

Tender Details

Tender No: ISTRAC/PURC/2020E0212101

Tender Date: 17/09/2020

Purchase Entity: PURCHASE

Tender Notice

Tender Notice No. ISTRAC/PURC/2020E0212101

Tender Attachments

Technical Documents Only : These documents will be sent to Vendor

Attachment - I:

IDT0032650000000000isro05401.pdf

Attachment - II:

IDT0032650000000000isro05402.xlsx

Attachment - III:

Attachment - IV:

Attachment - V:

INSTRUCTIONS TO TENDERERS FOR ONLINE SUBMISSION OF TENDERS THROUGH E-PROCUREMENT

**INSTRUCTIONS TO TENDERERS FOR ONLINE SUBMISSION OF TENDERS THROUGH E-PROCUREMENT
SYSTEM:**

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISRO TELEMETRY TRACKING AND COMMAND NETWORK (ISTRAC)

Plot No. 12 & 13, 3rd Main, 2nd Phase

PEENYA INDUSTRIAL AREA, BANGALORE –560 058

Phone No.: 080-28376383 Fax: 080-28094061 E-mail: purchase@istrac.org

1. Conditions for online submission of tenders:

1.1.It is mandatory for interested parties to register as vendors in our e-procurement portal <https://eprocure.isro.gov.in> for participating in online eProcurement process of ISRO. Only registered vendors can submit their offers online in our eProcurement portal.

1.2.To register as vendors please refer to the help demos listed on the home page of the e-procurement link mentioned above. They may approach help desk (contact details provided on the home page) for any technical help for registration and subsequent process.

1.3.Bidders shall arrange themselves all resources, including Digital signature certificates and Internet Connections at their own cost, for participating in online tendering.

1.4.Vendors can download the tender details and submit their offers online using their vendor accounts (obtained during registration) in our portal. Help demos for tender download and bidding processes are given on home page.1.5.The tender should be submitted online in the ISTRAC link before the due date and time as specified in the tender schedule in the portal.

1.6.Vendors shall also take note of other Instructions to tenderers indicated in the tender documents.

2. Procedure for seeking clarifications/help for the tender:

2.1.All enquiries regarding the tenders and submission of offers shall be online and only through our eProcurement portal.

2.2.Vendors may approach help desk e-mail id and phone number given on the home page for any technical help (e-mail: support.isro@nextenders.com and Ph:020-30187500).

3. Procedure for reporting technical issues, if any, in online submission:

3.1.In case bidder encounters any technical snag pertaining to e-procurement system while acting on the tender, computer screen shot of the error message with date & time stamp on the web-browser along with the query shall be e-mailed by the bidder to the help desk (as mentioned above) for problem resolution at least 24 hours before the due date and time of the tender.

3.2.The time taken to ascertain, evaluate and suggest a solution for the problem reported by vendor may vary from case to case. Hence vendors are advised to submit the bid well in advance before closing date and time to avoid last minute issues.

3.3. ISTRAC shall not be responsible for failure of vendors in submitting bids online caused due to technical reasons at vendor end such as network or power failures, computer failure, internet-browser, mistakes / errors in filling the bids on line by vendor etc.

3.4. Queries by vendors on technical problems on the last day of tender will not be binding on ISTRAC/ISRO for resolving/addressing. ISTRAC will not be responsible for non-submission of bids for those cases.

4. Terms & conditions for extension of Tender Due Date:

4.1. The Server Date & Time as appearing on our website <https://eprocure.isro.gov>. in shall only be considered for the cut-off date and time for receipt of tenders.

4.2. Request, if any, for extension of tender due date shall reach ISTRAC at least 4 working days in advance of due date and time for consideration. ISTRAC is not bound by such requests to extend the due date unless it feels necessary.

4.3. The e-procurement system does not permit submission of any offer after closing date and time of the e-tender. Hence, there is no scope for any late or delayed offer in the on-line bidding process. Requests for extension of due date and time citing technical issues in online submission of offers will not be entertained.

4.4. In case there is complete breakdown of eProcurement system on the last day of the tender for any reason then ISTRAC may extend the date for submission after their own assessment.

5. Reworking on Submitted bids:

5.1. Vendors have to note that once rework is initiated the status of the earlier submitted bid becomes Pending till the bidding process is completed once again. During the process of rework earlier submitted bid data becomes invalid and will not be available for opening. If rework is initiated then vendor has to complete the entire process of bid submission once again within the due date and time for a valid bid submission.

5.2. ISTRAC will not be responsible for non submission of bids resulting due to failure of vendor to once again complete the process of bid submission before due date after reworking of submitted bid is initiated.

5.3. Please note that unsolicited clarifications / changes / modifications sought by the vendors after submitting their bids will not be considered.

6. Procedure for filling offers online:

6.1.Vendors may please note that in case of two-part tender, the price details shall be mentioned only in the price-bid template. If the price details either in part or full are indicated in the technical bid, the bid will be disqualified.

6.2.Vendors may note that in e-procurement system submission of bid is a two-step process. After submission of their bids, vendors have to wait for bid sealing by ISTRAC purchase officer. Following that vendors have to submit open authorization in the e-procurement system to enable the purchase officer to open the bid. If open authorization is not completed by the vendor then purchase officer will not be able to open the bid and the bid becomes invalid.

7. Using Digital Certificates for online submission:

7.1.Vendors may note that digital keys of class-III USB tokens, which supports both digital signing and encryption are to be used for bidding in ISTRAC e-procurement system.

7.2.Vendors may note that they have to use the same digital key with which they submitted the bid to give open authorization. If vendors use different key for open authorization, the system will not accept the open authorization and the bid becomes invalid.

7.3.In case the digital key which is used during bid submission expires before giving open authorization, then vendor has to first login with the new key and use the expired key for completing open authorization process for the bid.

8. Uploading files in to E-procurement portal:

8.1.Vendors may please note that the maximum file size that can be uploaded per attachment in e-procurement system is 4 MB. If the document is more than 4 MB then the document is to be split into multiple documents of size less than 4 MB and upload into attachments. Literature / Technical data should accompany the quotation.

8.2.Similarly, if the number of files to be uploaded is more than the number of attachments allowed in the tender then group the files into folders such that the number of folders is less than the number of attachments. Further zip/archive the folders and upload as attachments. However, the attachment size should still be less than 4 MB.

8.3.Vendors may note that documents including Literature / Technical data are to be uploaded through e-procurement system only.

FORM B

INSTRUCTIONS TO TENDERERS:

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISRO TELEMETRY TRACKING AND COMMAND NETWORK (ISTRAC)

Plot No. 12 & 13, 3rd Main, 2nd Phase

PEENYA INDUSTRIAL AREA, BANGALORE –560 058

Phone No.: 080-28376383 Fax: 080-28094061 E-mail: purchase@istrac.org

INSTRUCTIONS TO TENDERERS AND TERMS AND CONDITIONS OF TENDERS FOR INDIGENOUS STORES ITEMS :

1.ISRO Telemetry Tracking and Command Network [ISTRAC] has implemented e-tender system for ONLINE tenders. ISTRAC invites offers through e-tender portal <https://e-procure.isro.gov.in> for the supply of items. The suppliers need to get enrolled in the e-tender portal to access tender and submit their offer online. Vendors need to have Digital Signature Certificate as detailed on our e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. No Manual/Postal/courier/e-mail/Fax offers will be entertained. No Manual tender document will be issued by ISTRAC. Suppliers are requested to note and comply with the Instructions to tenderers for online submission of tenders through E-Procurement System indicated in the document “INSTRUCTIONS TO TENDERERS FOR ONLINE SUBMISSION OF TENDERS THROUGH E-PROCUREMENT”.

2.Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be distinctly shown separately in the tender.

a.CST/VAT/SERVICE TAX:

With effect from 01.04.2007, Form-D has been withdrawn for Inter-State purchases by Government Departments. Accordingly, the suppliers have to indicate clearly the percentage of CST/VAT applicable. Service Tax if any applicable has to be clearly indicated.

b. EXCISE DUTY:

ISTRAC is eligible for Excise Duty Exemption under Ministry of Finance, Department of Revenue, Government of India, vide Central Excise Notification No.10/97-Central Excise, dated 01.03.1997 as amended by Notification No. 16/2007 dated 01.03.2007 and necessary Exemption Certificate will be provided.

3. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

4. a) Your quotation should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the price bid form. When quotations are given in terms of units other than those specified in the price bid form, relationship between the two sets of units must be furnished.

5. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

6. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be attached through online mode only.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever.

In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

7. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

8. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

9. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

10. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

11. The authority of the person signing the tender, if called for, should be produced.

12. For items having shelf life, those with maximum shelf life should be supplied if order is placed.

13. The goods / material offered should be strictly as per our specifications. Change(s) in specifications, if any, should be clearly indicated by the supplier in his quotation. The supplier should also indicate make/type No. of the materials / equipments offered.

14. The drawings, specifications, end-use, etc., given by ISTRAC along with the tender enquiry, are confidential and shall not be disclosed to any third party.

15. In case of two-part tenders, parties shall submit their offers as follows:-

a) Part-I – Technical Bid:

Only Technical details shall be mentioned in this bid and shall not upload any details of price along with the technical bid. Vendor specified terms column is to be filled with out indicating any price details . If any Price detail is mentioned in the Technical Bid such offer shall be rejected.

b) Part-II – Price Bid:

Only the price details along with applicable taxes and other cost if any shall be indicated in the price bid form.

TERMS & CONDITIONS OF TENDER

1. DEFINITIONS:

(a) The term 'Purchaser' shall mean the President of India or his successors or assigns.

(b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

c) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

d) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

2. PRICES:

Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

3. SECURITY DEPOSIT:

On acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and

(iii) of clause 10(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

4. GUARANTEE & REPLACEMENT:

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) PERFORMANCE BANK GUARANTEE: To fulfil guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On

the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.

(g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at purchaser's site.

(h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in para 4 (b) & (c) shall be the 'asked for' guarantee period plus two months.

5. PACKING FORWARDING & INSURANCE:

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

6. DESPATCH:

The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. TEST CERTIFICATE:

Wherever required, test certificates should be sent along with the despatch documents.

8. ACCEPTANCE OF STORES:

(a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. 8 (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

9. REJECTED STORES:

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

10. DELIVERY:

(a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified dates.

(b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the purchaser shall be entitled at his option either.

(i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or

(ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or

(iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly complying with the particulars are not, in the opinion of the purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor.

In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to re-purchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the purchaser, whose decision shall be final. It shall not be necessary for the purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the purchaser to recover damages for breach of Contract by the Contractor.

11. EXTENSION OF TIME:

As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the purchaser's right to recover liquidated damages under clause 10 thereof.

12. ERECTION OF PLANT & MACHINERY:

Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the purchaser, the purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the purchaser.

