

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
LIQUID PROPULSION SYSTEMS CENTRE, VALIAMALA (LPSC)  
THIRUVANANTHAPURAM**

**Tender for Augmentation of AV facility in AD's and Controller's  
conference halls**

**Bids to be submitted online**

**Tender No.: LPSC/LVF/LP202400031501 dated 03-04-2024**

## A. Tender Details

Tender No :	<b>LPSC/LVF/LP202400031501</b>
Tender Date :	<b>03-04-2024</b>
Tender Classification:	<b>GOODS</b>
Purchase Entity :	<b>LVF</b>
Centre :	<b>LIQUID PROPULSION SYSTEMS CENTRE, VALIAMALA (LPSC)</b>

### Augmentation of AV facility in ADs and Controller conference halls

For and on behalf of the President of India, the Head, Purchase & Stores, Liquid Propulsion Systems Centre (LPSC), Valiamala, Thiruvananthapuram invites tenders through e-procurement mode;

Prospective vendors interested in participating in the tendering process need to get registered in the portal. Offers submitted through our online portal only will be considered and no other means will be considered. Detailed instruction, pre-requisites and illustrative tutorials for bid enrollment, preparation etc are available in the portal. A help desk is also functioning to assist the vendors whose contact details are available in the portal.

This being a two part tender, Technical and Price Part are opened separately, the tenders should not attach any documents containing Pricing information along with Technical Bid. Normally we do not open PART-II (Commercial Offer), if PART-I (Technical Offer) does not meet with our technical specification requirements.

#### A.1 Tender Schedule

Bid Submission Start Date :	<b>03-04-2024 12:00</b>
Bid Clarification Due Date :	<b>10-04-2024 10:00</b>
Bid Submission Due Date :	<b>30-04-2024 14:00</b>
Bid Opening Date :	<b>30-04-2024 14:30</b>
Price Bid Opening Date :	<b>30-05-2024 14:00</b>

## **B. Tender Attachments**

### **Technical Write-up/Drawings**

**Document : Annexure Ia - Detailed specifications**

**Document : Annexure IV - Compliance matrix**

**Document : Annexure Ib - Scope of work**

### **Instructions To Vendors**

#### **4. INSTRUCTIONS TO INDIGENOUS TENDERERS**

1. a) As far as implementation of provision for Public Procurement (Preference to Make in India) Order, 2017 is concerned, the Office orders vide No. P-4502/2/2017-B.E-II dt 15.06.2017, which is partially modified by Order No.P-45021/2/2017-PP (BE-II) dt 28.05.2018, Order P- 45021/2/2017-PP (BE-II) dt 29.05.2019, Order No. P-45021/2/2017-PP (BE-II) dt 04.06.2020 and Order No. P-45021/2/2017-PP (BE-II) 16.09.2020 and subsequent Amendments issued by the Department of Promotion of Industries and Internal Trade, Ministry of Commerce and Industry regarding Class-I/Class-II local suppliers, Purchase preference, verification of local contents etc shall be applicable to this tender. Therefore, bidders are requested to ensure compliance of the same while submitting tenders. b) Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs. Such MSE s shall produce documentary proof of registration as per provisions of the Policy ie: registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum or any other body specified by Ministry of MSME.

2. Applicable Law: - The Contractor shall be interpreted, construed and governed by the Law of India.

3. Bank Details :- The offer should contain Bank details viz., Bankers Name, Address, Phone No. & Mail id, Bank Account No., IFSC code, PAN No., GST No., etc.

4. Contractors Default Liability :- The 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.

5. Counter Terms and Conditions of suppliers: - Where counter terms and conditions / printed or cyclostyled conditions has 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.

6. DELIVERY AND LIQUIDATED DAMAGES (LD) :- (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 if 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 15 (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.

7. Delivery Period :- The time for and the date / period of delivery of the stores stipulated in the Tender / Purchase Order shall be deemed to be the essence of the contract and delivery must be completed on or before the specified dates.

