

Government of India
Planning Commission
Unique Identification Authority of India(UIDAI RO-Delhi)

Room No.28, Janpath Hotel,
Janpath, New Delhi-110 001

Tender Enquiry

To

M/s _____

Our Ref.	D-11018/07/2010/Adm/UIDAI(RO-Delhi)/PC-1/HVAC	Date :	14 th June, 2013
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INVITATION FOR QUOTATIONS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF HVAC SYSTEM FOR UNIQUE IDENTIFICATION AUTHORITY OF INDIA (UIDAI RO-Delhi)

1. Bids under two bid system (Technical-Bid and Financial-Bid) in sealed covers are invited bids for "Supply, Installation, Testing and Commissioning of HVAC System for Unique Identification Authority of India (UIDAI RO-Delhi), Planning Commission, New Delhi" to be installed at the site at Ground Floor, Pragati Maidan Metro Station, New Delhi. Bidders are requested to superscribe Tender Enquiry No, date and date of opening of the Bids on the sealed covers to avoid the Bid being declared invalid.

2. The address and contact numbers for sending Bids or seeking clarifications regarding this Tender Enquiry are given below -

- a. Bids/queries to be addressed to : **SO(Admin), UIDAI, RO-Delhi.**
- b. Postal address for sending the Bids : Room No.28, Janpath Hotel, Janpath, New Delhi-110 001
- c. Name/designation of the contact personnel : **A.K.Sharma, SO(Admin)**
- d. Telephone numbers of the contact personnel : **011-23747147**
- e. e-mail ids of contact personnel : ashokkumar.uidai@gmail.com

3. This Tender Enquiry is divided into Five Chapter as follows:
- a. **Chapter- I** – Contains General Information and Instructions for the Bidders about the Tender Enquiry such as the time, place of submission and opening of tenders, Validity period of tenders, etc (page 3-5) .
 - b. **Chapter- II** – Conditions of Contract which will form part of the contract with successful bidder (page 6-14) .
 - c. **Chapter- III** – Schedule of Requirement i.e. essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical Specifications, Delivery Period, Mode of Delivery and Consignee details (page 15).
 - d. **Chapter- IV** – Specifications and allied Technical Details (Page 16-17).
 - e. **Chapter- V** – Price Schedule (to be utilised by the bidders for quoting their prices) Contains Evaluation Criteria and Format for Price Bids (Page 18).
 - f. **Chapter – VI** – Draft Contract Agreement (page 28-46)
5. This Tender Enquiry is being issued with no financial commitment and the Purchaser (UIDAI RO-Delhi) reserves the right to change or vary any part thereof at any stage. Purchaser (UIDAI RO-Delhi) also reserves the right to withdraw the TENDER ENQUIRY, should it become necessary at any stage.
6. Each page of this tender enquiry is to be signed by the tenderer and following certificate given in the offer letter:
- `I/WE HEREBY DECLARE THAT ALL THE TERMS AND CONDITIONS GIVEN IN TENDER NO. D-11016/11/Del/2011-Admin/UIDAI DATED ____ April, 2013 ARE ACCEPTED BY ME/US ON BEHALF OF MY/OUR FIRM`
7. The cost of tender is Rs.1000/- (Rupees One Thousand Only) (non refundable). The payment will be accepted by Demand Draft/Pay Order in favour of PAO, UIDAI, payable at New Delhi only (cash will not be accepted).

(Suman Kumar)
ADG (Admin)

Chapter-1 – Instructions to Bidders

1. Last date and time for depositing the Bids: 28th June, 2013 BY 1430 HRS.

The sealed quotations under two-bid system i.e. Technical-Bid and Financial-Bid in sealed covers should be deposited/reach by the due date and time. Both the sealed bids should be enclosed in a third envelop superscribing as “Tender for Supply, Installation, Testing and Commissioning of HVAC System for Unique Identification Authority of India (UIDAI RO-Delhi), Planning Commission, New Delhi”.

2. Manner of depositing the Bids: Sealed quotations should be either dropped in the Tender Box or sent by registered post at the address given above so as to reach by the due date and time. Late tenders will not be considered. No responsibility will be taken for postal delay or non delivery/ non-receipt of Bid documents. Bids sent by FAX or e-mail will not be considered (unless they have been specifically called for by these modes due to urgency).

3. Time and date for opening of Bids : 28th June, 2013, 2013 BY 1500 HRS.

(If due to any exigency, the due date for opening of the Technical-Bid is declared a closed holiday, then it will be opened on the next working day at the same time or on any other day/time, as intimated by the Purchaser (UIDAI RO-Delhi)).

4. Location of the Tender Box: Room No. 28, Hotel Janpath, Janpath, New Delhi - 110 001.

Only those quotations that are found in the tender box will be opened.

5. Place of opening of the Bids: Room No. 28, Hotel Janpath, Janpath, New Delhi -110 001.

The Bidders may depute their representatives, duly authorized in writing, to attend the opening of Quotation on the due date and time. Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders. **This event will not be postponed due to non-presence of your representative.**

6. Two-Bid system: In case of the Two-bid system, only the Technical Bid would be opened on the time and date mentioned above. Date of opening of the Financial Bid will be intimated after acceptance of the Technical Bids. Financial Bids of only those firms will be opened, whose Technical Bids are found compliant/suitable after Technical evaluation is done by the Purchaser (UIDAI RO-Delhi).

7. Forwarding of Bids – Bids should be forwarded by Bidders under their original memo / letter pad inter alia furnishing details like TIN number, VAT/CST number, Bank address with EFT Account if applicable, etc and complete postal & e-mail address of their office.

- 8. Clarification regarding contents of the TENDER ENQUIRY:** A prospective bidder requiring clarification regarding the contents of the bidding documents shall notify to the Purchaser (UIDAI RO-Delhi) in writing about the clarifications sought not later than 14 (fourteen) days prior to the date of opening of the Bids. Copies of the query and clarification by the purchaser will be sent to all prospective bidders who have received the bidding documents.
- 9. Modification and Withdrawal of Bids:** A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Purchaser (UIDAI RO-Delhi) prior to deadline prescribed for submission of bids. A withdrawal notice may be sent by fax but it should be followed by a signed confirmation copy to be sent by post and such signed confirmation should reach the purchaser not later than the deadline for submission of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of bid security.
- 10. Clarification regarding contents of the Bids:** During evaluation and comparison of bids, the Purchaser (UIDAI RO-Delhi) may, at its discretion, ask the bidder for clarification of his bid. The request for clarification will be given in writing and no change in prices or substance of the bid will be sought, offered or permitted. No post-bid clarification on the initiative of the bidder will be entertained.
- 11. Rejection of Bids:** Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summarily rejection with forfeiture of EMD. Conditional tenders will be rejected.
- 12. Unwillingness to quote:** Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be delisted for the given range of items as mentioned in this TENDER ENQUIRY.
- 13. Validity of Bids:** The Bids should remain valid for a period of **120 days** from the last date of submission of the Bids.
- 14. Earnest Money Deposit:**– Bidders are required to submit Earnest Money Deposit (EMD) for an amount of Rs 15,000/- (Rs. Fifteen Thousand Only) along with their bids. The EMD may be submitted in the form of an Account Payee Demand Draft/Pay Order from any of the public sector banks or a private sector bank authorized to conduct government business. EMD of the unsuccessful bidders will be returned to them without interest at the earliest after expiry of the final bid validity and or before the 30th day after the award of the contract. The Bid Security of the successful bidder would be returned, without any interest whatsoever, after the receipt of Performance Security as called for in the contract. **EMD is not required to be submitted by those Bidders who are registered with the Central Purchase Organization (e.g. DGS&D), National Small Industries**

Corporation (NSIC). The EMD will be forfeited if the bidder withdraws or amends, impairs or derogates from the tender in any respect within the validity period of their tender. The EMD shall stand forfeited in case the successful bidder does not accept the LOI on award of worked services.

Chapter-II – Conditions of Contract

The Bidder is required to give confirmation of their acceptance of the Conditions of the Request for Proposal mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Successful Bidder (lowest bidder) in the Contract) as selected by the Purchaser (UIDAI RO-Delhi). Failure to do so may result in rejection of the Bid submitted by the Bidder.

1. **Law:** The Contract shall be considered and made in accordance with the laws of the Republic of India. The contract shall be governed by and interpreted in accordance with the laws of the Republic of India.
2. **Effective Date of the Contract:** The contract shall come into effect on the date of signatures of both the parties on the contract (Effective Date) and shall remain valid until the completion of the obligations of the parties under the contract. The deliveries and supplies and performance of the services shall commence from the effective date of the contract.
3. **Arbitration:** All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to construction or performance, which cannot be settled amicably, may be resolved through arbitration.
4. **Penalty for use of Undue influence** : The Successful Bidder (lowest bidder) undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Purchaser (UIDAI RO-Delhi) or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present Contract or any other Contract with the Government of India. Any breach of the aforesaid undertaking by the Successful Bidder (lowest bidder) or any one employed by him or acting on his behalf (whether with or without the knowledge of the Successful Bidder (lowest bidder)) or the commission of any offers by the Successful Bidder (lowest bidder) or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Purchaser (UIDAI RO-Delhi) to cancel the contract and all or any other contracts with the Successful Bidder (lowest bidder) and recover from the Successful Bidder (lowest bidder) the amount of any loss arising from such cancellation. A decision of the Purchaser (UIDAI RO-Delhi) or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Successful Bidder (lowest bidder). Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Successful Bidder (lowest bidder) towards any officer/employee of the Purchaser (UIDAI RO-Delhi) or to any other person in a position to influence any officer/employee of the Purchaser (UIDAI RO-Delhi) for showing any favour in relation to

this or any other contract, shall render the Successful Bidder(lowest bidder) to such liability/ penalty as the Purchaser (UIDAI RO-Delhi) may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Purchaser (UIDAI RO-Delhi).