13. PAYMENT:

a. Contractor's bill will be passed for payment only after the stores have been received, inspected and accepted by the Purchaser.

b. In case of AMC/CAMC the payment will be made on pro-rata quarterly basis after satisfactory completion of service for the respective quarter against submission of bills duly certified by Engineer in-charge, ISTRAC and endorsed by their Division Head

14. MODE OF PAYMENT:

Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.

15. RECOVERY OF SUM DUE:

Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the purchaser on demand the remaining balance due. Similarly, if the purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the purchaser are finally adjudicated upon and paid by the Contractor.

16. INDEMNITY:

The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of infringement of any Patent, Copyright or Trademark, and shall at all times indemnify the purchaser against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfilment of the contract.

17. ARBITRATION:

In the event of any question, dispute or difference arising under these conditions or any conditions contained in the Purchase Order or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of the Head of the Purchase office or some other person appointed by him. It will be no objection that the arbitrator is a Government servant, that he had to deal with matter to which the Contract relates or that in the course of his duties as Government servant he

has expressed views on all or any other matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

If the arbitrator be the Head of the Centre/Unit –

(i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in office either to proceed with reference himself, or to appoint another person as arbitrator, or

(ii) In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Centre/Unit to appoint another person as arbitrator.

If the arbitrator be a person appointed by the Head of the Purchase Office – In the event of his dying, neglecting or refusing to act or resigning or being unable to act, for any reason, it shall be lawful for the Head of the Centre/Unit either to proceed with the reference himself or appoint another person as arbitrator in place of the outgoing arbitrator.

Subject as aforesaid the Arbitration & Conciliation Act 1996 and the rules thereunder and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this Clause. The Arbitrator shall have the power to extend with the consent of the purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during arbitration proceedings.

In the event of any dispute or difference relating to the interpretation and application for the provisions of the Contracts, such dispute or difference shall be referred by either party to Arbitration of one of the Arbitrations in the Department of Public Enterprises. The Arbitration Act 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Govt. of India. The parties to the dispute will share equally, the cost of arbitration as intimated by Arbitrator.

18. COUNTER TERMS AND CONDITION OF SUPPLIERS:

Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.

19. SECURITY FOR PURCHASE OF MATERIALS:

Successful tenderer will have to furnish in the form of a bank guarantee or any other form as called for by the purchaser towards adequate security for the materials and properties provided by the Purchaser for the due execution of the Contract.

20. Bank Guarantee towards Free Issue Materials (FIM):

The successful Tenderers shall furnish Bank Guarantee (BG) towards the cost of Free Issue Materials issued by Purchaser towards adequate Security for the FIM for the execution of the Contract. The BG is to be kept valid till supply and acceptance of the final product.

21. Earnest Money Deposit/Bid Security:

a. The Tender should be accompanied with an Earnest Money Deposit for a prescribed amount wherever called for in the Notice Inviting Tender [NIT]. Foreign vendors, registered vendors or vendors who have already applied for renewal of registration, Central PSUs/ PSEs/ Autonomous Bodies, Micro and Small Enterprises, KVIC, National Small Industries Corporation, etc., are exempted from the payment of EMD.

b. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.

22. Risk Purchase:

In case Contractor fails to deliver and install the Stores/Equipment or any part thereof, within the period fixed for such delivery and installation or at any time repudiates the Contract before expiry of such period, the purchaser is entitled to terminate or cancel the Contract and to repurchase the stores not delivered at the risk and cost of the contractor and the contractor shall be liable for any loss which the Purchaser may sustain on that account limited to the contract value.

23. Parallel Contract:

ISTRAC reserves the right to enter into Parallel Contract/s with one or more Contractors.

INSTRUCTIONS TO TENDERERS AND TERMS AND CONDITIONS OF TENDERS FOR IMPORTED STORES ITEMS:

1.ISRO Telemetry Tracking and Command Network [ISTRAC] has implemented e-tender system for ONLINE tenders. ISTRAC invites offers through e-tender portal <https://e-procure.isro.gov.in> for the supply of items. The suppliers need to get enrolled in the e-tender portal to access tender and submit their offer online. Vendors need to have Digital Signature Certificate as detailed on our e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. No Manual/Postal/courier/e-mail/Fax offers will be entertained. No Manual tender document will be issued by ISTRAC. Suppliers are requested to note and comply with the Instructions to tenderers for online submission of tenders through E-Procurement System indicated in the document "Instructions-for-Online-Submission-of tenders-EGPS.pdf".

2.Suppliers are requested to submit their offer/quotation online complete in all respects with technical specifications, including pamphlets and catalogues.

3.In case of two-part tenders, parties shall submit their offers as follows:-

a) Part-I – Technical Bid:

Only Technical details shall be mentioned in this bid and shall not upload any details of price along with the technical bid. Vendor specified terms column is to be filled with out indicating any price details. If any Price detail is mentioned in the Technical Bid such offer shall be rejected.

b) Part-II – Price Bid:

Only the price details along with applicable taxes and other cost if any shall be indicated in the price bid form.

4. The offer shall contain the following information as applicable. A Proforma Invoice may also be attached containing the following information :

a)The FOB/FCA value, the C & F value for import by Sea freight / Air freight up to and for air parcel post up toshould be separately indicated.

b)Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent immediately after Customs clearance of the goods in India.

c)The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.

d)The earliest delivery period and country of origin of the Stores.

e)Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.

f)The approximate net and gross weight and dimensions of packages /cases.

g)Recommended spares for satisfactory operation for a minimum period of one year.

h)Detailsofanytechnicalservice,ifrequiredforerection,assembly,commissioning and demonstration.

5. The FOB/FCA and C & F prices quoted should be inclusive of all taxes, levies,duties arising in the tenderer's country.

6.The offer should be valid for a minimum period of 120 days from the due dateof opening of the tender.

7.Samples, if called for, should be sent free of all charges.

8.OffersmadebyIndianAgentsonbehalf oftheirPrincipals, shouldbesupported by the proforma invoice of their Principals.

9. The details of Import License will be furnished in the purchase order.

10.The authority of person signing the tender, if called for, shall be produced.

11.Instructions / Operation Manual containing all assembly details including wiringdiagrams should be attached through online mode only. All documents /correspondence should be in English language only.

12.The Purchaser reserves the right to accept or reject the lowest or any offer inwhole or part without assigning any reason.

13. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.

14.a) Part shipment is not allowed unless specifically agreed to by us.

b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through any Agency nominated by us.

15. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractors.

16. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.

17. For items having shelf life, those with maximum shelf life should be supplied if order is placed.

18. The goods / material offered should be strictly as per our specifications. Change(s) in specifications, if any, should be clearly indicated by the supplier in his quotation. The supplier should also indicate make/type No. of the materials / equipments offered.

19. Indian Agents while quoting on behalf of their principals shall attach necessary authorization letter from their Principals along with the bid.

20. In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/ OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

21. If an Indian agent submits bid on behalf of the Principal/OEM, the same Indian agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

22. If a firm quotes 'Nil' charges/consideration, the bid shall be treated as unresponsive and will not be considered;

23. The drawings, specifications, end-use, etc., given by ISTRAC along with the tender enquiry, are confidential and shall not be disclosed to any third party.

TERMS AND CONDITIONS OF THE TENDER:

1. DEFINITIONS:

(a) The term 'Purchaser' shall mean the President of India or his successors or assignees.

(b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.

(c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores of plant, machinery or equipment of part thereof.

(d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.

2. PRICES:

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations.

3. TERMS OF PAYMENT:

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the undermentioned documents:

a) Original Bill of Lading / Airway Bill

b) Commercially certified invoices describing the stores delivered, quantity, unit rate and their total value, in triplicate. The invoice should indicate the discounts, if any, and Agency Commission separately.

c) Packing List showing individual dimensions and weight of packages.

d) Country of Origin Certificate in duplicate.

e) Test Certificate.

f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.

g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

4. IMPORT LICENCE:

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide para 3.2

5. DEMURRAGE:

Supplier shall bear demurrage charges, if any, incurred by the purchaser due to delayed presentation of shipping documents as prescribed in para 3.2 to the bankers within a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

6. ADDRESS OF INDIAN AGENTS:

.....

7. GUARANTEED TIME DELIVERY:

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.

8. INSPECTION AND ACCEPTANCE TEST:

8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under this Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.

8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the purchaser's representative to carry out the tests efficiently.

8.3 When the stores have passed the specified test, the purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the purchaser as may be required.

9. MODE OF DESPATCH:

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

10. PORT OF ENTRY:

Thiruvananthapuram/Chennai/Mumbai/Hyderabad/Bangalore/.....

11. CONSIGNEE:

Purchase & Stores Officer (Stores)
Plot No. 12 & 13, III Main, II Phase,
Peenya industrial Area,
Bangalore-560058

12. SHIPPING MARKS.

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO.

DATED

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISTRAC/ISRO

Plot No. 12 & 13, III Main, II Phase,

Peenya industrial Area

Bangalore-560058

Destination: &

Port of Entry:

13.INSURANCE OF THE STORES:

The necessity or otherwise of insurance will be as indicated in the PurchaseOrder.

14.CONTRACTOR'S DEFAULT LIABILITY:

14.1The purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.

b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

a) Any completed stores.

b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted, by the purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the purchaser for liquidated damages for delays set out in Clause 19 until the stores are accepted.

16. REPLACEMENT:

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the purchaser agrees, the price towards replacement items shall be paid by the purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

17. REJECTION :

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the purchaser shall either reject the stores or request the Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the purchaser. If the Contractor fails to do so, the purchaser may at his option either –

a) replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or

b) terminate the Contract for default as provided under clause 14 above, or

c) acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice the Purchaser's rights under clause 19.

18. EXTENSION OF TIME:

If the completion of supply of stores is delayed due to reason of force majeure such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5 percent) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten

percent (10percent) of the Contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

20. GUARANTEE & REPLACEMENT:

a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.

b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.

c) If in the opinion of the purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the purchaser provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects have developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.

f) PERFORMANCE BANK GUARANTEE:

To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser - Bank Guarantee format enclosed) from a Bank approved by the purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.

g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at purchaser's site.

h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.

21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

22. PACKING:

a) The Contractor wherever applicable shall pack and crate all stores for sea/air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractor shall be held responsible for all damages due to improper packing.

b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.

c)The Contractor shall notify the purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.

d)The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.

e)Transshipment of equipment shall not be permitted except with the written permission of the purchaser.

f)Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:

a)Commercial Bill of Lading / Air Way Bill / Post parcel Receipt. (Two non-negotiable copies)

b)Invoice (3 copies)

c)Packing List (3 copies)

d)Test Certificate (3 copies)

e)Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

23.ARBITRATION:

If at any time any question, dispute or difference whatsoever shall arise between the purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of

Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

24. LANGUAGE AND MEASURES:

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

25. INDEMNITY:

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfillment of the Contract.