8. Delivery Term :- Ex-Works / FOR LPSC

9. 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 restrictions, strikes, and 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 the other terms and conditions of the Contract.

10. 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 or for a period as specified in the tender document 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) 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.

11. 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, Copy right 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 fulfilment of the Contract.

12. 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.

13. Mode of Despatch :- For supplies BY ROAD / BY RAIL:- 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. The Contractor will be held responsible for any demurrage / wharfage paid due to non-receipt of documents in time.

14. Offer Validity :- a) For Single Part Tender - Quotation should be valid for 90 days from the date of

opening of the tender or any other period as specified in the tender. b) For Two Part Tender - Quotation should be valid for 120 days from the date of opening of the tender or any other period as specified in the tender. Note :- Offer with validity lesser than that specified is liable for exclusion from the procurement process

15. Packing Forwarding & Insurance:- The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by Rail / Road 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. b) Insurance : 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.

16. Payment :- 100% payment shall be made through RTGS within 30 days of receipt and acceptance of the item at our site against submission of PBG.

17. Performance Bank Guarantee (PBG) :- To fulfil guarantee conditions outlined in clause 2(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 3% 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.

18. Price : a) Price should be firm and fixed and should be on the basis of FOR, LPSC / delivery at site. The Purchaser will not pay separately for transit insurance, and the risk and cost during transit shall be exclusively the responsibility of the Contractor and the purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract. b) Tenders 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 variations. c) Prices are required to be quoted according to the units indicated in the tender. When quotations are given in terms of units other than those specified in the tender form, relationship between the two systems of unit must be furnished.

19. Quantity (QTY) and Unit of Measure (UOM) Quote should be as per the quantity and unit of measure mentioned the tender. If dimensional details are available, the same should also be indicated in your offer.

20. Resolution of Disputes:- Any dispute, disagreement or question arising out of or relating to or in consequence of the contract or to its fulfillment, or the validity of enforcement thereof which cannot be settled mutually, or the settlement of which is not herein specifically provided for, shall within 30 (thirty) days from the date either party informs the other in writing that such dispute or disagreement exists be referred to arbitration by the sole arbitrator. The Arbitrator shall be appointed As per the Indian

Arbitration and Conciliation Act 1996 and proceedings will be conducted in Trivandrum. The Arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act 1996 (Act 26 of 1996) as amended from time to time and the decision of the Arbitrator shall be final and binding on the parties thereto. Each party shall bear its own cost of preparing and presenting its case. The cost of Arbitration including the fees and expenses of the Arbitrator shall be shared equally by the parties unless the award provides otherwise. Subject to provisions of this clause, the courts at Kerala shall have exclusive jurisdiction. Performance under this Contract shall, however continue during Arbitration proceeding and no payment due or payable by the parties hereto shall be withheld unless any such payment is/or forms a part of the subject matter of the Arbitration proceedings.

21. Security Deposit (SD) :- Applicable for order value above INR 5 L (Including taxes and other charges). On acceptance of the order, 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 3 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.

22. Specifications:- a) Stores offered should strictly conform to Purchasers 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. Wherever options are called for in our specifications, the tenderer should address all such options. 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.

23. Taxes :- The applicable GST / IGST shall be clearly mentioned in your offer along with HSN code of the offered items. We are eligible for IGST @ 5% as per the Department of Revenue Notification No. 25/2018 Integrated Tax (Rate) Schedule-I; Sl.No.243B dated 31.12.2018 (Amendment to Notification No. 7/2018 - Integrated Tax (Rate) dated 25.01.2018 and Notification No. 1/2017 - Integrated Tax (Rate) dated 28.06.2017

24. Training:- The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchasers engineering / technical personnel from India and for the active association on the manufacturing processes throughout the manufacturing period of the Contract / Stores, number of such personnel to be mutually agreed upon.

