V1N5
130	Innspark SIEM SOAR	1	DC(RGB)	Innspark SSHW1X05	INN-SS-BSAPV3-1029
131	Innspark SIEM SOAR	1	DC(RGB)	Innspark SSHW1X05	INN-SS-BSAPV3-1030
132	Router	2	DC(RGB)	CISCO ISR 4431	FGL223280VJ , FGL202410XQ
133	EDS (Pri)	1	DC(RGB)	TECHROUTES TRS2928F-1	20047003387
134	EDS (Sec.)	1	DC(RGB)	TECHROUTES TRS2928F-2	20047000420
135	Cisco 9200 (Pri)	1	DC(RGB)	CISCO C9200-24T	JAE230316NP
136	Cisco 9200 (Sec)	1	DC(RGB)	CISCO C9200-24T	JAE230316YT
137	Router	2	DC(RGB)	Cisco ISR 4461	FDO2428A02G , FDO2428A02H
138	Router	2	DC(RGB)	Cisco Vedge 2000	26OE1303240029M , 26OE1251180167
139	UCS Controller	1	DC(RGB)	CISCO C240-M5SX	WZP23090RHR
140	Power Device	1	DC(RGB)	Delta PP-CSU502	23R204017N0481G481
141	Management Switch	1	DC(RGB)	Cisco C9200L-48T-4X	JAE2349106Q

SCHEDULE-A**PRICE SCHEDULE**

Name of Work: - Migration of Data Center to D Block, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi

Tender No.: AAI/CHQ/ITD/Data_Center_Migration/01/24

Sr. No.	Description	U.O.M	Quantity (A)	Unit Rate (B)	Amount (Exclusive of Taxes) (C =A*B)
1	SITC of Modular UPS System with Modular batteries with 30-minute backup time at full load with 1-year standard warranty	Nos	2		
2	SITC of In-Row Intelligent Cooling Racks for Server Room with Cold Aisle Containment facility with 1 year standard warranty	Nos	4		
3	SITC of DCIM system with 1 year standard warranty	Lot	1		
4	SITC of Fire Detection & Alarm System with 1 year standard warranty	Lot	1		
5	SITC of Gas Based Fire Suppression system with 1 year standard warranty	Lot	1		
6	SITC of High Sensitivity Smoke Detection System with 1 year standard warranty	Lot	1		
7	SITC of Access control System with 1 year standard warranty	Lot	1		
8	SITC of IP Based CCTV System with 1 year standard warranty	Lot	1		
9	SITC of Rodent Repellent System with 1 year standard warranty	Lot	1		
10	SITC of Water Leak Detection System with 1 year standard warranty	Lot	1		
11	SITC of Racks (Server) with 2 Qty Temperature and Humidity Sensors in each rack, along with 2 Qty Removable Cable manager rings to be installed at rear side of each rack	Nos	12		
12	SITC of Racks (Network) with 2 Qty Temperature and Humidity Sensors in each rack, along with 2 Qty Removable Cable manager rings to be installed at rear side of each rack	Nos.	4		

13	SITC of Intelligent Rack PDUs along with Temperature and Humidity Sensors for each rack with 1 year standard warranty	Nos	32		
14	SITC of 75" Big Display System with 1 year standard warranty	Nos.	4		
15	SITC of TOR Switch with 1 year standard warranty	Nos	8		
16	SITC of Visitor Management System with 1 year standard warranty	Lot	1		
17	SITC of BusWay Trunking system with 1 year standard warranty	Lot	1		
18	Cables including Optical Fibre and Cat 6 and their Termination Points, Cable Trays, Conduits and Circuit Breakers ,Earthing Blanking panels(Qty-100) to cover unutilized Rack space for effective cooling.	Lot	1		
19	Cost of Relocation of IT items	Lot	1		
20	Multiskilled technician (Four L1 in 24x7 shift) for operation and maintenance of non-IT infrastructure – Annual Cost	Years	5		
21	Multiskilled technician (One L2 in general shift) for operation and maintenance of non-IT infrastructure – Annual Cost	Years	5		
22	CMC of Line Items 1-10 & 13-17 for First year after warranty (@9% of 70 % of Cost of Line Items 1-10 & 13-17)	Lot	1		
23	CMC of Line Items 1-10 & 13-17 for Second year after warranty (@10% of 70% cost of Line Items 1-10 & 13-17)	Lot	1		
24	CMC of Line Items 1-10 & 13-17 for Third year after warranty (@11% of 70% cost of Line Items 1-10 & 13-17)	Lot	1		
25	CMC of Line Items 1-10 & 13-17 for Fourth year after warranty (@12% of 70% cost of Line Items 1-10 & 13-17)	Lot	1		
	Grand Total (Exclusive of Taxes)				

Note:

- 1 **Form D (etc.) for concessional duty shall not be applicable for AAI for exemption or reduction in Govt. Duties.**
- 2 **GST on the applicable items at current prevailing rate shall be furnished by the bidder.**

- 3 **In E-tendering portal, there may be short description of Products/ items as described above due to constraint of space, for details refer Tender Document or description in detail on portal.**

AUTHORIZED SIGNATURE

NAME OF THE SIGNATORY

NAME & ADDRESS OF THE TENDERER

**To,
General Manager (IT)**