26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the purchaser unless specific written acceptance thereof is obtained.

27. SECURITY INTEREST:

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, purchaser shall have a security interest in such items which shall be deemed to be released

only at the time when the applicable deliverable item is finally accepted and delivered to the purchaser in accordance with the terms of the Contract. Such security interest of the purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

28. BANK CHARGES:

While the purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

29. TRAINING:

The Contractor shall, if required by the purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores, number of such personnel to be mutually agreed upon.

30. APPLICABLE LAW:

The Contract shall be interpreted, construed and governed by the laws of India.

31. Bank Guarantee towards Free Issue Materials (FIM):

The successful Tenderers shall furnish Bank Guarantee (BG) towards the cost of Free Issue Materials issued by Purchaser towards adequate Security for the FIM for the execution of the Contract. The BG is to be kept valid till supply and acceptance of the final product.

32. Customs Duty:

ISTRAC is eligible for concessional Customs duty @ 5.15% vide Notification No.51/96-Cus dated 23.07.1996 as amended vide Customs Notification No. 24/2007 dated 01.03.2007. The necessary Customs Duty Exemption Certification [CDEC] shall be provided by ISTRAC for Imported Items. Tenderers are requested to take note of this aspect while submitting the offer wherever applicable.

33. High Sea Sale:

Tenderers submitting offer[s] against High Sea Sale Trade, the price of such offers be in Indian Rupees only and shall be inclusive of Freight and Clearance Charges for delivery up to ISTRAC, Bengaluru. The offers shall be Firm, Fixed Price without any variation in Exchange Conversion Rate whatsoever. No Sales Tax will be applicable for High Sea Sale. Customs Duty Exemption Certificate 51/96 will be provided by ISTRAC. Customs Duty at actuals will be reimbursed against documentary evidence such as Bill of Entry.

34. Earnest Money Deposit/Bid Security:

a.The Tender should be accompanied with an Earnest Money Deposit for a prescribed amount wherever called for in the Notice Inviting Tender [NIT].Foreign vendors, registered vendors or vendors who have already applied for renewal of registration, Central PSUs/ PSEs/ Autonomous Bodies, Micro and Small Enterprises, KVIC, National Small Industries Corporation, etc., are exempted from the payment of EMD.

b.In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.

35. Risk Purchase:

In case Contractor fails to deliver and install the Stores/Equipment or any part thereof, within the period fixed for such delivery and installation or at any time repudiates the Contract before expiry of such period, the purchaser is entitled to terminate or cancel the Contract and to repurchase the stores not

delivered at the risk and cost of the contractor and the contractor shall be liable for any loss which the Purchaser may sustain on that account limited to the contract value.

36. Parallel Contract:

ISTRAC reserves the right to enter into Parallel Contract/s with one or more Contractors.

CERTIFICATE OF UNDERTAKING

CERTIFICATE OF UNDERTAKING:

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISTRAC, BENGALURU:560 058.

Subject: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017 –reg.

REQUIREMENT OF REGISTRTION:

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. (Competent authority is : DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (DPIIT)).

2. "BIDDER" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

3. "Bidder from a country which shares a land border with India" for the purpose means:

- (a) An entity incorporated, established or registered in such a country; or
- (b) A subsidiary of an entity incorporated, established or registered in such a country; or
- (c) An entity substantially controlled through entities incorporated, established or registered in a such a country; or
- (d) An entity whose beneficial owner is situated in such a country; or
- (e) An Indian (or other) agent of such an entity; or
- (f) A natural person who is a citizen of such a country; or
- (g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

4. The beneficial owner for the purpose of (3) above will be as under:

i) In case of a company or Limited Liability Partnership, the beneficial owner is a natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation:

(a) "Controlling Ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;

(b) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.

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

iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.

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

5. An AGENT is a person employed to do any act for another, or to represent another in dealings with third person.

6. A certificate from the bidder shall be enclosed along with their quotation (Technical bid) as per the format enclosed.

(TO BE PRINTED ON THE LETTER HEAD OF THE VENDOR)

CERTIFICATE

Ref: Tender No..... date

Our Quotation No. date

1. I/WE..... read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I / We Certify that this bidder is not from such a country.

OR*

2.I/We read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I / We..... Certify that this bidder is from such a country and registered with the Competent Authority (i.e. Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)). Copy of Registration Certificate is enclosed.

3.I/We hereby confirm that the country of origin of goods is

4.I/We..... hereby undertake that if the Certificate is found to be false at any given time ISRO/ISTRAC may treat this as a ground for immediate termination and further legal action in accordance with law can be initiated.

SIGNATURE:

DESIGNATION:

COMPANY NAME AND SEAL:

(*Strike out whichever is not applicable).

Bid Templates

Page1

Item Specifications

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1.1	Section 1 : General The solution consists of installation and commission of the CCTV Surveillance at the SSA Control Center. . Only central public sector undertakings of Government of India are allowed to participate in the tender.			
1.2	The vendor has to quote for all the sections mentioned in the specificaitons.			
1.3	Vendor shall submit the specification-cum-			

	<p>compliance statement in the tabular format with clear remark 'complied' or 'Not complied'. Vendor may quote for better specifications than specified.</p>			
1.4	<p>Vendor shall submit technical data sheet by highlighting each complied specification. Wherever technical specifications and operational/functional requirements not mentioned in datasheet, OEM compliance shall be submitted</p>			
1.5	<p>Vendor shall demonstrate the overall functioning of the system as per the design at the time of Acceptance test of system (ATP)</p>			
1.6	<p>All Cameras (section 2, 3,4) , out of the box ready- all in one camera station hardware (section 5) should be from the same</p>			

	OEM			
1.7	For Sections (6 – 13), installation, commissioning and operations of the CCTV solution at SSA Control Center are carried out smoothly without any compatibility issues and is the responsibility of the vendor.			
2	Section 2 Camera Type 1 : Outdoor Speed dome PTZ Camera with day/night vision and inbuilt IR illumination for day/night surveillance			
2.1	Make and Model			
2.2	Details of Product Specifications website and URL (web address) link			
2.3	Features & Specifications<< 2.3.1 >>Image Sensor: 1/2.8” to 1/3” Progressive scan CMOS or better<< 2.3.2>>			

	<p>Lens: Zoom lens 4.5–129 mm at F1.6– 4.4 or better<< 2.3.3 >>Zoom: 30x Optical zoom and 12x Digital zoom<< 2.3.4 >> Focus: Autofocus, auto-iris</p>			
<p><< 2.3.5>> Illumination / Sensitivity : 0.1 lux in color , 0.01lux in Mono at 30 IRE or better<< 2.3.6 >> Shutter Time : 1/10000 to 1 secs or better<< 2.3.7 >> Day/ Night Function: Shall support for Day / Night function automatically with removal of infrared(IR) cut-filter<< 2.3.8Pan/Tilt and Speed: Pan : 360° endless at speed 0.1°/s– 120°/s (240 degrees / second in enhanced mode) or better , Tilt: -90° to 25 ° at speed 0.1°/s–120°/s >></p>				
<p><< 2.3.9Presets of PTZ: Should support minimum 256 preset positions</p>				

<p>>><<2.3.10>>Video Compression : H.264, MPEG-4 and Motion JPEG (MJPEG)<< 2.3.11>>Resolution Support: 1920x1080 (HDTV 1080p) up to lower resolution 640 x 360 <<2.3.12>>Frame rate : Up to 25/30 fps (50/60 Hz) in all resolutions</p>				
<p><< 2.3.13 >>Video Streaming : Multi-Stream with variable/configurable frame rate/bit rate & Bandwidth for Live Pre- view and Recording<< 2.3.14>> Image Settings: Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control (including automatic gain control), Exposure zones, Automatic backlight compensation, Fine tuning of behavior at low light, WDR, Text and image overlay, Privacy masks,</p>				

<p>Wide Dynamic Range (WDR) – Forensic Capture<< 2.3.15>> Alarm: Should support for Alarms and pre- and post-alarm recording<< 2.3.16 >>Security : Password protection and have network security features.</p>				
<p><< 2.3.17>> Protocols Support: Ipv4/v6, HTTP, HTTPSa, SSL/TLSa, QoS Layer 3 DiffServ, FTP, SMTP, UPnPTM, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP<< 2.3.18>> Compatible Standard: Should comply with ONVIF Profile S , profile G << 2.3.19>>Intelligent Video : Should support for motion detection, << 2.3.20 >> Network Interface and Connectors: RJ 45 10BASE-T/100BASE-TX, PoE+</p>				

<p><< 2.3.21 >>Local Storage / Recording: Should support SD/SDHC/SDXC cards<< 2.3.22>>Power : Should support for Power over Ethernet (PoE+) plus << 2.3.23>>Vandal resistant enclosure with Built-in IR, IP66, IK 08rating, UL, FCC<< 2.3.24>> Certifications and Approvals“: CE/FCC/VCCI, Safety – IEC/EN/UL, Environment- IEC/EN</p>				
<p><< 2.3.25 >> MTBF >100,000 h (Certificates to be provided from OEM) << 2.3.26 >> Mount type: Pole/Wall<< 2.3.27>> Operating Temperature : - 40 deg to 50 deg C or better<< 2.3.28>> Accessories : The vendor should supply all the necessary accessories required to install and commission the system as per the design which may</p>				

include power supply adapters / PoE midspan adapter other Mounting/Bracket kit, Audio I/O Connectors, user's & Installation manual, Management tool etc., All accessories to be provided from the same OEM				
<< 2.3.29 >> IR Illumination : Range of reach 150 m or better, Illumination synchronized with day/night mode<< 2.3.30 >> Preferred Makes: Axis /Bosch/ Pelco << 2.3.31 >>Casing : IP66 rated casing or better , vandal proof				
3	Section 3 Outdoor Bullet IP based HDTV Camera with built-in IR-LEDs source for day / night surveillance			
3.1	Make and Model: Mandatory to provide Make & Model			

Item Specifications -I

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
3.2	3.2Details of Product specifications website and URL (web address) link: Mandatory to provide Product Specifications website and its URL link			
3.3	3.3Features & Specifications			
<< 3.3.1>>Image Sensor: 1/2.8" to 1/3" RGB Progressive scan CMOS or better << 3.3.2>> Lens: Varifocal, 2.8 to 8.5 mm or better << 3.3.3>> Sensitivity : 0.07 lux color , 0.01 lux B&W << 3.3.4>> Shutter Time: 1/15000 second to 2 secs or better				
<< 3.3.5>> Video				