5. **Agents / Agency Commission** : The Successful Bidder(lowest bidder) confirms and declares to the Purchaser (UIDAI RO-Delhi) that the Successful Bidder(lowest bidder) is the original manufacturer of the stores/provider of the services referred to in this Contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the contract to the Successful Bidder(lowest bidder); nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Successful Bidder(lowest bidder) agrees that if it is established at any time to the satisfaction of the Purchaser (UIDAI RO-Delhi) that the present declaration is in any way incorrect or if at a later stage it is discovered by the Purchaser (UIDAI RO-Delhi) that the Successful Bidder(lowest bidder) has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Successful Bidder(lowest bidder) will be liable to refund that amount to the Purchaser (UIDAI RO-Delhi). The Successful Bidder(lowest bidder) will also be debarred from entering into any supply Contract with the Government of India for a minimum period of five years. The Purchaser (UIDAI RO-Delhi) will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Successful Bidder(lowest bidder) who shall in such an event be liable to refund all payments made by the Purchaser (UIDAI RO-Delhi) in terms of the Contract along with interest at the rate of 2% per annum above LIBOR rate. The Purchaser (UIDAI RO-Delhi) will also have the right to recover any such amount from any contracts concluded earlier with the Government of India.

6. **Access to Books of Accounts** : In case it is found to the satisfaction of the Purchaser (UIDAI RO-Delhi) that the Successful Bidder(lowest bidder) has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the Successful Bidder(lowest bidder), on a specific request of the Purchaser (UIDAI RO-Delhi), shall provide necessary information/ inspection of the relevant financial documents/information.

7. **Non-disclosure of Contract documents** : Except with the written consent of the Purchaser (UIDAI RO-Delhi)/ Successful Bidder(lowest bidder), other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. **Liquidated Damages** : In the event of the Successful Bidder(lowest bidder)'s failure to submit the Bonds, Guarantees and Documents, supply the stores/goods/services and conduct trials, installation of equipment, training, etc as specified in this contract, the Purchaser (UIDAI RO-Delhi) may, at his discretion, withhold any payment until the completion of the contract. The PURCHASER (UIDAI RO-Delhi) may also deduct from the SUCCESSFUL BIDDER(LOWEST BIDDER) as agreed, liquidated damages to the sum of 1% (One) of the contract price of the delayed/undelivered stores/services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 10% of the value of delayed stores.

9. **Termination of Contract** : The Purchaser (UIDAI RO-Delhi) shall have the right to terminate this Contract in part or in full in any of the following cases :-

- (a) The delivery of the material/services is delayed for causes not attributable to Force Majeure for more than (15 Days) after the scheduled date of delivery.
- (b) The Successful Bidder(lowest bidder) is declared bankrupt or becomes insolvent.
- (c) The delivery of material / services is delayed due to causes of Force Majeure by more than (01 month) provided Force Majeure clause is included in contract.
- (d) The Purchaser (UIDAI RO-Delhi) has noticed that the Successful Bidder(lowest bidder) has utilised the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.
- (e) As per decision of the Arbitration Tribunal.

10. **Notices** : Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/airmail, addressed to the last known address of the party to whom it is sent.

11. **Transfer and Sub-letting** : The Successful Bidder(lowest bidder) has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.

12. **Patents and other Industrial Property Rights** : The prices stated in the present Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial property rights. The Successful Bidder(lowest bidder) shall indemnify the Purchaser (UIDAI RO-Delhi) against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Successful Bidder(lowest bidder) shall be responsible for the completion of the supplies including spares, tools, technical literature and training

aggregates irrespective of the fact of infringement of the supplies, irrespective of the fact of infringement of any or all the rights mentioned above.

13) **Amendments** : No provision of present Contract shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this Contract and signed on behalf of both the parties and which expressly states to amend the present Contract.

14) **Taxes and Duties** :

(a) **The bidders are required to quote the prices on 'All Inclusive' basis i.e. the quoted prices shall be inclusive of all Govt. taxes & levies applicable, freight charges, insurance charges, packing charges, installation Charges etc.** The rate and the nature of Tax applicable at the time of supply and included in the quoted prices should be shown separately. Taxes will be paid to the Successful Bidder(lowest bidder) at the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale / services is legally liable to sales tax / service tax and the same is payable as per the terms of the contract.

(b). If a Bidder is exempted from payment of any duty/tax upto any value of supplies from them, he should clearly state that no such duty/tax will be charged by him up to the limit of exemption which he may have. If any concession is available in regard to rate/quantum of any Duty/tax, it should be brought out clearly. Stipulations like, the said duty/tax was presently not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a Bidder that such duty/tax will not be charged by him even if the same becomes applicable later on. In respect of the Bidders, who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of such duty/tax which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders.

(c). Any change in any duty/tax upward/downward as a result of any statutory variation in excise taking place within contract terms shall be allowed to the extent of actual quantum of such duty/tax paid by the supplier. Similarly, in case of downward revision in any duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the Purchaser (UIDAI RO-Delhi) by the Successful Bidder(lowest bidder). All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the Successful Bidder(lowest bidder).

15. **Performance Guarantee**: The bidder will be required to furnish a Performance Bank Guarantee by way of Bank Guarantee through a Public Sector Bank or a private sector bank authorised to conduct government business for a sum equal to 10 % of the contract value within 05 days of signing of the contract valid for a period of 60 days beyond contract period.

16. **Tolerance clause** – To take care of any change in the requirement during the period starting from issue of TENDER ENQUIRY till placement of the contract, Purchaser (UIDAI RO-Delhi) reserves the right to **50%** plus/minus increase or decrease the quantity of the required goods / services upto that limit without any change in the terms & conditions and prices quoted by the Supplier (lowest bidder). While awarding the contract, the quantity ordered will be increased or decreased by the Purchaser (UIDAI RO-Delhi) within this tolerance limit.

19. **Payment Terms** - It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through ECS/EFT mechanism instead of payment through cheques, wherever feasible. The payment will be made as per the following terms, on production of the requisite documents:

- (a). Payment will be made on successful execution of supply order issued against the Supply Order.
- (b). Amount of LD / Risk Expense etc., if any, will be deducted from the billing amount.

17. **Advance Payments**: No advance payment(s) will be made in any case whatsoever.

18. **Paying Authority**:

- (a). **PAO, UIDAI HQ, Planning Commission, 2nd Floor, Tower-1, Jeevan Bharti Building, Connaught Place, New Delhi – 110 001.**

The payment of bills will be made on submission of the following documents, whichever applicable, by the Successful Bidder(lowest bidder) to the Paying Authority along with the bill:

- i. Ink-signed copy of contingent bill / Successful Bidder(lowest bidder)'s bill.
- ii. Ink-signed copy of Commercial invoice / Successful Bidder(lowest bidder)'s bill.
- iii. Details for electronic payment viz Account holder's name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code (if these details are not incorporated in contract).
- iv. Any other document / certificate that may be provided for in the contract.
- v. User Acceptance, where applicable.
- vi. Certificate mentioned at Para 22 (c) (Fall Clause).
- vii. Quantity / Life certificate of the equipments to be enclosed with the bill.

19. **Fall clause -**

(a). The price charged for the stores / services to be supplied under the contract by the Contractor shall in no event exceed the lowest prices at which the contractor sells the stores / services or offer to sell stores / services of identical description to any persons / Organisation including the purchaser or any department of the Central government or any Department of state government or any statutory undertaking the central or state government as the case may be during the period till performance of all supply Orders placed during the currency of the Supply Order is completed.

(b). If at any time, during the said period the contractor reduces the sale price, sells or offer to sell such stores / services to any person / organisation including the purchaser or any Deptt, of central Govt. or any Department of the State Government or any Statutory undertaking of the Central or state Government as the case may be at a price lower than the price chargeable under the contract, the Successful Bidder forthwith notify such reduction or sale or offer of sale to the Director General of Supplies & Disposals and the price payable under the contract for the stores / services of such reduction of sale or offer of the sale shall stand correspondingly reduced. The above stipulation will, however, not apply to:--

i. Exports by the contractor.

ii. Sale of goods as original equipment at price lower than the prices charged for normal replacement.

iii. Sale of goods such as drugs which have expiry dates.

iv. Sale of goods / services at lower price on or after the date of completion of sale/placement of the order of goods / services by the authority concerned under the existing or previous contracts as also under any previous contracts entered into with the Central or State Govt. Depts, including their undertakings excluding joint sector companies and/or private parties and bodies.