<p>Compression : H.264, MPEG-4 and Motion JPEG (MJPEG)<< 3.3.6>> Resolution Support:1920x1080 HDTV and up to lower resolution from 320 x 188 << 3.3.7>>Frame rate : 25/30 fps at 50/60 Hz or better << 3.3.8>> Video Streaming : Multi-Stream with variable/configurable frame rate/bit rate & Bandwidth for Live Pre-view and Recording</p>				
<p><< 3.3.9>> Audio/Alarm: Should support for Audio/Alarms, audio streaming<< 3.3.10>>Pan/Tilt/Zoom Function : Should support for Digital PTZ<< 3.3.11>> Image Settings: Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control (including automatic gain control), Exposure zones,</p>				

<p>Fine tuning of behavior at low light, WDR, Text and image overlay, Mirroring of images, Privacy masks, IR illumination, Wide Dynamic Range (WDR) – Forensic Capture<< 3.3.12>> Security : Password protection, Network Security, User access log</p>				
<p><< 3.3.13 >>Protocols Support: Ipv4/v6, HTTP, HTTPS,QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, SNMP v1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, LLDP << 3.3.14>> Compatible Standard: Should comply with ONVIF Profile S & G<< 3.3.15 >> Intelligent Video : Should support for Motion detection,<< 3.3.16>> Network Interface and Connectors: RJ 45 10BASE-</p>				

T/100BASE-TX, PoE, terminal block for alarm				
<< 3.3.17>> Local Storage / Recording: Should support SD/SDHC/SDXC card<< 3.3.18>> IR illumination: Optimized IR, highly efficient LEDs with adjustable intensity and angle of illumination. Range up to 40 m << 3.3.19>> Power : Power over Ethernet (PoE) IEEE standard << 3.3.20>> Vandal resistant enclosure with Built-in IR, IP66, IK 08rating, UL, FCC				
<< 3.3.21 >> Certifications and Approvals: CE/FCC/VCCI, Safety – IEC/EN/UL, Environment- IEC/EN<< 3.3.22 >> MTBF >100,000 h (Certificates to be provided from OEM) << 3.3.23 >> Mount type: Pole/Wall<< 3.3.24>> Operating Temperature : - 40 deg to 60 deg C				

<p><< 3.3.25>> Accessories : The vendor should supply all the necessary accessories required to install and commission the system as per the design which may include power supply adapters / PoE midspan adapter other Mounting/Bracket kit, Audio I/O Connectors, user's & Installation manual, Management tool etc., All accessories to be provided from the same OEM<< 3.3.26 >> Preferred Makes: Axis/Bosch/ Pelco</p>				
4	Section 4 Indoor fixed dome IP based HDTV camera with built-in IR-LEDs source for day / night surveillance			
4.1	4.1 Make and Model : Mandatory to provide Make & Model			
4.2	4.2Details of Product , Mandatory to provide			

	Product Specifications website and its URL link			
4.3	4.3 Features & Specifications			
<< 4.3.1>>Image Sensor : 1/2.8" to 1/3" RGB Progressive scan CMOS or better<< 4.3.2>>Lens : Varifocal, 3.4–8.9 mm or better<< 4.3.3>>Sensitivity: Color : 0.1 lux , Mono : 0.02 lux or better<< 4.3.4>>Shutter Time : 1/15000 second to 2 second or better				
<< 4.3.5 >>Day/ Night Function : Shall support for Day / Night function automatically with removal of infrared(IR) cut filter<< 4.3.6 >>Video Compression : H.264, MPEG-4 Part and Motion JPEG (MJPEG)<< 4.3.7 >>Resolution Support : 1920x1080 HDTV and up				

<p>to lower resolution from 640 x 480<< 4.3.8>>Frame rate : 25/30 fps</p>				
<p><< 4.3.9>>Video Streaming : Multi-Stream with variable/configurable frame rate/bit rate & Bandwidth for Live Preview and Recording<< 4.3.10>>Audio/Alarm: Should support for Audio streaming, Alarms.<< 4.3.11>> Image Settings : Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control (including automatic gain control), Exposure zones, Fine tuning of behavior at low light, WDR, Text and image overlay, Mirroring of images, Privacy masks, Wide Dynamic Range (WDR) –Forensic Capture << 4.3.12>> Security : Should have password protection, Network</p>				

security, access logs				
<< 4.3.13 >>Protocols Support: Ipv4/v6, HTTP, HTTPS,QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, SNMP v1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, LLDP<< 4.3.14>> Compatible Standard : Should comply with ONVIF Profile S & G<< 4.3.15>> Intelligent Video : Should support for motion detection, active tempering alarms << 4.3.16>> Network Interface : RJ 45 10BASE- T/100BASE-TX, PoE				
<< 4.3.17>>Local Storage /Recording : Should support SD/SDHC/SDXC cards<< 4.3.18>>Certifications : CE/FCC/VCCI, Safety – IEC/EN/UL, Environment-				

<p>IEC/EN<< 4.3.19>>IR Built-in IR illuminator with 30 m viewing distance<< 4.3.20>>Accessories : The vendor should supply all the necessary accessories required to install and commission the system as per the design which may include power supply adapters / PoE midspan adapter other Mounting/Bracket kit, Audio I/O Connectors, user's & Installation manual, Management tool etc., All accessories to be provided from the same OEM<< 4.3.21>> Preferred Makes: Axis/Bosch/ Pelco</p>				
<p>5</p>	<p>5. Out-of-the box ready all in one storage, camera station.</p>			
<p>5.1</p>	<p><< 5.1>> Make and Model: Mandatory to provide Make & Model</p>			

Item Specifications -II

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
5.2	5.2Details of Product Specifications website and URL (web address) link: Mandatory to provide Product Specifications			
5.3	5.3Features and Specifications			
<< 5.3.1>>The offered product should be out-of-the-box ready rack server validated for reliable ultra high-definition recording.<< 5.3.2>>The offered product should be installed as per the design provided in the annexure to support parallel recording. << 5.3.3>>The offered product should be from the same OEM as that of the offered camera systems.<< 5.3.4>>The				

<p>product should be preconfigured and preloaded with Camera Station video management software including licenses for at least 32 channels plus all necessary software</p>				
<p><< 5.3.5>>They should be populated with redundant enterprise-grade hard disks and power supplies, operating system stored on solid-state drive (SSD), and should have expandable storage<< 5.3.6>>Storage memory: a total of 64 TB or more usable storage space after RAID5 configuration. The storage should support multiple RAID groups with hot swappable Enterprise Class HDD, 7200 rpm disks. << 5.3.7>> Operating Systems : Microsoft Windows installed on Operating system drive : 240 GB SSD<< 5.3.8>> Antivirus software: Pre –</p>				

<p>installed with 3-year License, software to be provided in separate media</p>				
<p><< 5.3.9>>Power : 100-240 V AC, 10 – 5 A, 50/60 Hz redundant power supply << 5.3.10>>Form Factor : 2U preferred .<< 5.3.11>>Connectors : Ethernet (RJ45) 1 GbE (minimum 2 Numbers) , USB (minimum 3 numbers) 3 ports , VGA / Display ports/ HDMI ports << 5.3.12>> Certifications and Approvals: CE/FCC/VCCI, Safety – IEC/EN/UL, Environment- IEC/EN</p>				
<p><< 5.3.13>>All other relevant accessories which may include the rack rails, power cords , power supply adapters / PoE midspan adapter other Mounting/Bracket kit, Audio I/O Connectors,</p>				

<p>user's & Installation manual, Management tool, system recovery disks, drivers & utilities DVDs, OS CD/DVD, OS license, antivirus license, active speakers etc., for installing, rack-mounting and commissioning the system as per the design . All accessories to be provided from the same OEM<< 5.3.14>> Should have atleast 5 nos of workstation / client licenses</p>				
<p>5.4</p>	<p>5.4Video Management Software The pre-installed video management software should have the following features.</p>			
<p><< 5.4.1>>The surveillance system shall provide a highly scalable and reliable platform to enable customized, network-based surveillance applications.<< 5.4.2</p>				

<p>>>Capable of handling multi-vendor products. The surveillance system shall be open standard supporting multiple vendor IP cameras and encoder manufacturers within the same system. << 5.4.3>>The system shall support seamless integration of all ONVIF compliant cameras. License to handle/manage/add multiple cameras based on scalability.<< 5.4.4>> Video compression: H.264 & MPEG4</p>				
<p><< 5.4.5>>The surveillance system viewing system should be in both server and clients for local viewing along with the capability of viewing single or multiple live and archive cameras, control PTZ camera.<< 5.4.6 >>The system shall support integration with other</p>				

<p>software applications through an open and published Application Programming Interface (API). Such applications shall include, but not be limited to, access control, video analytics, and other alarm and sensor inputs.<< 5.4.7>> System shall have both video management and video stream storage management. Recording frame rate, resolution, bit rate with respect of individual channel shall be programmable.</p>				
<p><< 5.4.8 >> Administration(a.)Software shall support naming and labeling cameras(b.)Auto search and detection of cameras(c.)Configurable camera settings(d.)Ability to display information on multiple monitors(e.)Support for multiple servers, sites and clients(</p>				

<p>f.)Bandwidth optimized multi-streaming(g.)Configuring live video and recording mode(h.)Support for future integration of cameras/servers.(i.)Dashboard display of system status(j.)Ability to backup & restore system databases/recordings</p>				
<p><< 5.4.9 >>Preview(a.)Support for different frame rate on preview and recording(b.)Live view of minimum 16 cameras or better simultaneously, User definable split(c.)Minimum 5 programmable camera view sequences on monitoring display(d.)Camera selection by double-clicks or drag and drop from, site maps, Tree View(e.)Web client for remote viewing, playback &</p>				

<p>search(f.)Create snapshot images on-the-fly and as an event index for search later on(g.)Zoom in/out on live view and playback(h.)“User should have 1-to-1 or 1-to-many audio broadcast to multiple devices at the same time”(i.)Control of PTZ cameras and pre-set positions using mouse (j.)Display map with all camera preview on.(k.)Device states shown by icons, including network connection loss, video loss, and(l.)camera de-adjustment Image Enhancement Feature, motion detector, unattended baggages, etc”</p>				
<p><< 5.4.10>>Search(a.)Shall search video clips in servers with date, time, channel, event/alarm(b.)To search motion detection, digital input, bookmark,</p>				

<p>snapshot, event with specified date, time, channel.(c.)To search video clips with thumbnail image previews.(d.)To search events on video loss/recovery, network disconnect/reconnect, user.(e.)Login/logout database log with specified date, time and channel</p>				
<p><< 5.4.11 >>PTZ Control(a.)To manage pan, tilt, zoom operation with speed control.(b.)Go to, set, clear pre-set positions and patrol on pre-set positions, Set multiple Patrolling schedules per camera per day, pause PTZ patrolling and control the movement manually(c.)User-defined PTZ command to support additional PTZ protocols(d.)On-screen 8-direction PTZ operation</p>				

with mouse operation				
<p><< 5.4.12>> Playback(a.)Shall play back recorded video/audio from servers, play, pause, stop, fast forward, fast rewind, Play backward, Play frame by frame, variable speed control, selective zooming in playback mode.(b.)Provision to play multiple files in sequence for a period of time.(c.)To create snapshot images on-the-fly and can be used as a search index(d.)To export a period of video clips into various formats including .avi/ .wav/mpg file Printed report with time and date stamp as image/video file.(e.)The system software for clients should also be working on a browser based system for remote users. This will allow any authorized user to display the video of any</p>				

<p>desired camera on the monitor with full PTZ and associated controls.(f.)The system administrator should be able to add, edit and delete users with rights. It shall be possible to view ability or rights of each user or the cameras which can be viewed and controlled as per the permission assigned by the administrator.(g.)The system shall support local administration role. Each local administrator shall be able to add, manage and remove local users.</p>				
<p><< 5.4.13>>Recording(a.)Simultaneous digital multi-channel video/audio recording on servers, (b.)The system shall provide the facility of viewing, recording and replay simultaneously and shall be capable of frame by frame analysis(c.)The</p>				

<p>offered system shall have the facility to export the desired portion of clipping on any storage device. Viewing of this recording shall be possible using standard media players</p>				
<p><< 5.4.14>>Schedule Recording(a.)To record video with user-defined schedule and time Period. Recording can be scheduled per camera, be set for continuous upload, per weekday or specific dates, recording schedules with holidays and exception days, per camera settings for minimum and maximum recording times, per camera, per recording schedule frame rate and quality settings</p>				
<p><< 5.4.15>>Alarm Recording(a.)Configurable pre-and post-alarm buffering, alarm priority</p>				

<p>handling, selective auto popup on alarm, alarms displayed in separate alarm window, Email or SMS notification on alarm. User-defined time period to record before and/or after a certain event occurs.</p>				
<p><< 5.4.16>>Motion Recording / alarm recording (a.)Advanced motion detection with exclude filter for image areas of no interest. Different day and night settings, camera-based motion Detection, option to save on bandwidth “No motion” detection.(b.)It should provide programmable motion detection and recording, to be defined area wise. The system must be able to support video motion detection algorithms to detect moving object or</p>				

person				
<< 5.4.17>>Hot-Spot Window(a.)To activate and switch the channel with event to the hot-spot Window. The original video in the hot-spot window should be switched over.(b.)Triggered event should be recorded into an event log.(c.)Provision to configure the following when an event occurs (d.) To play user-defined audio file or beep on the machine.(e.) E-Mail/FTP Notification with snapshot.(f.)It shall request the camera to go to certain PTZ pre-set position.(g.)To execute user-defined commands/operations				
<< 5.4.18>>User Access Controls(a.)Multilevel user/group profiles including				

Administrator/User/Guest levels(b.)Configurable permission control for camera group/user(c.)Restrict access to playback and export for users				
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Item Specifications -III

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
<< 5.4.19>> Logs(a.)Password protection for accessing the various logs(b.)All events, filter by camera/date/time/user/location(c.)Audit log, camera event and user access logs.(d.)Alerts from unintentional deletion of logs(e.)Configurable Report Generation				

6	Desktop Workstations for Client Monitoring			
<p><< 6.1>>Make and Model: Mandatory to provide Make & Model<<</p> <p>6.2>>Details of Product Specifications website and URL (web address) link: Mandatory to provide Product Specifications website and its URL link<<</p> <p>6.3>>Chasis type: Tower<<</p> <p>6.4>> Processor: 2 CPU with clock 2.10 Hz or better and recommended by the OEM of the camera systems<<</p> <p>6.5>> L3 Cache Memory: 11 MB L3 cache<<</p> <p>6.6>>Memory : 16GB (8*2GB) Fully buffered DDR4 @2400 MHz ECC RAM or better <<</p> <p>6.7>> Memory Scalability : DIMM slots 12, Scalable upto 98 GB (Minimum)<<</p> <p>6.8>>Drive Bays : Minimum 4 Nos. Hard Disk Bays <<</p> <p>6.9>>Hard Disk Drivers for Storage : 2x2</p>				

<p>TB 7.2k RPM SATA Hard Disk << 6.10>>Hard Disk for OS: 1x256 GB SSD</p>				
<p><< 6.11 >>Optical Drive: DVD-RW Combo with dual layer write capability<< 6.12 >>Graphics : 4GB graphics or better<< 6.13>>Network : 2x1GB Ethernet Adapter in addition to integrated NIC or more << 6.14>>I/O ports and connectors: 4 USB Ports or more << 6.15>>Keyboard: USB 2.0 Standard keyboard<< 6.16>>Mouse: USB 2.0 optical scroll mouse<< 6.17>>Active Speakers: 2 Speakers, Minimum 2W<< 6.18>>OS certification : Windows , Redhat Linux << 6.19>>Operating System: Windows 10 Pro 64 << 6.20>> Antivirus software: Pre – installed with 3-year License, software to be provided in separate</p>				

media				
<< 6.21>>Certification – Workstation shall be TPM 2.0 Certified, UEFI Secure BOOT<< 6.22>>Other Accessoriessystem recovery disks, divers & utilities DVDs, keyboard, mouse, OS CD/DVD, OS license, antivirus license, Active Speakers<< 6.23>>HDD shall not be returned back during warranty replacement<< 6.24>>Certifications and Approvals: CE/FCC/VCCI, Safety –IEC/EN/UL, Environment- IEC/EN<< 6.25>>Preferred brand : HP / DELL / Fujitsu				
7	Monitors 27 Inch size for Client Workstations<< The offered product should be from the same manufacturer as that of the offered workstation >>			
<< 7.1>>Make and Model: Mandatory to provide				

<p>Make & Model<< 7.2>>Details of Product Specifications website and URL (web address) link: Mandatory to provide Product Specifications website and its URL link<< 7.3>>Diagonal Size: 27 Inch or better<< 7.4>>Display Type and Back light: LCD with LED backlit << 7.5>>Resolution : 1920 x 1080, 60Hz << 7.6>>Brightness: 300 Nits or better<< 7.7>>Contrast Ratio : 1000:1 or better</p>				
<p><< 7.8>>Inputs: 2 Nos of HDMI / Display port, USB << 7.9>>Power : 230 V AC, 50 Hz<< 7.10>>Shall support for Tilt, Swivel and Pivot rotation.<< 7.11>>Environment: RoHS Compliance or Mercury Free display.<< 7.12>>Certifications: Energy Star and EPEAT Gold.<< 7.13>>Certifications and</p>				

<p>Approvals: CE/FCC/VCCI, Safety –IEC/EN/UL, Environment- IEC/EN<< 7.14>>Preferred brand : HP / DELL / Fujitsu</p>				
<p>8</p>	<p>Rack Mount Monitor (RKM) 19 Inch size</p>			
<p><< 8.1>>Make and Model: Mandatory to provide Make & Model<< 8.2>>Details of Product Specifications website and URL (web address) link: Mandatory to provide Product Specifications website and its URL line<< 8.3>>Resolution : 1280 x 1024 or better<< 8.4>>LCD Module: TFT-LCD, 19 Inch<< 8.5>>Viewable area : > 18 inches << 8.6>>Should support all resolutions at 60/75Hz refresh rates.<< 8.7>>Contrast ratio: 1000:1 or better<< 8.8>>Brightness: 250 nits or better<< 8.9>>Support</p>				

<p>Colour: 16 M colors or better << 8.10>>Video Inputs: DDCB of resolution 1920 x 1080 or better</p>				
<p><< 8.11 >>Power: AC 220V/ 50 Hz << 8.12>>Should have 102 keys layout with QWERTY layout.<< 8.13>>Both left and right click should be possible with the trackball /touchpad.<< 8.14>>VGA cable 1 No has to be provided.<< 8.15>>Must be compatible with the out-of-box all in one storage server.<< 8.16>>All necessary connectors / cables needs to provided. All accessories to be provided from the same OEM<< 8.17>>Certifications and Approvals: CE/FCC/VCCI, Safety –IEC/EN/UL, Environment- IEC/EN<< 8.18>>Preferred brands :</p>				

Raritan / HP /Dell				
9	KVM			
<p><< 9.1>>Make and Model : Mandatory to provide Make & Model<< 9.2>>Details of Product : Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 9.3>>Features and Specifications<< 9.4>>The offered switch shall support minimum 16 nos of target device ports per unit realized using a single chassis only<< 9.5>>KVM should be 19 inches rack mountable; vendor has to quote for the required number of mounting kit also.<< 9.6>>The refresh rate shall be 1600 x 1200 at 60 Hz << 9.7>>Supported OS platforms : Windows , RHEL << 9.8>> CAT 6 cable</p>				

<p>length and resolution: Minimum 50 ft. Cable length and should be supported for 1280 x 1024 resolutions<< 9.9>>The KVM should allow multiple servers to be accessed and monitored by a single key board and mouse<< 9.10>>The management of the server should be 'out-of-band' & control should be non-intrusive</p>				
<p><< 9.11>>The server should be identified by user defined name << 9.12>>It should be possible to switch to different servers by pressing a set of key sequence or by using commands through keyboard<< 9.13>>The on screen display should show the server name, server status and configuration menus.<< 9.14>>It should not occupy more that 1 U rack</p>				

<p>space.<< 9.15>>Power: 220 Volts / 50 Hz. Vendor shall supply C13/C14 power cables<< 9.16 >> The system should comply with international standards for safety, electromagnetic emissions, electromagnetic immunity, RoHS and WEEE<< 9.17>> All other relevant accessories which may include the rack rails, power cords , power supply adapters / PoE midspan adapter other Mounting/Bracket kit, Audio I/O Connectors, user's & Installation manual, Management tool, system recovery disks, drivers & utilities DVDs, for installing and commissioning the system as per the design. All accessories to be provided from the same OEM<< 9.18 >> Preferred brands :</p>				
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Raritan / HP /Dell				
10	Full HD LCD Monitor display 55 Inch size with 5 meter HDMI/DP cables suitable to client workstations			
<< 10.1>>Make and Model : Mandatory to provide Make & Model<< 10.2>>Details of Product : Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link				
<< 10.3>>Features and Specifications.<< 10.3.1>>Diagonal Size : 55 Inch (Minimum)<< 10.3.2>>Display Type and Back light : LCD with backlit LED<< 10.3.3>> Resolution : 1920 x 1080 at 60Hz<< 10.3.4>>Brightness : 500 Nits or better<< 10.3.5>> Contrast Ratio : 1000:1 or better<< 10.3.6>>Viewing				