(c). The Successful Bidder (lowest bidder) shall furnish the following certificate to the UIDAI RO-Delhi along with bill for payment for supplies made against the contract – “We certify that there has been no reduction in sale price of the stores/ services of description identical to the stores / services supplied to the Government under the contract herein and such stores / services have not been offered/sold by me/us to any person/organisation including the purchaser or any department of Central Government or any Department of a state Government or any Statutory Undertaking of the Central or state Government as the case may be upto the date of bill/the date of completion of supplies against all supply orders placed during the currency of the contract at price lower than the price charged to the government under the contract except for quantity of stores / services categories under sub-

clauses (a),(b) and (c) of sub-para (ii) above details of which are given below -

20. **Risk & Expense clause** –

(a). Should the stores / services or any instalment thereof not be delivered with the time or time specified in the contract documents, or if defective delivery is made in respect of the stores / services or any instalment thereof, the Purchaser (UIDAI RO-Delhi) shall, after granting the Successful Bidder(lowest bidder) 45 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, declare the contract as cancelled either wholly or to the extent of such default.

(b). Should the stores / services or any installment thereof not perform in accordance with the specifications / parameters provided by the SUCCESSFUL BIDDER(LOWEST BIDDER) during the check proof tests to be done in the PURCHASER (UIDAI RO-Delhi)'s country, the PURCHASER (UIDAI RO-Delhi) shall be at liberty, without prejudice to any other remedies for breach of contract, to cancel the contract wholly or to the extent of such default.

(c). In case of a material breach that was not remedied within 45 days, the PURCHASER (UIDAI RO-Delhi) shall, having given the right of first refusal to the SUCCESSFUL BIDDER(LOWEST BIDDER) be at liberty to purchase, manufacture, or procure from any other source as he thinks fit, other stores / services of the same or similar description to make good:-

i. Such default.

ii. In the event of the contract being wholly determined the balance of the stores / services remaining to be delivered thereunder.

(d). Any excess of the purchase price, cost of manufacturer, or value of any stores procured from any other Successful Bidder as the case may be, over the contract price appropriate to such default or balance shall be recoverable from the SUCCESSFUL BIDDER(LOWEST BIDDER). Such recoveries shall not exceed **10%** of the value of the contract.”

21. **Force Majeure**: Should any Force Majeure circumstances arise, each of the contracting party shall be excused for the non-fulfilment or for the delayed fulfilment of any of its contractual obligations, if the affected party within (**30 days**) of its occurrence informs the other party in writing. Force Majeure shall mean fires, floods, natural disasters or other acts, that are unanticipated or unforeseeable, and not brought about at the instance of the party claiming to be affected by such event, or which, if anticipated or foreseeable, could not be avoided or provided for, and which has caused the non-performance or delay in performance, such as war, turmoil, strikes, sabotage, explosions, quarantine restriction beyond the control of either party. A party claiming Force Majeure shall exercise

reasonable diligence to seek to overcome the Force Majeure event and to mitigate the effects thereof on the performance of its obligations under this contract.

22. **Specification**: The Successful Bidder(lowest bidder) guarantees to meet the specifications as per Part-II of this contract. In case of items where make/model has been specified, the Successful Bidder(lowest bidder) shall offer items of same make/model. However, in case of non availability of same make/model, optional make/model of equal/higher specification may be quoted. Acceptance of the same will be subject to approval of the competent authority.

23. **OEM Certificate**: In case the Bidder is not the OEM, the agreement certificate with the OEM for sourcing the spares shall be mandatory. However, where OEMs do not exist, minor aggregates and spares can be sourced from authorized vendors subject to quality certification.

24. **Earliest Acceptable Year of Manufacture**: Quantity/Life certificate will need to be enclosed with the Bill.

25. **Claims**: The following Claims clause will form part of the contract placed on successful Bidder –

a. The claims may be presented either: (a) on quantity of the stores, where the quantity does not correspond to the quantity shown in the Packing List/Insufficiency in packing, or (b) on quality of the stores, where quality does not correspond to the quality mentioned in the contract.

b. The quantity claims for deficiency of quantity shall be presented within 45 days of completion of JRI and acceptance of goods.

c. The quality claims for defects or deficiencies in quality noticed during the JRI shall be presented within 45 days of completion of JRI and acceptance of goods. Quality claims shall be presented for defects or deficiencies in quality noticed during warranty period earliest but not later than 45 days after expiry of the guarantee period.

d. The description and quantity of the stores are to be furnished to the Successful Bidder(lowest bidder) along with concrete reasons for making the claims. Copies of all the justifying documents shall be enclosed to the presented claim. The Successful Bidder(lowest bidder) will settle the claims within 45 days from the date of the receipt of the claim at the Successful Bidder(lowest bidder)'s office, subject to acceptance of the claim by the Successful Bidder(lowest bidder). In case no response is received during this period the claim will be deemed to have been accepted.

e. The Successful Bidder(lowest bidder) shall collect the defective or rejected goods from the location nominated by the Purchaser (UIDAI RO-Delhi) and deliver the

repaired or replaced goods at the same location under Successful Bidder(lowest bidder)'s arrangement.

f. Claims may also be settled by reduction of cost of goods under claim from bonds submitted by the Successful Bidder(lowest bidder) or payment of claim amount by Successful Bidder(lowest bidder) through demand draft drawn on an Indian Bank, in favour of Principal Controller/Controller of Defence Accounts concerned.

g. The quality claims will be raised solely by the Purchaser (UIDAI RO-Delhi) and without any certification/countersignature by the Successful Bidder(lowest bidder)'s representative stationed in India.

26. **Quality:** The quality of the stores delivered according to the present Contract shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Successful Bidder(lowest bidder)'s country or specifications enumerated as per TENDER ENQUIRY and shall also include therein modification to the stores suggested by the Purchaser (UIDAI RO-Delhi). Such modifications will be mutually agreed to. Successful Bidder(lowest bidder) confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications thereto and spares of improved and modified equipment are backward integrated and interchangeable with same equipment supplied by the Successful Bidder(lowest bidder) in the past if any. The Successful Bidder(lowest bidder) shall supply an interchangeability certificate along with the changed part numbers wherein it should be mentioned that item would provide as much life as the original item.

27. **Inspection Authority:** The inspection will be carried out by authorised representative of UIDAI RO-Delhi. The mode of Inspection will be Departmental Inspection/User Inspection/Joint Inspection/Self-certification.

28. **Warranty:** The following Warranty will form part of the contract placed on successful Bidder -

i. The Successful Bidder(lowest bidder) warrants that the goods supplied under the contract conform to technical specifications prescribed and shall perform according to the said technical specifications.

ii. The Successful Bidder(lowest bidder) warrants for a period of **12 months** from the date of acceptance of stores by Joint Receipt Inspection, wherever warranty is applicable.

Chapter III – Schedule of Retirement

1. **Schedule of Requirements (SOR)** – Detailed SOR of the items to be included in the proposed Supply Order are listed in **Appendix-‘A’** to this tender enquiry / TENDER ENQUIRY. Description / specifications of the required HVAC System alongwith the Estimated Consumption are indicated therein.

2. **Scope of Supply Order.** The proposed Supply Order will be an agreement between the purchaser (UIDAI RO-Delhi) and lowest bidder(s) (supplier) to supply the items included in this tender at specified prices, terms & conditions during the period of the contract. RC will be in the nature of a standing offer and neither any quantity nor any anticipated requirement is guaranteed. As the RC is a standing offer, either party (Successful Bidder(lowest bidder) / Purchaser (UIDAI RO-Delhi)) can revoke it at any time after giving a reasonable notice (at least 30 days in advance) and opportunity. However, once a supply order is placed on the Successful Bidder for supply of a definite quantity in terms of the Supply Order during the validity period of the Supply Order that supply order becomes a valid and binding contract and the Successful Bidder will be bound to supply the ordered quantity.

3. **Delivery Period** – The successful bidder / contractor will require to sign an agreement with the Purchaser (UIDAI RO-Delhi) within 05 working days from the date of written intimation to this effect. Supply order will be issued against the contract agreement for procurement of contracted items on as required basis. Delivery period for supply of items will be mentioned separately in each supply order which would normally be 07 days from the date of issue of supply order or as mutually agreed upon by the and Purchaser (UIDAI RO-Delhi). Please note that Contract can be cancelled unilaterally by the Purchaser (UIDAI RO-Delhi) in case contracted items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Purchaser (UIDAI RO-Delhi), with applicability of LD clause. Non-execution of supply order by stipulated time frame will render liable to forfeiture of Performance Guarantee of the bidder awarded the Supply Order.

4. **Consignee details** – **Room No. 28, Hotel Janpath, Janpath, New Delhi -110 001.**

5. **Contract Operating Authority.** Once the Supply Order is finalized, the same will be operated by UIDAI RO-Delhi, Administration Division

Chapter- IV – Specifications and Allied Technical Details

1. Technical Details:

(a) Specifications of the HVAC Systems to be included in the Supply Order are given in **Appendix-‘A’** to this tender enquiry. The items offered by the bidders shall conform to these specifications failing which such tenders will be technically rejected.

(b) Installation / commissioning of items, wherever applicable, shall be taken by the successful bidder (Contractor) free of cost at the site at Ground Floor, Pragati Maidan Metro Station, New Delhi.