Angle : 178 x 178 deg<<10.3.7>>Display Colors : 10 bit, 1.07 Billion				
<< 10.3.8>> Built-In Speakers : 10W + 10W<< 10.3.9>>Input Connections : DP, HDMI x 2, USB x 2, Stereo jack (mini)<< 10.3.10 >>External Control Ports : RJ45<< 10.3.11 >>Power :100 – 240 V AC, 50 Hz<< 10.3.12 >> Accessories : Mounting kit, VESA Mount , Power cable, HDMI/DP cable with 5 meter length. All accessories to be provided from the same OEM<< 10.3.13 >> Energy Star Certified<< 10.3.14 >> Preferred Brand : Samsung / Sony / LG				
11	POE Switches (layer 3)			
11.1	Physical should 19-inch rack mountable chassis along with rack mount kit. Offered switch shall be			

	within 2U form factor			
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Item Specifications -IV

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
11.2	Port Requirements			
	<< 11.1.1 >>Switch should have at least 4 nos of 1GbE/10GbE SFP+ Slots << 11.1.2>>Should have at least 16 –Port 100/1000 Mbps RJ 45 POE + ports with at least 360 W PoE budget or more<< 11.1.3 >>All the ports mentioned above should be exclusive of stacking ports<< 11.1.4>>The Switch shall be configured with 4 nos. of Transceiver should comply to IEEE 1G-LX single mode SFP fibre standard with SFP+ form factor<< 11.1.5>> The			

<p>transceivers offered should be from the switch manufacturer only</p>				
<p><< 11.2.6 >>PerformanceThe below mentioned performance requirement per switch should be achieved without stacking / stacking ports<< 11.2.6.1>>Minimum Switching capacity 112 Gbps excluding the stacking ports << 11.2.6.2>>Minimum Throughput 80 million pps excluding the stacking ports</p>				
<p><< 11.2.7>> Offered Switch shall be with non-blocking ports<< 11.2.8 >>The offered switches shall be hardware ready for SDN support<< 11.2.9>>Switch shall offer minimum of 4000 VLAN<< 11.2.10 >>Switch shall offer minimum of 24</p>				

<p>Private VLAN<< 11.2.11 >>Should support VLAN support and tagging (802.1Q)<< 11.2.12 >>Switch should support 802.1X Authentication , MAC Address Locking and MAC layer Filtering<< 11.2.13 >>Switch shall offer MAC Authentication<< 11.2.14 >>Switch shall offer Web Authentication<< 11.2.15 >>Switch shall offer DHCP Snooping<< 11.2.16 >> Switch shall offer openflow V1.0/V1.3 or equivalent<< 11.2.17 >>802.1s Multiple Spanning Tree Protocol<< 11.2.18 >>IGMP V2/V3 snooping , IGMP v2/V3 Fast leave ,PIM-SM<< 11.2.19 >>Jumbo packet support, Max Size=9000 Bytes<< 11.2.20 >>Rapid Per-VLAN Spanning Tree (RPVST+)<< 11.2.21 >>Switch shall offer Link</p>				
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Aggregation (802.ad)				
<p><< 11.2.22 >>The Switch should support the following layer 3 Features(a.)BGP, OSPF(b.)VRRP/ VRRP-E or equivalent.(c.)RIP v1/v2(d.)Multicast Routing(e.)Generic Routing Encapsulation (GRE) or equivalent << 11.2.23 >>IPV6 Support(a.)Ipv6 Routing (OSPF v3), RIPng (Ipv6), BGP4+ (Ipv6)(b.)Ipv6 Multicast Routing(c.)Ipv6 over Ipv4 tunnels(d.)Multicast Listener Discovery (MLD) version 1 and 2 snooping<< 11.2.24 >>Security Features(a.)802.x Accounting(b.)MAC Authentication(c.)Protection against Denial of Service (DoS) attacks(d.)Provide IP Layer 3 filtering based on</p>				

<p>source/destination IP address/subnet and source/destination TCP/UDP port number<< 11.2.25 >>Supported Protocol and RFC Standards or equivalent(a.) 802.1D Bridging(b.)802.1q VLAN Tagging(c.)802.1p Mapping to Priority Queue(d.)802.1w Rapid Spanning Tree (RSTP)(e.)802.3ad Link Aggregation(f.)802.3x Flow Control(g.)SNMP V1, V2, V3(h.)RFC 783 TFTP(i.)RFC 854 Telnet(j.)RFC 1757 RMON MIB(k.)RFC 896 Congestion Control in IP/TCP Internetworks(l.)RFC 950 Internet Standard Subnetting Procedure(m.)RFC 1191 Path MTU Discovery(n.)RFC 1403 BGP OSPF Interaction(o.)RFC 1519 Classless Inter-Domain</p>				
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<p>Routing (CIDR): (p.)RFC 1812 Requirements for IP Version 4 Routers(q.)RFC 2236 Internet Group Management Protocol (IGMP) Version 2(r.)RFC 1887 An Architecture for Ipv6 Unicast Address Allocation(s.)RFC 1981 Path MTU Discovery for Ipv6(t.)RFC 2374 Ipv6 Aggregatable Global Unicast Address Format(u.)RFC 2080 RIPng for Ipv6(v.)RFC 2373 Ipv6 Addressing Architecture(w.)RFC 2461 Neighbor Discovery for IP Version 6 (Ipv6)</p>				
<p>11.3</p>	<p><< 11.3>>Switch Management<<11.3.1>>Should be offered with internal hot-swappable , redundant power supplies (220 VAC at 50 Hz)<<11.3.2>> Vendor shall ensure that required power cables IEC-C13/14 (2 meters power cord)</p>			

	shall be provided along with systems			
11.4	<<11.4 >> Environmental regulatory compliance(a.)RoHS-compliant (b.)WEEE-compliant(c.)FIPS Compliant(d.)Electromagnetic emissions compliant FCC Class A(e.)The offered product must be certified with EAL 4 [Evaluation Assurance Level] or NIAP/CCEVS [National Information Assurance Partnership / Common Criteria Evaluation & Validation Scheme]			
11.5	Preferred Brands : Cisco / HP /Ruckus /Allied Telesis			
12	Management Switches (layer 3)			
12.1	Physical should 19-inch rack mountable chassis along with rack mount kit. Offered switch shall be			

	within 2U form factor			
12.2	<p><< 12.2 >>Port Requirements<< 12.2.1 >>Switch should have at least 4 nos of 1GbE/10GbE SFP+ Slots << 12.2.2>>Should have at least 24 –Port 100/1000 Mbps RJ 45 Ports << 12.2.3 >>All the ports mentioned above should be exclusive of stacking ports<< 12.2.4>>The Switch shall be configured with 4 nos. of Transceiver should comply to IEEE 1G-LX single mode SFP fibre standard with SFP+ form factor<< 12.2.5 >>The transceivers offered should be from the switch manufacturer only</p>			
<< 12.2.6>>Performance	The below mentioned performance requirement per switch should be achieved without stacking			

<p>/ stacking ports<< 12.2.6.1 >> Minimum Switching capacity 128 Gbps excluding the stacking ports << 12.2.6.2 >>Minimum Throughput 100 million pps excluding the stacking ports</p>				
<p><< 12.2.7 >> Offered Switch shall be with non-blocking ports<< 12.2.8>>The offered switches shall be hardware ready for SDN support<< 12.2.9>>Switch shall offer minimum of 4000 VLAN<< 12.2.10 >>Switch shall offer minimum of 24 Private VLAN<< 12.2.11 >>Should support VLAN support and tagging (802.1Q)<< 12.2.12 >>Switch should support 802.1X Authentication , MAC Address Locking and MAC layer Filtering<< 12.2.13 >>Switch shall offer MAC Authentication<< 12.2.14</p>				

<p>>>Switch shall offer Web Authentication<< 12.2.15</p> <p>>>Switch shall offer DHCP Snooping<< 12.2.16</p> <p>>>Switch shall offer openflow V1.0/V1.3 or equivalent<< 12.2.17</p> <p>>>802.1s Multiple Spanning Tree Protocol<< 12.2.18 >>IGMP V2/V3 snooping , IGMP v2/V3 Fast leave ,PIM-SM<< 12.2.19 >>Jumbo packet support, Max Size=9000 Bytes<< 12.2.20 >>Rapid Per-VLAN Spanning Tree (RPVST+)<< 12.2.21</p> <p>>>Switch shall offer Link Aggregation (802.ad)<< 12.2.22 >> The Switch should support the following layer 3 Features(a.)BGP, OSPF(b.)VRRP/ VRRP-E or equivalent.(c.)RIP v1/v2(d.)Multicast Routing(e.)Generic Routing Encapsulation (GRE) or equivalent << 12.2.23 >>IPV6</p>				
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<p>Support(a.)Ipv6 Routing (OSPF v3), RIPng (Ipv6), BGP4+ (Ipv6)(b.)Ipv6 Multicast Routing(c.)Ipv6 over Ipv4 tunnels(d.)Multicast Listener Discovery (MLD) version 1 and 2 snooping<< 12.2.24 >>Security Features(a.)802.x Accounting(b.)MAC Authentication(c.)Protection against Denial of Service (DoS) attacks(d.)Provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number<< 12.2.25 >>Supported Protocol and RFC Standards or equivalent(a.) 802.1D Bridging(b.)802.1q VLAN Tagging(c.)802.1p Mapping to Priority Queue(d.)802.1w Rapid Spanning Tree</p>				
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<p>(RSTP)(e.)802.3ad Link Aggregation(f.)802.3x Flow Control(g.)SNMP V1, V2, V3(h.)RFC 783 TFTP(i.)RFC 854 Telnet(j.)RFC 1757 RMON MIB(k.)RFC 896 Congestion Control in IP/TCP Internetworks(l.)RFC 950 Internet Standard Subnetting Procedure(m.)RFC 1191 Path MTU Discovery(n.)RFC 1403 BGP OSPF Interaction(o.)RFC 1519 Classless Inter-Domain Routing (CIDR): (p.)RFC 1812 Requirements for IP Version 4 Routers(q.)RFC 2236 Internet Group Management Protocol (IGMP) Version 2(r.)RFC 1887 An Architecture for Ipv6 Unicast Address Allocation(s.)RFC 1981 Path MTU Discovery for Ipv6(t.)RFC 2374 Ipv6 Aggregatable Global Unicast Address</p>				
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<p>Format(u.)RFC 2080 RIPng for Ipv6(v.)RFC 2373 Ipv6 Addressing Architecture(w.)RFC 2461 Neighbor Discovery for IP Version 6 (Ipv6)</p>				
<p>12.3</p>	<p>Switch Management<< 12.3.1 >>Should be offered with internal hot- swappable , redundant power supplies (220 VAC at 50 Hz)<< 12.3.2 >> Vendor shall ensure that required power cables IEC- C13/14 (2 meters power cord) shall be provided along with systems</p>			
<p>12.4</p>	<p><< 12.4 >>Environmental regulatory compliance (a.)RoHS-compliant (b.)WEEE- compliant(c.)FIPS Compliant(d.)Electromagn etic emissions compliant FCC Class A(e.)The offered product must be certified with EAL 4 [Evaluation Assurance Level] or</p>			