(c) The site of commissioning the equipments may be inspected by the bidders before submission of bids.

2. Eligibility Criteria: The firm fulfilling the following eligibility criterions will considered for opening of their Financial-Bids:-

(a) Average annual financial turnover during the last three years, ending 31st Mar of the previous financial year from the date of opening of technical-bid, should not be less than **Rs. 50 Lakhs**. Documentary evidence to this effect duly attested should be submitted alongwith the technical bid.

(b) The firm must have successfully executed Supply Orders for Supply, Installation, Testing and Commissioning of HVAC System or Similar Items as included in this Rate Contract to Govt. organisations with consolidated value for Supply, Installation, Testing and Commissioning of HVAC System Supply Orders not less than **Rs 25 Lakhs** in any of the last three financial years.

(c) As documentary evidence of the eligibility criteria mentioned in sub-para (b) above, copies of Rate Contracts / supply orders alongwith satisfactory contract / order execution report(s) issued by the concerned organization should be enclosed by the bidder with the Technical-Bid.

(d) Bidder must have valid VAT / Sales Tax Registration Certificate. A copy of the certificate alongwith receipt of the last premium paid should be enclosed with the Technical-Bid.

(e) Bidder must possess valid PAN Card. A copy of the same should be enclosed with the Technical-Bid.

3. Two-Bid System – The quotation must be submitted by the bidder under two-bid system i.e. Technical-Bid and Financial Bid to be submitted in separate sealed covers as per formats at **Appendix-‘B’** and **Appendix-‘C’** respectively. The Technical Bid and Financial Bid both enclosed in separate sealed covers should be put together in a bigger sealed cover duly sealed superscribing as “Tender for Supply, Installation, Testing and Commissioning of HVAC System for Unique Identification Authority of India (UIDAI RO-

Delhi), Planning Commission, New Delhi “ and should be addressed to ADG (Admin), UIDAI RO-Delhi, New Delhi. Bidders are also required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any.

Chapter- V – Price Schedule

1. **Evaluation Criteria** - The broad guidelines for evaluation of Bids/Quotations will be as follows:

(a). Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the TENDER ENQUIRY, both technically and commercially.

(b). In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Purchaser (UIDAI RO-Delhi) with reference to the technical characteristics of the equipment/items and terms & conditions as mentioned in the TENDER ENQUIRY. The compliance of Technical Bids would be determined on the basis of the parameters specified in the TENDER ENQUIRY (**Appendix-‘B’** also refers). The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.

(c). The Lowest Bid will be decided upon the lowest price quoted by the particular Bidder as per the Price Format given at **Appendix-‘C’** to this tender enquiry / TENDER ENQUIRY. Only one rate shall be quoted against each item in Financial Bid and items make / model / brief description/ specification and MRP shall also be indicated. Overwriting of prices should be avoided and in case any correction is done, the same must be countersigned.

The consideration of taxes and duties in evaluation process will be as follows:

i. All taxes and duties (including those for which exemption certificates are issued) quoted by the Bidders will be considered. The ultimate cost to the Purchaser (UIDAI RO-Delhi) would be the deciding factor for ranking of Bids. **Bidders are required to quote all inclusive rates for the items included in the proposed Supply Order.** The quoted rates, once accepted, shall remain valid till completion of Supply Order.

(d). If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

(e). **The lowest bid will be decided based on ‘Price of Two Set’ mentioned at Appendix ‘C’** The Lowest Acceptable Bid will be considered further for placement of contract / Supply Order after complete clarification and price negotiations as decided by the Purchaser (UIDAI RO-Delhi). The Purchaser (UIDAI RO-Delhi) also reserves the right to do Apportionment of Quantity, if it is convinced that Lowest Bidder is not in a position to supply full quantity in stipulated time.

Appendix 'A'**NAME OF PROJECT- Customization Works of Proposed Regional Office, Delhi at Pragati Maidan Metro Station****NAME OF WORK- HVAC WORKS (HIGHER SIDE)**

S.No	Description	Unit	Qty.
1.0	Air Cooled Package Unit		
	Supply, installation, testing and commissioning of following capacities package unit complete with all components, controls, interlocking, electrical accessories, including air cooled condenser and refrigerant piping as required. The package shall be provided with filtration arrangement having down to 10 micron particle size with the minimum efficiency of 90%. Necessary arrangement included with the equipment including controls, interlocking, drain pipe of appropriate size, 6mm thick rubber pads, channel at the bottom of package unit, minor civil works etc. as required.		
i)	5.5 TR Air cooled package unit	Nos.	2
2.0	Extra insulated liquid and suction copper refrigerant piping:		
	Supply, installation, testing and commissioning of 16G copper tube of suitable size as required for above package units including cutting, bending, jointing, brazing etc. as required.		
	(The approximate distance between indoor and outdoor unit of AC is approximately 70 meters. Bidders are advised to visit the site for better appreciation of requirement.)		
	Total		

TECHNICAL SPECIFICATIONS

A) AIR COOLED PACKAGE TYPE CONDITIONER UNIT:

1.0 SCOPE:

The scope of this section comprises supply, erection, testing and commissioning of self-contained air cooled package air-conditioning units and auxiliaries conforming to these specifications and in accordance with the drawings.

2.0 PACKAGE UNITS:

Air cooled package unit shall be as per approved make, energy efficient reciprocating compressor complete with vibration isolators & factory installed controls (like HP & LP cutouts, inter locking Fan & Compressor, Thermostat with selector switch etc) & accessories including wiring. Efficient cooling coil shall be selected for low velocity with copper tubing having extended aluminium fins. Hydraulic expansion of tubes assures tight bonding between tubes & fins for high heat transfer. Tubes shall be arranged in a staggered design for best air contact thus giving low bypass. The cooling coil circuits are fed with liquid refrigerant through the thermostatic expansion valve and a distributor. Blower of an evaporating unit shall be statically and dynamically balanced and shall be selected to give required airflow as identified in the drawings. Filters shall be minimum 25mm thick synthetic type or equivalent wire aluminium frame. Drain pan shall be of 18 gauge insulated with expanded polyethylene sheet. Casing shall be heavy gauge factory painted to provide better protection against rusting.

Remote air cooled condensing unit shall have to be most efficient condenser coils made out of copper tubing with extended aluminium fins. Tubes shall be arranged in a staggered design for better efficiency. Condenser fans shall be selected to operate quietly for required CFM to keep condensing temperature low. The compressor may be in the indoor unit or with the outdoor unit, but, it should be capable of operating continuously even at high ambient of 46 deg C (115 deg F). The condensing unit shall be installed with steel base frame, alongwith cushy foot mounting vibration isolation pads.

Interconnected refrigerant piping between outdoor unit & indoor unit shall be of heavy gauge copper complete with thermostatic expansion valve, liquid line strainer, drier, shut off valves, high & low pressure gauges including insulated suction line. 25mm thick neoprene rubber pads shall be supplied for each indoor/outdoor units. The units shall be tested in accordance with IS:1391.

3.0 INDICATING PANEL :-

1. The **following should be incorporated in the indicating panel:**
 - a) Each compressor ON and OFF.
 - (b) Evaporator fan ON and OFF.

- (c) Each condenser ON and OFF.
 - (d) HP cut out for each compressor.
 - (e) LP cut out for each compressor.
 - (f) Reset push button in case of alarm.
2. For 'ON' indications green LEDs should be provided.
 3. For 'OFF' indications red LEDs should be provided.
 4. The position of indicating lamps should be at the eye level and also just above their respective start /stop push buttons.

Measuring instruments :-

Each compressor should have suction and discharge pressure gauges.

4.0 INSTALLATION:

The units shall be mounted on ribbed rubber pads for vibration isolation. The contractor shall supply the required charge of refrigerant, lubricant and other consumables, for commissioning and testing of the equipment.

All the equipment shall be thoroughly tested and checked for leaks. All safety controls shall be suitably set and a record of all setting shall be furnished to the project supervisor.

5.0 TESTING:

Unit capacity in tons Refrigeration, shall be computed from the temperature readings and air-flow measurements. Flow measurements shall be preferably by a hot-wire anemometer or a velometer. Computed results shall conform to the specified capacities and the power consumption shall conform to the figures furnished by the manufacturer.

6.0 PAINTING:

Shop coats of paint that have become marred during transportation or erection shall be cleaned off with mineral spirits, wire brushed and spot primed over the affected areas, then coated with enamel paint to match the finish over the adjoining shop- painted surfaces.

7.0 CONDENSER DRAIN PIPING :

All pipes to be used for cold water (makeup), drain, and condensate drain shall be PVC pipe conforming to IS: 4985 - Class I & all joints should be Gluing or solvent cementing as per manufacturer recommendation.

8.0 REFRIGERANT PIPING:

- a. All refrigerant pipes and fittings shall be type 'L' hard drawn copper tubes and wrought copper fitting suitable for connection with silver solder phos copper.
- b. All joints in copper piping shall be sweat joints using low temperature brazing and/or silver solder. Before jointing any copper pipe or fittings, its interior shall be thoroughly cleaned by passing a clean cloth via wire or cable through its entire length. The piping shall be continuously kept clean of dirt etc. while construction the joints. Subsequently, it shall be thoroughly blown out using carbondioxide/nitrogen.
- c. Refrigerant lines shall be sized to limit pressure drop between evaporator and condensing unit to less than 0.2 kg per Sq.cm.
- d. Removable type combination drier and filter shall be installed in liquid line of the refrigeration system incorporating a three way valve bypass. After ninety days of operation, liquid line drier and filter cartridges must be replaced.
- e. After the refrigerant piping installation has been completed the refrigerant piping system shall be pressure tested using, Freon mixed with nitrogen/carbondioxide at a pressure of 20 Kg per Sq. cm. (High side) and 10 Kg per Sq. cm (Low side) pressure shall be maintained on the system for a minimum of 12 hours. The system shall then be evacuated to a minimum vacuum of 70 cm. of mercury and held for 24 hours, during which time, change in vacuum shall not exceed 12 cm of mercury. Vacuum shall be checked with vacuum gage.
- f. All refrigerant piping shall be installed strictly as per the instructions and recommendations of air conditioning equipment manufacturers.

9.0 TESTING & BALANCING:

- a. All piping shall be tested to hydrostatic test pressure of atleast two and half times the maximum operating pressure, but not less than 24 hours. All leaks and defects in joints revealed during the testing shall be rectified and gotten approved at site.
- b. Piping repaired subsequent to the above pressure test shall be retested in the same manner.
- c. System may be tested in sections and such sections shall be securely capped, then retested for entire system.
- d. The contractor shall give sufficient notice to all other agencies at site, of his intention to test a section or sections of piping and all testing shall be witnessed and recorded by Owner's site representative.
- e. The contractor shall make sure that proper noiseless circulation of fluid is achieved through all coils and other heat exchange equipment in the system

concerned. If proper circulation is not achieved the contractor shall rectify the defective connection. He shall bear all expenses for carrying out the above rectifications, including the tearing up and refinishing of floors and walls as required.

- f. The contractor shall provide all materials, tools, equipment, instruments, services and labour required to perform the test.
- g. Complete certified report shall be submitted for evaluation and approval. Upon approval, four copies of the balancing report shall be submitted with complete drawings and documents.

10.0 LIST OF APPROVED MAKES:

S. No.	Items	Acceptable Makes
1.	Packaged Type AC Units	Hitachi / Blue Star / Carrier / Voltas

11.0 STANDARDS & CODES:

The equipments and workmanship shall comply to the relevant clauses of the following standards and specifications

- a) National Building Code of India
- b) Relevant BIS Codes
- c) ASHRAE Standards/ARI Standards
- d) ASHRAE Hand Book:
 - i. System & Equipment 2004
 - ii. Applications 2003
 - iii. Refrigeration 2002
 - iv. Fundamentals 2001
- e) Duct construction standards as per relevant BIS Codes/ SMACNA
- f) Air Filters as per ASHRAE 52.2-1999
- g) Indoor Air Quality as per 62-1999
- h) Kitchen exhaust ducts as per NFPA and ASHRAE
- i) Motors, Cabling, Wiring and Accessories as per relevant BIS codes.

12.0 GUARANTEE :

The equipment supplying agency will submit the guarantee of the equipment supplied and the workman ship of installation for a minimum period of 1 year including free service period shall be of 1 year, all inclusive at no extra cost. The rate quoted shall deem to be inclusive of the guarantee and service charges.

Appendix-‘B’**FORMAT FOR SUBMISSION OF TECHNICAL BID**

Srl.	Tendered Parameters / Eligibility Criteria	Details to be furnished by the tenderer	Documentary Evidence required to be attached	Compliance by the tenderer (Yes / No)
1.	Average Annual financial turnover during last three years, ending 31 st Mar of the previous financial year from the date of opening of Technical Bids, should not be less than Rs. 50 Lakhs.		Audited Balance Sheet for the last three FYs to be enclosed.	
2.	The firm must have successfully executed Rate Contract / Supply Orders of Consumable / Similar Items as included in this Rate Contract to Govt. Organisations with consolidated value of the Rate Contract / Supply Order not less than Rs.25 Lakhs in any of the last three financial years.		As documentary evidence of the eligibility criteria mentioned at serial 2, copies of Rate Contracts / supply orders alongwith satisfactory contract / order execution report(s) issued by the concerned organization should be enclosed	
3.	Bidder must have valid VAT / Sales Tax Registration Certificate.		A copy of the certificate alongwith receipt of last premium paid should be enclosed.	
4.	Bidder must possess valid PAN Card. A copy of the same should be enclosed with the Technical-Bid.		A copy of the PAN Card should be enclosed.	
5.	Details of Earnest Money Deposit (EMD) as per details given in para 14 of Part-I of RFP/TE. (Indicate DD/Pay Order/FDR No., amount, date of issue and issuing Bank/Branch).		EMD to be submitted in original.	

6.	Compliance to the Schedule of Requirement (Refer Para 4 of Part-2 of the Tender Enquiry). Format for the same is at Annexure-1		N/A	
7.	Acceptance of All Terms & Conditions of the Tender Enquiry.		N/A	

Undertaking:-

- (a) I/We have read all terms and conditions of the NIT and abide by them.
- (b) It is certified that our Firm has not been blacklisted by any Govt. organization in the past.
- (c) It is further certified that we have inspected the office sites where the CCTV Systems is proposed to be installed.

Office seal

Place:

Dated:

(Signature of the Tenderer)

Appendix 'C'**FORMAT FOR SUBMISSION OF FINANCIAL BID**

NAME OF PROJECT- Customization Works of Proposed Regional Office, Delhi at Pragati Maidan Metro Station

NAME OF WORK- HVAC WORKS (HIGHER SIDE)

S.No	Description	Unit	Qty.	Amount (Lump Sum) (All inclusive)
1.0	Air Cooled Package Unit			
	Supply, installation, testing and commissioning of following capacities package unit complete with all components, controls, interlocking, electrical accessories, including air cooled condenser and refrigerant piping as required. The package shall be provided with filtration arrangement having down to 10 micron particle size with the minimum efficiency of 90%. Necessary arrangement included with the equipment including controls, interlocking, drain pipe of appropriate size, 6mm thick rubber pads, channel at the bottom of package unit, minor civil works etc. as required.			
i)	5.5 TR Air cooled package unit	Nos.	2	
2.0	Extra insulated liquid and suction copper refrigerant piping:			
	Supply, installation, testing and commissioning of 16G copper tube of suitable size as required for above package units including cutting, bending, jointing, brazing etc. as required.			
	(The approximate distance between indoor and outdoor unit of AC is approximately 70 meters. Bidders are advised to visit the site for better appreciation of requirement.)			
	Total			

Date :

Place :

(Signature of the Bidder)

CERTIFICATE OF FALL CLAUSE

(It is mandatory to submit this Certificate, failing which the bids will be rejected)

We certify that there has been no reduction in the Supply, Installation, Testing and Commissioning of HVAC System supplied to the Government under the contract herein and such items/services have and department of Central Government or any Department of a state Government or any Statutory Undertaking of the Central or state Government, as the case may be, upto the date of bill/the date of completion of supplies against all orders placed during the currency of the Supply Order at price lower than the price charged to the government under the contract.”

Office Stamp

Signature of Bidder

DRAFT AGREEMENT

This Agreement is made on the ____ day of the month of April, 2013, between, on the one hand, on the behalf of the President of India acting through Director General, Unique Identification Authority of India, Planning Commission, Government of India,

(hereinafter called the "Purchaser") and, on the other hand, M/s _____ (herein called the "Successful Bidder").

WHEREAS

- (a) The Purchaser has requested the Successful Bidder to supply certain items as defined in this Contract (hereinafter called the "Services").
- (b) The Successful Bidder, having represented to the Employer that it has the required professional skills, and personnel and technical resources, has agreed to supply the items on the terms and conditions set forth in this "Contract".

NOW THEREFORE the parties hereto hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this contract:-
 - (a) Conditions of Contract.
 - (b) Schedule of Requirement
 - (c) Specifications and Allied Technical Details
 - (d) Price Schedule
- 2. The mutual rights and obligations of the Purchaser and the Successful Bidder shall be as set forth in the contract, in particular:
 - (a) the Successful Bidder shall supply the items in accordance with the provisions of the contract; and
 - (b) the Purchaser shall make payment to the Successful Bidder in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed in their respective names as of the day and year first above written.