	NIAP/CCEVS [National Information Assurance Partnership / Common Criteria Evaluation & Validation Scheme]			
12.5	Preferred Brands : Cisco / HP /Ruckus /Allied Telesis			
13	13. Ethernet Surge Protector			
<< 13.1>>Make and Model : Mandatory to provide Make & Model<< 13.2>> Details of Product Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 13.3 >> Compatibility : 10BASE-T/100BASE-TX/1000BASE-T, POE Compatible<< 13.4>> Data Rate : Shall support 1Gbps (minimum)<< 13.5 >> Surge Handling capacity (8/20 micro sec) : should have 2 kA nominal discharge capability or				

<p>better<<13.6 >> Connection Type : RJ-45 Jacks<<13.7 >> Casing : weather proof metal enclosure<< 13.8>> Certification/Approvals : IEC IP66 / UL/ EN / CE / IEC << 13.9>> Power supply/ other Mounting/Bracket kit, Drill template, user's Installation manual, Management tools << 13.10>>All accessories to be provided for realizing the CCTV solution as per the design. All accessories to be provided from the same OEM<< 13.11>>Preferred make : Axis / Citel / Emerson /Schneider</p>				
<p>14</p>	<p>Weather Proof Outdoor Pole mount Junction Box with IP66 rated</p>			
<p><< 14.1>>Make and Model : Mandatory to provide Make & Model<< 14.2>> Details of Product</p>				

<p>Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 14.3>> Dimension : Shall be 24x18x12 Inches (WxHxD) or better<< 14.4 >> Environmental Rating protection : Shall be rated for IP 65 or higher protection for Pole mount<< 14.5>> Housing : Carbon steel<< 14.6>> Coating : DIN power coated<< 14.7>> Color : Gray<< 14.8>> Front Door : Single door with proper Gasket protection to protect from Water entry & dust<< 14.9>> Ventilation : Shall have vents with brush cover for air circulation<< 14.10>>Standards : UL/cUL/IEC << 14.11>>Grounding : shall have provision for grounding<< 14.12>>Hinge pins : shall have hinge pins</p>				
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<p>for easy door removal<<14.13>>Mounting panel : Zinc galvanized mounting panel<< 14.14>>Enclosure edge / flange : Shall have Water and Dust proof edge flange trough collar diverts liquids, dirt << 14.15>> Accessories / parts to accommodate the termination of the network cable, LAN Surge Protector, Power Surge Protector, Power adapter for Illuminators etc.<< 14.16>>Bolts, Nuts & fixtures: Shall provide Stainless Steel accessories to mount junction boxes on the poles.<< 14.17>>The delivered product should be ISI marked /certified.<< 14.18 >>Preferred Make: Rittal / APW/ Netrack / Valrack /WQ</p>				
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Item Specifications -V

SI. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
15	Hot Dip Galvanized Outdoor Pole (15 Feet height) with Camera Mounting Arm and Pole Earth Kit			
<< 15.1>> Make and Model : Mandatory to provide Make and model << 15.2>> Details of Product Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 15.3>> Material : Outdoor GI/Steel pipes of ISI mark<< 15.4>> Coating and Metal protection treatment for Monopole : Galvanize Aluminum Hot Dip die casting/coating (Galvanized) confirming EN ISO 1461 standard<<				

<p>15.5>> Size : 6 Inch Diameter or better<< 15.6>> Wall thickness : 2mm or better<< 15.7>> Length / Height : Minimum 15 feet and at least 12 feet above ground level<< 15.8>> Wind loads for design : Comply as per IS875 standard<< 15.9>> Protection : Shall provide Protective measures from lightening and monkey menace<< 15.10>>Top Cover : Pole top shall be closed suitable cap of same material with same coating as same as pole<< 15.11>>Provision for Outdoor Junction fixing on the Pole : Suitable Plate/brackets to be welded before final Galvanized coating for fixing the Outdoor junction box<< 15.12>>Provision for Cable Entry : Suitable holes to be done for cable entry at bottom (input cables) and</p>				
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<p>top(camera & illuminators) before Galvanized coating << 15.13>>Gasket/groumet for cable entry holes : Suitable Gasket/groumet should provide to protect of water Seepage << 15.14>> Outreach Arm : Arms fixed to Poles for mounting the Cameras,<< 15.15>>Length of the Arm : Length 1m to 2m with mounting brackets for outdoor fixed bullet cameras and Speed dome cameras (according to site condition)<< 15.16>>The design for the parapet/ roof top support shall be arrived at in consultation with the SSA Control Center Engineers after the award of the contract. The vendor has to fabricate/ provide the parapet / roof top pole based on the approved design during installation activity<< 15.17>>All necessary</p>				
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<p>accessories like the bolts, nuts, mounting bracket kit, Drill template, user's & Installation manual needs to be provided for completing the installation and commissioning as per the design.</p>				
<p>16</p>	<p>Supply and installation of CAT 6 armoured cable</p>			
<p><< 16.1>> Make and Model/Part Number<< 16.2>> Type : Unshielded 4 pair Outdoor Armoured LAN cables for outdoor application, LSZH<< 16.3 >> The structured cabling for CCTV system inside the control centre has been already implemented in the control centre. The vendor has to carry out the cabling activity only from the building to the perimeter where the poles/ cameras are located. << 16.4>> The vendor has to provide the</p>				

<p>necessary termination at the pole and camera end.<< 16.5 >> The final quantity of the cable needed may be 10 percent more than the quantity mentioned below. For any such additional items the payment shall be made on the actuals.<< 16.6>> Quantity : 6 rolls of 305 m << 16.7>> Conductor : Min 24 AWG 7/32 standard copper,<< 16.8>> Network support : 10/100/1000 Mbps<< 16.9>> Application: Connecting Outdoor cameras on the poles POE switch inside the building. The outer periphery of the SSA Control Center is approximately 10m from the rectangular building.<< 16.10>> Certificates ISO/IEC ,TIA/EIA, IEC or better<< 16.11>> Vendor has to quote of products from Molex/ Commscope /Panduit brands only.<<</p>				
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<p>16.12>> Required Consumables for the for realizing the has to be included in the quote</p>				
<p>17</p>	<p>Network Alarm Programmable Microphone.The vendor shall offer Network Alarm Programmable Microphone with the following specifications or better</p>			
<p><< 17.1>> Make and Model : Mandatory to provide Make & Model<< 17.2>> Details of Product Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 17.3>>Audio stream supported SIP2.0, RTP multicast<< 17.4>> Audio codecs : G.711u, G.722<< 17.5>> Speakers 2 built-in, stereo, power output 2x1 W<< 17.6>> Supported</p>				

<p>protocols : IPv4, HTTP, NTP, RTP, TCP, UDP, DHCP, SIP, mDNS<< 17.7>></p> <p>Logical inputs 2, galvanically separated, sensitive to contact or voltage from 5 to 48 V<< 17.8>></p> <p>Relay output 1, galvanically isolated, NO and NC contact, max load 48 V, 1 A<< 17.9>></p> <p>Headphone output 3.5 mm jack, stereo, power output 2x30 mW<< 17.10>></p> <p>Primary microphone inputsymmetric, XLR, integrated phantom power supply 24 V<< 17.11>></p> <p>Headset microphone input 3.5 mm jack, integrated power supply for electret microphones<< 17.12>></p> <p>Line input 3.5 mm jack, mono or stereo non-symmetric stereo<< 17.13>></p> <p>Power supply: 12 to 32 V, power draw max. 1 A or better PoE to</p>				
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<p>802.3af standard<< 17.14>>Operating temperature : temperature range 0-40°C<< 17.15>>Programmable Zones : at least 10 Zones without a Server<< 17.16>> Audio Communication : Two Way<< 17.17>>Accessories: All necessary accessories like the power supply/Adapters (if required), other Mounting/Bracket kit, Drill template, user's & Installation manual, Management tools . All accessories to be provided from the same OEM<< 17.18>>Certifications and Approvals CE/FCC/VCCI, Safety -IEC/EN/UL, Environment- IEC/EN<< 17.19>>Preferred Makes : Avaya / Axis / 2N/ Cisco</p>				
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18	Indoor Network Speaker The vendor should offer the indoor network speaker with the following specifications or better			
<< 18.1>> Make and Model : Mandatory to provide Make & Model<< 18.2>> Details of Product Specifications website and URL (web address) link : Mandatory to provide Product Specifications website and its URL link<< 18.3>>Audio streaming : One-way/two-way (mono) << 18.4>>Audio compression: AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726/G.722 MP3 in mono/stereo from 64 kbps to 320 kbps.Constant and variable bit rate.Sampling rate from 8 kHz up to 48 kHz or better.<< 18.5>> Max sound pressure level : 90 dB or better << 18.6>> Frequency response : 75				

<p>Hz - 20 kHz or better << 18.7>> Amplifier description : Built-in 10 W with POE or better.<< 18.8 >> Security : Password protection, IP address filtering, HTTPSb encryption, IEEE 802.1Xb network access control, Digest authentication, User access log, Centralized Certificate Management<< 18.9>>Supported protocols : IPv4/v6c , HTTP, HTTPSb , SSL/TLSb , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, SNMP v1/v2c/v3 (MIB-II), DNS, , NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SSH, NTCIP, SIP<< 18.10 >>Application Programming Interface: Open API for software integration<< 18.11>>Voice announcement: Voice announcementshould</p>				
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<p>support 10 or more pre-recorded voice announcements. Voice announcement through built-in SIP support for connection to any IP telephone / VoIP system<< 18.12 >>VoIP : Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX. IPv6, SRTP, SIPS,SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN)<< 18.13>>Intelligent audio : Support for Auto Speaker Test<< 18.14>>Event triggers : Virtual inputs, External input Call: DTMF, State changes<< 18.15>> Event actions : Play audio clip, send SNMP trap, send Auto Speaker Test, status LED<< 18.16>> Notification via email, HTTP, HTTPS and TCP'<< 18.17 >> 'Built-in</p>				
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<p>installation aids' : Test tone verification and identification<< 18.18>>'Functional monitoring' : Test tone verification and identification<< 18.19>>Casing : Plastic casing, IP40 rated Colors: White / light grey << 18.20>>Memory : 256 MB RAM, 512 MB Flash<< 18.21>>Power : Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 (max. 12.95 W)<< 18.22>>Connectors : RJ45 10BASE-T/100BASE-TX PoE<< 18.23>>Max range: 6 m (19.7 ft)' : 6 m (19.7 ft)<< 18.24>>Reliability : Designed for 24/7 operation<< 18.25>>Certifications and Approvals : CE/FCC/VCCI, Safety -IEC/EN/UL 60950-22, Environment- IEC/EN and NEMA 250 Type 4X<< 18.26>>MTBF >100,000 h (Certificates to be</p>				
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<p>provided from OEM) << 18.27>> Mount type : Wall or pole mount cabinet type speakers<< 18.28>>Accessories : All necessary accessories like the Power supply/Adapters Midspan other Mounting/Bracket kit, Drill template, user's & Installation manual, Management tools need to complete the installation as per the design. All accessories to be provided from the same OEM<< 18.29>>Certifications and Approvals : CE/FCC/VCCI, Safety -IEC/EN/UL, Environment- IEC/EN<< 18.30>> Preferred Makes : Avaya / Axis / 2N/ Cisco</p>				
<p>19</p>	<p>Power line surge protector</p>			
<p><< 19.1>>Technology : MOV technology for L to N << 19.2>>Normal Line Voltage : 230 V , 50 Hz<<</p>				