**Signed, Sealed and Delivered from
On behalf of M/s _____**

**Signed, Sealed and Delivered
from & On behalf of President
of India**

Signed

Name

Designation

Date

June , 2013

Place

New Delhi

Signed

Name

Suman Kumar

Designation

ADG (Admin)

Date

June 2013

Place

New Delhi

in the presence of:

Name

Designation

Date

Place

New Delhi

in the presence of:

Name

Designation

Date

Place

New Delhi

Conditions of Contract

1. **Law**: The Contract shall be considered and made in accordance with the laws of the Republic of India. The contract shall be governed by and interpreted in accordance with the laws of the Republic of India.
2. **Effective Date of the Contract**: The contract shall come into effect on the date of signatures of both the parties on the contract (Effective Date) and shall remain valid until the completion of the obligations of the parties under the contract. The deliveries and supplies and performance of the services shall commence from the effective date of the contract.
3. **Arbitration**: All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to construction or performance, which cannot be settled amicably, may be resolved through arbitration.
4. **Penalty for use of Undue influence** : The Successful Bidder(lowest bidder) undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Purchaser (UIDAI RO-Delhi) or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present Contract or any other Contract with the Government of India. Any breach of the aforesaid undertaking by the Successful Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Successful Bidder) or the commission of any offers by the Successful Bidder or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Purchaser (UIDAI RO-Delhi) to cancel the contract and all or any other contracts with the Successful Bidder and recover from the Successful Bidder the amount of any loss arising from such cancellation. A decision of the Purchaser (UIDAI RO-Delhi) or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Successful Bidder. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Successful Bidder towards any officer/employee of the Purchaser (UIDAI RO-Delhi) or to any other person in a position to influence any officer/employee of the Purchaser (UIDAI RO-Delhi) for showing any favour in relation to this or any other contract, shall render the Successful Bidder to such liability/ penalty as the Purchaser (UIDAI RO-Delhi) may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Purchaser (UIDAI RO-Delhi).
5. **Agents / Agency Commission** : The Successful Bidder confirms and declares to the Purchaser (UIDAI RO-Delhi) that the Successful Bidder is the original manufacturer of the

stores/provider of the services referred to in this Contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the contract to the Successful Bidder; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Successful Bidder agrees that if it is established at any time to the satisfaction of the Purchaser (UIDAI RO-Delhi) that the present declaration is in any way incorrect or if at a later stage it is discovered by the Purchaser (UIDAI RO-Delhi) that the Successful Bidder has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Successful Bidder will be liable to refund that amount to the Purchaser (UIDAI RO-Delhi). The Successful Bidder will also be debarred from entering into any supply Contract with the Government of India for a minimum period of five years. The Purchaser (UIDAI RO-Delhi) will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Successful Bidder who shall in such an event be liable to refund all payments made by the Purchaser (UIDAI RO-Delhi) in terms of the Contract along with interest at the rate of 2% per annum above LIBOR rate. The Purchaser (UIDAI RO-Delhi) will also have the right to recover any such amount from any contracts concluded earlier with the Government of India.

6. **Access to Books of Accounts** : In case it is found to the satisfaction of the Purchaser (UIDAI RO-Delhi) that the Successful Bidder has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the Successful Bidder, on a specific request of the Purchaser (UIDAI RO-Delhi), shall provide necessary information/inspection of the relevant financial documents/information.

7. **Non-disclosure of Contract documents** : Except with the written consent of the Purchaser (UIDAI RO-Delhi)/ Successful Bidder, other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. **Liquidated Damages** : In the event of the Successful Bidder's failure to submit the Bonds, Guarantees and Documents, supply the stores/goods/services and conduct trials, installation of equipment, training, etc as specified in this contract, the Purchaser (UIDAI RO-Delhi) may, at his discretion, withhold any payment until the completion of the contract. The PURCHASER (UIDAI RO-Delhi) may also deduct from the SUCCESSFUL BIDDER as agreed, liquidated damages to the sum of 1% (One) of the contract price of the delayed/undelivered stores/services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 10% of the value of delayed stores.

9. **Termination of Contract** : The Purchaser (UIDAI RO-Delhi) shall have the right to terminate this Contract in part or in full in any of the following cases :-

- (a) The delivery of the material/services is delayed for causes not attributable to Force Majeure for more than (15 Days) after the scheduled date of delivery.
- (b) The Successful Bidder is declared bankrupt or becomes insolvent.
- (c) The delivery of material / services is delayed due to causes of Force Majeure by more than (01 month) provided Force Majeure clause is included in contract.
- (d) The Purchaser (UIDAI RO-Delhi) has noticed that the Successful Bidder has utilised the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.
- (e) As per decision of the Arbitration Tribunal.

10. **Notices** : Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/airmail, addressed to the last known address of the party to whom it is sent.

11. **Transfer and Sub-letting** : The Successful Bidder has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.

12. **Patents and other Industrial Property Rights** : The prices stated in the present Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial property rights. The Successful Bidder shall indemnify the Purchaser (UIDAI RO-Delhi) against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Successful Bidder shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies, irrespective of the fact of infringement of any or all the rights mentioned above.

13) **Amendments** : No provision of present Contract shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this Contract and signed on behalf of both the parties and which expressly states to amend the present Contract.

14) **Taxes and Duties** :

- (a) **The bidders are required to quote the prices on 'All Inclusive' basis i.e. the quoted prices shall be inclusive of all Govt. taxes & levies applicable, freight charges, insurance charges, packing charges, installation Charges etc.** The rate and the nature of Tax applicable at the time of supply and included in the quoted prices should be shown separately. Taxes will be paid to the Successful Bidder at the rate at

which it is liable to be assessed or has actually been assessed provided the transaction of sale / services is legally liable to sales tax / service tax and the same is payable as per the terms of the contract.

(b). If a Bidder is exempted from payment of any duty/tax upto any value of supplies from them, he should clearly state that no such duty/tax will be charged by him up to the limit of exemption which he may have. If any concession is available in regard to rate/quantum of any Duty/tax, it should be brought out clearly. Stipulations like, the said duty/tax was presently not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a Bidder that such duty/tax will not be charged by him even if the same becomes applicable later on. In respect of the Bidders, who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of such duty/tax which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders.

(c). Any change in any duty/tax upward/downward as a result of any statutory variation in excise taking place within contract terms shall be allowed to the extent of actual quantum of such duty/tax paid by the supplier. Similarly, in case of downward revision in any duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the Purchaser (UIDAI RO-Delhi) by the Successful Bidder. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the Successful Bidder.

15. **Performance Guarantee**: The bidder will be required to furnish a Performance Bank Guarantee by way of Bank Guarantee through a Public Sector Bank or a private sector bank authorised to conduct government business for a sum equal to 10 % of the contract value within 05 days of signing of the contract valid for a period of 60 days beyond contract period.

16. **Tolerance clause** – To take care of any change in the requirement during the period starting from issue of TENDER ENQUIRY till placement of the contract, Purchaser (UIDAI RO-Delhi) reserves the right to **50%** plus/minus increase or decrease the quantity of the required goods / services upto that limit without any change in the terms & conditions and prices quoted by the Supplier (lowest bidder). While awarding the contract, the quantity ordered will be increased or decreased by the Purchaser (UIDAI RO-Delhi) within this tolerance limit.

19. **Payment Terms** - It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through ECS/EFT mechanism instead of payment through cheques, wherever feasible. The payment will be made as per the following terms, on production of the requisite documents:

(a). Payment will be made on successful execution of supply order issued against the Supply Order.

(b) Amount of LD / Risk Expense etc., if any, will be deducted from the billing amount.

17. **Advance Payments**: No advance payment(s) will be made in any case whatsoever.

18. **Paying Authority**:

(a). **PAO, UIDAI HQ, Planning Commission, 2nd Floor, Tower-1, Jeevan Bharti Building, Connaught Place, New Delhi – 110 001.**

The payment of bills will be made on submission of the following documents, whichever applicable, by the Successful Bidder to the Paying Authority along with the bill:

- i. Ink-signed copy of contingent bill / Successful Bidder's bill.
- ii. Ink-signed copy of Commercial invoice / Successful Bidder's bill.
- iii. Details for electronic payment viz Account holder's name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code (if these details are not incorporated in contract).
- iv. Any other document / certificate that may be provided for in the contract.
- v. User Acceptance, where applicable.
- vi. Certificate mentioned at Para 22 (c) (Fall Clause).
- vii. Quantity / Life certificate of the equipments to be enclosed with the bill.

19. **Fall clause -**

(a). The price charged for the stores / services to be supplied under the contract by the Contractor shall in no event exceed the lowest prices at which the contractor sells the stores / services or offer to sell stores / services of identical description to any persons / Organisation including the purchaser or any department of the Central government or any Department of state government or any statutory undertaking of the central or state government as the case may be during the period till performance of all supply Orders placed during the currency of the Supply Order is completed.

(b). If at any time, during the said period the contractor reduces the sale price, sells or offer to sell such stores / services to any person / organisation including the purchaser or any Deptt, of central Govt. or any Department of the State Government or any Statutory undertaking of the Central or state Government as the case may be at a price lower than the price chargeable under the contract, the Successful Bidder forthwith notify such reduction or sale or offer of sale to the Director General of Supplies & Disposals and the price payable under the contract for the stores / services

of such reduction of sale or offer of the sale shall stand correspondingly reduced. The above stipulation will, however, not apply to:--

- i. Exports by the contractor.
- ii. Sale of goods as original equipment at price lower than the prices charged for normal replacement.
- iii. Sale of goods such as drugs which have expiry dates.
- iv. Sale of goods / services at lower price on or after the date of completion of sale/placement of the order of goods / services by the authority concerned under the existing or previous contracts as also under any previous contracts entered into with the Central or State Govt. Depts, including their undertakings excluding joint sector companies and/or private parties and bodies.

(c). The Successful Bidder (lowest bidder) shall furnish the following certificate to the UIDAI RO-Delhi along with bill for payment for supplies made against the contract – “We certify that there has been no reduction in sale price of the stores/ services of description identical to the stores / services supplied to the Government under the contract herein and such stores / services have not been offered/sold by me/us to any person/organisation including the purchaser or any department of Central Government or any Department of a state Government or any Statutory Undertaking of the Central or state Government as the case may be upto the date of bill/the date of completion of supplies against all supply orders placed during the currency of the contract at price lower than the price charged to the government under the contract except for quantity of stores / services categories under sub-clauses (a),(b) and (c) of sub-para (ii) above details of which are given below -”.

20. **Risk & Expense clause** –

(a). Should the stores / services or any instalment thereof not be delivered with the time or time specified in the contract documents, or if defective delivery is made in respect of the stores / services or any instalment thereof, the Purchaser (UIDAI RO-Delhi) shall, after granting the Successful Bidder 45 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, declare the contract as cancelled either wholly or to the extent of such default.

(b). Should the stores / services or any installment thereof not perform in accordance with the specifications / parameters provided by the SUCCESSFUL BIDDER during the check proof tests to be done in the PURCHASER (UIDAI RO-Delhi)'s country, the PURCHASER (UIDAI RO-Delhi) shall be at liberty, without prejudice to any other remedies for breach of contract, to cancel the contract wholly or to the extent of such default.

(c). In case of a material breach that was not remedied within 45 days, the PURCHASER (UIDAI RO-Delhi) shall, having given the right of first refusal to the SUCCESSFUL BIDDER be at liberty to purchase, manufacture, or procure from any other source as he thinks fit, other stores / services of the same or similar description to make good:-

i. Such default.

ii. In the event of the contract being wholly determined the balance of the stores / services remaining to be delivered thereunder.

(d). Any excess of the purchase price, cost of manufacturer, or value of any stores procured from any other Successful Bidder as the case may be, over the contract price appropriate to such default or balance shall be recoverable from the SUCCESSFUL BIDDER. Such recoveries shall not exceed **10%** of the value of the contract.”

21. **Force Majeure:** Should any Force Majeure circumstances arise, each of the contracting party shall be excused for the non-fulfilment or for the delayed fulfilment of any of its contractual obligations, if the affected party within **(30 days)** of its occurrence informs the other party in writing. Force Majeure shall mean fires, floods, natural disasters or other acts, that are unanticipated or unforeseeable, and not brought about at the instance of the party claiming to be affected by such event, or which, if anticipated or foreseeable, could not be avoided or provided for, and which has caused the non-performance or delay in performance, such as war, turmoil, strikes, sabotage, explosions, quarantine restriction beyond the control of either party. A party claiming Force Majeure shall exercise reasonable diligence to seek to overcome the Force Majeure event and to mitigate the effects thereof on the performance of its obligations under this contract.

22. **Specification:** The Successful Bidder guarantees to meet the specifications as per Part-II of this contract. In case of items where make/model has been specified, the Successful Bidder shall offer items of same make/model. However, in case of non availability of same make/model, optional make/model of equal/higher specification may be quoted. Acceptance of the same will be subject to approval of the competent authority.

23. **OEM Certificate:** In case the Bidder is not the OEM, the agreement certificate with the OEM for sourcing the spares shall be mandatory. However, where OEMs do not exist, minor aggregates and spares can be sourced from authorized vendors subject to quality certification.

24. **Earliest Acceptable Year of Manufacture:** Quantity/Life certificate will need to be enclosed with the Bill.

25. **Claims:** The following Claims clause will form part of the contract placed on successful Bidder –

a. The claims may be presented either: (a) on quantity of the stores, where the quantity does not correspond to the quantity shown in the Packing List/Insufficiency in

packing, or (b) on quality of the stores, where quality does not correspond to the quality mentioned in the contract.

b. The quantity claims for deficiency of quantity shall be presented within 45 days of completion of JRI and acceptance of goods.

c. The quality claims for defects or deficiencies in quality noticed during the JRI shall be presented within 45 days of completion of JRI and acceptance of goods. Quality claims shall be presented for defects or deficiencies in quality noticed during warranty period earliest but not later than 45 days after expiry of the guarantee period.

d. The description and quantity of the stores are to be furnished to the Successful Bidder along with concrete reasons for making the claims. Copies of all the justifying documents shall be enclosed to the presented claim. The Successful Bidder will settle the claims within 45 days from the date of the receipt of the claim at the Successful Bidder's office, subject to acceptance of the claim by the Successful Bidder. In case no response is received during this period the claim will be deemed to have been accepted.

e. The Successful Bidder shall collect the defective or rejected goods from the location nominated by the Purchaser (UIDAI RO-Delhi) and deliver the repaired or replaced goods at the same location under Successful Bidder's arrangement.

f. Claims may also be settled by reduction of cost of goods under claim from bonds submitted by the Successful Bidder or payment of claim amount by Successful Bidder through demand draft drawn on an Indian Bank, in favour of Principal Controller/Controller of Defence Accounts concerned.

g. The quality claims will be raised solely by the Purchaser (UIDAI RO-Delhi) and without any certification/countersignature by the Successful Bidder's representative stationed in India.

26. **Quality:** The quality of the stores delivered according to the present Contract shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Successful Bidder's country or specifications enumerated as per TENDER ENQUIRY and shall also include therein modification to the stores suggested by the Purchaser (UIDAI RO-Delhi). Such modifications will be mutually agreed to. Successful Bidder confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications thereto and spares of improved and modified equipment are backward integrated and interchangeable with same equipment supplied by the Successful Bidder in the past if any. The Successful Bidder shall supply an interchangeability certificate along with the changed part numbers wherein it should be mentioned that item would provide as much life as the original item.

27. **Inspection Authority**: The inspection will be carried out by authorised representative of UIDAI RO-Delhi. The mode of Inspection will be Departmental Inspection/User Inspection/Joint Inspection/Self-certification.

28. **Warranty** : The following Warranty will form part of the contract placed on successful Bidder -

i. The Successful Bidder warrants that the goods supplied under the contract conform to technical specifications prescribed and shall perform according to the said technical specifications.

ii. The Successful Bidder warrants for a period of **12 months** from the date of acceptance of stores by Joint Receipt Inspection, wherever warranty is applicable.

Schedule of Requirements

1. **Schedule of Requirements (SOR)** – Detailed SOR of the items to be included in the proposed Supply Order are listed in **Appendix-‘A’** to this Agreement. Description / specifications of the required HVAC System alongwith the Estimated Consumption are indicated therein.

2. **Scope of Supply Order.** The proposed Supply Order will be an agreement between the purchaser (UIDAI RO-Delhi) and lowest bidder(s) (supplier) to supply the items included in this tender at specified prices, terms & conditions during the period of the contract. RC will be in the nature of a standing offer and neither any quantity nor any anticipated requirement is guaranteed. As the RC is a standing offer, either party (Successful Bidder / Purchaser (UIDAI RO-Delhi)) can revoke it at any time after giving a reasonable notice (at least 30 days in advance) and opportunity. However, once a supply order is placed on the Successful Bidder for supply of a definite quantity in terms of the Supply Order during the validity period of the Supply Order that supply order becomes a valid and binding contract and the Successful Bidder will be bound to supply the ordered quantity.

3. **Delivery Period** – The successful bidder / contractor will require to sign an agreement with the Purchaser (UIDAI RO-Delhi) within 05 working days from the date of written intimation to this effect. Supply order will be issued against the contract agreement for procurement of contracted items on as required basis. Delivery period for supply of items will be mentioned separately in each supply order which would normally be 07 days from the date of issue of supply order as mutually agreed upon by the and Purchaser (UIDAI RO-Delhi). Please note that Contract can be cancelled unilaterally by the Purchaser (UIDAI RO-Delhi) in case contracted items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Purchaser (UIDAI RO-Delhi), with applicability of LD clause. Non-execution of supply order by stipulated time frame will render liable to forfeiture of Performance Guarantee of the bidder awarded the Supply Order.

4. **Consignee details** – ***UIDAI, RO-Delhi, Room No.28, Hotel Janpath, Janpath, New Delhi – 11 00 01.***

8. **Contract Operating Authority.** Once the Supply Order is finalized, the same will be operated by ***UIDAI RO-Delhi, Administration Division***

Specifications and Allied Technical Details

1. Technical Details:

(a) Specifications of the HVAC Systems to be included in the Supply Order are given in **Appendix-‘A’** to this Agreement. The items offered by the bidders shall conform to these specifications failing which such tenders will be technically rejected.

(b) Installation / commissioning of items, wherever applicable, shall be taken by the successful bidder (Contractor) free of cost at the site at Ground Floor, Pragati Maidan Metro Station, New Delhi.

(c) The site of commissioning the equipments may be inspected by the bidders before submission of bids.