<p>19.3>>Normal Discharge current (8/20 micro sec) : 20 KA (Nominal) and 40 KA (at max)<<</p> <p>19.4>>Response time < 100 nano secs<<</p> <p>19.5>>Test Standards : IEC / UL /EN<<</p> <p>19.6>>Accessories : Power supply/Adapters Midspan other Mounting/Bracket kit, Drill template, user's & Installation manual, Management tools need to complete the installation as per the design. All accessories to be provided from the same OEM<<</p> <p>19.7>>Preferred make : Axis / Citel / Emerson /Schneider</p>				
20	General Terms and Conditions			
<< 20.1 >>The scope of this tender is for supply, installation and commissioning of				

<p>cameras, IP based network speakers, network alarm programmable microphone, related network, server, software and other installations. The supply, installation and integration shall be implemented as a total turn-key solution as per the design specified in the annexure.” CCTV solution at SSA Control Centre”</p>				
<p><< 20.2 >> SSA Control Centre will take up the power cabling, Network cabling within the building. Any signal loss/ damage in these components, it is in the scope of SSA Control Centre. The armored CAT 6 cable supply and installation for the perimeter (outside the building to the poles / cameras) has to be carried out by the vendor.</p>				
<p><< 20.3>> For all the</p>				

<p>licensed products, required licenses shall be submitted with appropriate authorization. Supplier will be responsible for the updates /renewal of such licenses during warranty period.<< 20.4>> For all the items, details of Manufacturer & Model No. shall be explicitly quoted. The related technical brochures/datasheet/supporting documents and URLs of the same from OEM website should be submitted along with the offer to verify the offered specifications & part numbers of Bill of Material (BOM). The offer which fails to provide these requirements is liable for rejection.<< 20.5>> Vendor should carefully consider all the clauses in the specifications and should ensure that their</p>				
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<p>offer is complete in all respects at the time of submission. The compliance to the specification must be provided as per the template attached in PDF format. Complete technical documentation justifying the compliance should be enclosed along with their offer. Offer which are incomplete are liable to be considered noncompliant<< 20.6>></p> <p>The supplier shall take utmost care in laying, fixing and termination activities, to avoid any losses to SSA Control assets and damages to already laid cables or building. In case of any damage, the supplier shall be responsible for re-establishing the facility and has to borne the incurring expenditure towards the damages.<< 20.7>> During the</p>				
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<p>technical evaluation process, the supplier should be ready to demonstrate the similar system working at any site to the SSA Control Centre authorized officials, if needed<< 20.8 >> The vendor should not cause any damage to the existing false floor, false ceiling and walls of the control centre during implementation. Any such damage caused shall be repaired / rectified as original by vendor free of cost.<< 20.9>> Vendor can plan for a site visit during bidding process for the better understanding of the scope of implementation. (Not mandatory)</p>				
<p><< 20.10 >>In case, the vendor plans to visit the site, the vendor can visit the only on Tuesdays and Thursdays during the</p>				

<p>period, the tender is opened for bid submission.<< 20.11>> Address for visit : SSA Control Centre , Annexure to ISTRAC-ISRO , Peenya, Bangalore 560058<< 20.12>> No visit shall be entertained after the last date for bid submission.<< 20.13>>Documentation: After installation, the supplier shall submit a report with full details of the setup with facility layout, camera locations , Speaker and microphone connectivity , system architecture, network cable routing diagram and operational and maintenance document of the overall system. Vendor shall impart technical training regarding operation and maintenance of the CCTV system to Department's personnel<< 20.14>> The Vendor shall have an</p>				
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<p>support centre / team in Bengaluru to offer onsite support<< 20.15>> Camera OEM should have a Service Centre / team in Bengaluru<< 20.16>>Vendor Should be an ISO Certified Company<< 20.17>> Bill of materials is indicative only. Any other accessories / components items required for installation and commissioning the CCTV system should be included and quoted by the supplier.<< 20.18>>All necessary accessories to realize the CCTV Surveillance system at the SSA Control Center as per the design has to be from the corresponding OEM</p>				
<p><< 20.19>>The cost of all accessories need to be included in the bill of materials<< 20.20>>The vendor can visit the site to</p>				

<p>access the actual items/ accessories needed to realize the solution<< 20.21>>At the time of installation and commissioning of the configuration if it is found that some additional hardware accessories or software items with licenses are required to complete the configuration to meet the operational requirement (as per the design) which were not included in the vendor's original list of deliverables then, vendor is required to supply such items to ensure the completeness of the configuration at no extra cost. Vendor should ensure completeness of the list of deliverables in the offer to avoid such discovery during installation<< 20.22>>Vendor shall ensure that required</p>				
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<p>power cables IEC-C13/14 (2 meters power cord) shall be provided along with systems,(wherever applicable) << 20.23>>Installation of cameras, network, recording and commissioning shall be done as per the guidance of concerned engineer of SSA Control Centre, in accordance with the detailed layout of the proposed setup enclosed in this indent.<< 20.24>> After sales support: The supplier should ensure up keeping of the total facility during the warranty period of 3 years. The mode of after sales support shall be explained clearly in their offer.<< 20.25>>All accessories required to complete the installation is the responsibility of the vendor<< 20.26>>Vendor shall provide the</p>				
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Operation & Configuration manuals - 3 sets				
<p><< 20.27>>The terms of the contract is for 'Supply, Installation and Commissioning by vendor' and 'Acceptance by user' at SSA Control Centre Peenya<< 20.28>>The CCTV Systems configuration diagram (Annexure) provided is indicative. Vendors have to provide complete configuration / architecture design diagrams with required items in quote for the total solution.<< 20.29>>The final implementation for CCTV surveillance and Public addressing system shall be carried out based on the approved design by the SSA control centre team.The final configuration drawings shall be duly signed by vendor and SSA Control</p>				

<p>Centre team before starting the supply & installation.<< 20.30>>Vendor shall provide authorization (OEM) letters / certificates from manufacturer for hardware & software items including Cameras, Network Switches, Servers, Software & Workstations, display screen for supply and service during the standard warranty period.</p>				
<p><< 20.31>>Warranty : Standard Warranty: Minimum comprehensive warranty support for a period of three years shall be provided for all items and for the setup. In case, any of the manufacturers provides comprehensive support for more than three years, for any item, the same shall be provided to SSA Control Centre.<< 20.32>> In case of any</p>				

defects arise during installation due to improper installation practices, by vendors/ their representatives, the same have to be replaced / rectified at free of cost << 20.33 >>Delivery : The vendor should deliver all the items at SSA Control Centre , Peenya				

Vendor Specified Terms

Description	Vendor Terms
Payment Term	
Taxes and other costs, if any	
Delivery Period	
Delivery Term	
Country of Origin	

Security Deposit: FD or BG for 10% of PO value to be submitted after receipt of PO and valid till supply & acceptance.	
Performance Bank Guarantee: BG for 10% of PO value to be submitted while claiming payment valid till end of warranty period with a claim period of 60 days.	
(OR) SD-cum-Warranty (PBG) (in lieu of SD & PBG as a single instrument): BG for 10% of PO value to be submitted after receipt of PO valid till end of Warranty period with a claim period of 60 days.	
Delay in Completion/Liquidated Damages: A sum of 0.5% undelivered portion of PO for each week of delay or part thereof. Total LD shall not exceed 10% of PO value.	
Warranty	
Validity	
Name, email id and Address of the company on whom the Purchase Order to be placed.	
Any other terms	

Supporting Documents from Vendor

Attachment - I:

Attachment - II:**Price Bid Form**

Item Description	Slab Range	Qty	UOM	Currency	Unit Price	Total Price
CCTV CAMERA Outdoor Speed dome PTZ Camera with day/night vision and inbuilt IR illumination for day/night surveillance	-	5	Nos	-	-	-
CCTV CAMERA Outdoor Bullet IP based HDTV Camera with built-in IR-LEDs source for day / night surveillance	-	5	Nos	-	-	-
CCTV CAMERA Indoor fixed dome IP based HDTV camera with built- in IR-LEDs source for day / night	-	17	Nos	-	-	-

surveillance						
CCTV SYSTEMS Out-of-the box ready all in one storage, camera station.	-	2	Nos	-	-	-
SPEAKERS Indoor Network Speaker	-	12	Nos	-	-	-
MICROPHONE Network alarm programmable microphone.	-	2	Nos	-	-	-
EQUIPMENT INSTALLATION SERVICES Installation and Commissioning	-	1	Nos	-	-	-
SWITCHES CCTV Management Switch	-	2	Nos	-	-	-
SWITCHES POE plus switches	-	4	Nos	-	-	-
WORK STATION Desktop workstations for	-	2	Nos	-	-	-

client monitoring						
MONITORS Monitors 27 Inch size for Client Workstations	-	2	Nos	-	-	-
MONITORS Rack Mount Monitor (RKM) 19 Inch size	-	1	Nos	-	-	-
SWITCHES KVM Switch	-	1	Nos	-	-	-
LCD TFT MONITOR Full HD LCD Monitor display 55 Inch size with 5 meter HDMI/DP cables suitable to client workstations	-	1	Nos	-	-	-
CCTV ACCESSORIES Ethernet Surge Protector	-	22	Nos	-	-	-
CCTV ACCESSORIES Weather Proof Outdoor Pole	-	10	Nos	-	-	-

mount Junction Box with IP66 rated						
CCTV ACCESSORIES Hot Dip Galvanized Outdoor Pole (15 Feet height) with Camera Mounting Arm and Pole Earth Kit	-	9	Nos	-	-	-
CCTV ACCESSORIES Parapet mount with Camera Mounting Arm and Pole Earth Kit	-	1	Nos	-	-	-
CCTV ACCESSORIES Pole Mount with Straps	-	10	Nos	-	-	-
LAN SERVICES Supply and installation of CAT 6 armoured cable (6 rolls)	-	1	Lot	-	-	-
CCTV	-	12	Nos	-	-	-

ACCESSORIES Power line surge protector						
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Break-up of other taxes and other costs should be specified in respective narration columns.

Sum of these Break-up values should be specified in respective value columns.