NAME OF PROJECT- Customization Works of Proposed Regional Office, Delhi at Pragati Maidan Metro Station

NAME OF WORK- HVAC WORKS (HIGHER SIDE)

S.No	Description	Unit	Qty.
1.0	Air Cooled Package Unit		
	Supply, installation, testing and commissioning of following capacities package unit complete with all components, controls, interlocking, electrical accessories, including air cooled condenser and refrigerant piping as required. The package shall be provided with filtration arrangement having down to 10 micron particle size with the minimum efficiency of 90%. Necessary arrangement included with the equipment including controls, interlocking, 6mm thick rubber pads, channel at the bottom of package unit, minor civil works etc. as required.		
i)	5.5 TR Air cooled package unit	Nos.	2
2.0	Extra insulated liquid and suction copper refrigerant piping:		
	Supply, installation, testing and commissioning of 16G copper tube of suitable size as required for above package units including cutting, bending, jointing, brazing etc. as required.		
i)	5.5 TR Air cooled package unit	RM	lot

TECHNICAL SPECIFICATIONS

A) AIR COOLED PACKAGE TYPE CONDITIONER UNIT:

1.0 SCOPE:

The scope of this section comprises supply, erection, testing and commissioning of self-contained air cooled package air-conditioning units and auxiliaries conforming to these specifications and in accordance with the drawings.

2.0 PACKAGE UNITS:

Air cooled package unit shall be as per approved make, energy efficient reciprocating compressor complete with vibration isolators & factory installed controls (like HP & LP cutouts, inter locking Fan & Compressor, Thermostat with selector switch etc) & accessories including wiring. Efficient cooling coil shall be selected for low velocity with copper tubing having extended aluminium fins. Hydraulic expansion of tubes assures tight bonding between tubes & fins for high heat transfer. Tubes shall be arranged in a staggered design for best air contact thus giving low bypass. The cooling coil circuits are fed with liquid refrigerant through the thermostatic expansion valve and a distributor. Blower of an evaporating unit shall be statically and dynamically balanced and shall be selected to give required airflow as identified in the drawings. Filters shall be minimum 25mm thick synthetic type or equivalent wire aluminium frame. Drain pan shall be of 18 gauge insulated with expanded polyethylene sheet. Casing shall be heavy gauge factory painted to provide better protection against rusting.

Remote air cooled condensing unit shall have to be most efficient condenser coils made out of copper tubing with extended aluminium fins. Tubes shall be arranged in a staggered design for better efficiency. Condenser fans shall be selected to operate quietly for required CFM to keep condensing temperature low. The compressor may be in the indoor unit or with the outdoor unit, but, it should be capable of operating continuously even at high ambient of 46 deg C (115 deg F). The condensing unit shall be installed with steel base frame, alongwith cushy foot mounting vibration isolation pads.

Interconnected refrigerant piping between outdoor unit & indoor unit shall be of heavy gauge copper complete with thermostatic expansion valve, liquid line strainer, drier, shut off valves, high & low pressure gauges including insulated suction line. 25mm thick neoprene rubber pads shall be supplied for each indoor/outdoor units. The units shall be tested in accordance with IS:1391.

3.0 INDICATING PANEL :-

2. The **following should be incorporated in the indicating panel:**

- a) Each compressor ON and OFF.
- (b) Evaporator fan ON and OFF.

- (c) Each condenser ON and OFF.
 - (d) HP cut out for each compressor.
 - (e) LP cut out for each compressor.
 - (f) Reset push button in case of alarm.
2. For 'ON' indications green LEDs should be provided.
 3. For 'OFF' indications red LEDs should be provided.
 4. The position of indicating lamps should be at the eye level and also just above their respective start /stop push buttons.

Measuring instruments :-

Each compressor should have suction and discharge pressure gauges.

4.0 INSTALLATION:

The units shall be mounted on ribbed rubber pads for vibration isolation. The contractor shall supply the required charge of refrigerant, lubricant and other consumables, for commissioning and testing of the equipment.

All the equipment shall be thoroughly tested and checked for leaks. All safety controls shall be suitably set and a record of all setting shall be furnished to the project supervisor.

5.0 TESTING:

Unit capacity in tons Refrigeration, shall be computed from the temperature readings and air-flow measurements. Flow measurements shall be preferably by a hot-wire anemometer or a velometer. Computed results shall conform to the specified capacities and the power consumption shall conform to the figures furnished by the manufacturer.

6.0 PAINTING:

Shop coats of paint that have become marred during transportation or erection shall be cleaned off with mineral spirits, wire brushed and spot primed over the affected areas, then coated with enamel paint to match the finish over the adjoining shop- painted surfaces.

7.0 CONDENSER DRAIN PIPING :

All pipes to be used for cold water (makeup), drain, and condensate drain shall be PVC pipe conforming to IS: 4985 - Class I & all joints should be Gluing or solvent cementing as per manufacturer recommendation.

8.0 REFRIGERANT PIPING:

- a. All refrigerant pipes and fittings shall be type 'L' hard drawn copper tubes and wrought copper fitting suitable for connection with silver solder phos copper.
- b. All joints in copper piping shall be sweat joints using low temperature brazing and/or silver solder. Before jointing any copper pipe or fittings, its interior shall be thoroughly cleaned by passing a clean cloth via wire or cable through its entire length. The piping shall be continuously kept clean of dirt etc. while construction the joints. Subsequently, it shall be thoroughly blown out using carbondioxide/nitrogen.
- c. Refrigerant lines shall be sized to limit pressure drop between evaporator and condensing unit to less than 0.2 kg per Sq.cm.
- d. Removable type combination drier and filter shall be installed in liquid line of the refrigeration system incorporating a three way valve bypass. After ninety days of operation, liquid line drier and filter cartridges must be replaced.
- e. After the refrigerant piping installation has been completed the refrigerant piping system shall be pressure tested using, Freon mixed with nitrogen/carbondioxide at a pressure of 20 Kg per Sq. cm. (High side) and 10 Kg per Sq. cm (Low side) pressure shall be maintained on the system for a minimum of 12 hours. The system shall then be evacuated to a minimum vacuum of 70 cm. of mercury and held for 24 hours, during which time, change in vacuum shall not exceed 12 cm of mercury. Vacuum shall be checked with vacuum gage.
- f. All refrigerant piping shall be installed strictly as per the instructions and recommendations of air conditioning equipment manufacturers.

9.0 TESTING & BALANCING:

- a. All piping shall be tested to hydrostatic test pressure of atleast two and half times the maximum operating pressure, but not less than 24 hours. All leaks and defects in joints revealed during the testing shall be rectified and gotten approved at site.
- b. Piping repaired subsequent to the above pressure test shall be retested in the same manner.
- c. System may be tested in sections and such sections shall be securely capped, then retested for entire system.
- d. The contractor shall give sufficient notice to all other agencies at site, of his intention to test a section or sections of piping and all testing shall be witnessed and recorded by Owner's site representative.
- e. The contractor shall make sure that proper noiseless circulation of fluid is achieved through all coils and other heat exchange equipment in the system

concerned. If proper circulation is not achieved the contractor shall rectify the defective connection. He shall bear all expenses for carrying out the above rectifications, including the tearing up and refinishing of floors and walls as required.

- f. The contractor shall provide all materials, tools, equipment, instruments, services and labour required to perform the test.
- g. Complete certified report shall be submitted for evaluation and approval. Upon approval, four copies of the balancing report shall be submitted with complete drawings and documents.

10.0 LIST OF APPROVED MAKES:

S. No.	Items	Acceptable Makes
1.	Packaged Type AC Units	Hitachi / Blue Star / Carrier / Voltas

11.0 STANDARDS & CODES:

The equipments and workmanship shall comply to the relevant clauses of the following standards and specifications

- j) National Building Code of India
- k) Relevant BIS Codes
- l) ASHRAE Standards/ARI Standards
- m) ASHRAE Hand Book:
 - i. System & Equipment 2004
 - ii. Applications 2003
 - iii. Refrigeration 2002
 - iv. Fundamentals 2001
- n) Duct construction standards as per relevant BIS Codes/ SMACNA
- o) Air Filters as per ASHRAE 52.2-1999
- p) Indoor Air Quality as per 62-1999
- q) Kitchen exhaust ducts as per NFPA and ASHRAE
- r) Motors, Cabling, Wiring and Accessories as per relevant BIS codes.

12.0 GUARANTEE :

The equipment supplying agency will submit the guarantee of the equipment supplied and the workman ship of installation for a minimum period of 1 year including free service period shall be of 1 year, all inclusive at no extra cost. The rate quoted shall deem to be inclusive of the guarantee and service charges.

FINANCIAL**NAME OF PROJECT- Customization Works of Proposed Regional Office, Delhi at Pragati Maidan Metro Station****NAME OF WORK- HVAC WORKS (HIGHER SIDE)**

S.No	Description	Unit	Qty.	Unit Rate	Amount (All Inclusive)
1.0	Air Cooled Package Unit				
	Supply, installation, testing and commissioning of following capacities package unit complete with all components, controls, interlocking, electrical accessories, including air cooled condenser and refrigerant piping as required. The package shall be provided with filtration arrangement having down to 10 micron particle size with the minimum efficiency of 90%. Necessary arrangement included with the equipment including controls, interlocking, 6mm thick rubber pads, channel at the bottom of package unit, minor civil works etc. as required.				
i)	5.5 TR Air cooled package unit	Nos.	2		
2.0	Extra insulated liquid and suction copper refrigerant piping:				
	Supply, installation, testing and commissioning of 16G copper tube of suitable size as required for above package units including cutting, bending, jointing, brazing etc. as required.				
i)	5.5 TR Air cooled package unit	RM	lot		
3.0	Grand Total (All inclusive)				
The quoted prices shall be inclusive of all applicable taxes.					