25. LPSC shall have the right to place part order among the parties for the items for which they are the lowest.

26. Option Clause : The Purchase reserves the right to increase/decrease the Ordered Quantity by up to 25% at any time, till final delivery date (or the extended delivery date of the Contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of delivery period (or the extended delivery period). It may please be noted that, this clause is not applicable for Development Orders.

5. This procurement is NOT eligible for GST @ 5% , Therefore bidders are requested to quote GST at actuals as per HSN code.

## C. Bid Templates

### C.1 Technical Bid - Augmentation of AV facility in AD's and Controller's conference halls

#### 1. Boundary layer microphone

##### Item specifications for Boundary layer microphone

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type	Condenser microphone	Yes / No / Explain		
2	Acoustic principle	Boundary layer microphone	Yes / No / Explain		
3	Pickup pattern	Cardioid	Yes / No / Explain		
4	Sensitivity	10 mV / Pa or better	Yes / No / Explain		
5	Frequency response	100 Hz to 15 kHz or better	Yes / No / Explain		
6	Maximum sound pressure level	117 dB or better	Yes / No / Explain		
7	Phantom power	48V	Yes / No / Explain		
8	LED indicator	Yes	Yes / No / Explain		
9	Microphone modes	Toggle on/off and Push to mute and Push to talk	Yes / No / Explain		

#### 2. Wireless Microphone (Collar) with transmitter and receiver unit

##### Item specifications for Wireless Microphone

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type	Wireless	Yes / No / Explain		
2	Pickup pattern	Omnidirectional	Yes / No / Explain		

3	Form factor	Collar Mic	Yes / No / Explain		
4	Transducer type	Condenser	Yes / No / Explain		
5	Frequency response (Microphone)	100 Hz to 15 kHz or better	Yes / No / Explain		
6	Operating range	90 m or better	Yes / No / Explain		
7	On/off switch	Yes	Yes / No / Explain		
8	LED indicator	Yes	Yes / No / Explain		
9	Transmitter and receiver units	Both required	Yes / No / Explain		

### 3. Audio Digital Signal Processor

#### Item specifications for Audio Digital Signal Processor

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Analog inputs	Should support 16 Mic/Line level inputs with individual AEC processing on Phoenix/Combicon removable screw connector and selectable 48V Phantom power	Yes / No / Explain		
2	Analog outputs	8 Mic/Line level outputs on Phoenix/Combicon removable screw connector	Yes / No / Explain		
3	Noise cancellation	Yes	Yes / No / Explain		
4	Frequency response	100 Hz to 15 kHz or better	Yes / No / Explain		
5	RS-232 serial port	Yes	Yes / No / Explain		
6	RJ45 ethernet port	Yes	Yes / No / Explain		
7	Network audio port (AVB/Dante/BLUlink or equivalent)	Yes	Yes / No / Explain		

8	USB audio support	Yes	Yes / No / Explain		
9	One or more DSP units/expanders of the same OEM may be cascaded to support 16 mic / line inputs and 8 mic / line level outputs.	Yes	Yes / No / Explain		

#### 4. AUDIO AMPLIFIER

##### Item specifications for AUDIO AMPLIFIER

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type	Two channel Class-D power amplifier	Yes / No / Explain		
2	Frequency response	100 Hz to 15 kHz or better	Yes / No / Explain		
3	Signal to Noise ratio	90 dB or better	Yes / No / Explain		
4	Output power	8 ohm: 120 watts per channel or better	Yes / No / Explain		
5	100 V High impedance mode	Yes	Yes / No / Explain		

#### 5. Ceiling Mount Speakers

##### Item specifications for Ceiling Mount Speakers

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	System Type	6 inch full range or better	Yes / No / Explain		
2	Coverage Angle	110 degree conical or better	Yes / No / Explain		
3	Nominal impedance	8 ohm	Yes / No / Explain		
4	Power rating (Continuous/RMS)	30 watts or better	Yes / No / Explain		
5	Transformer Taps (100V)	30w,15w	Yes / No / Explain		

6	Sensitivity(1w,1m)	85 dB SPL or better	Yes / No / Explain		
7	Maximum sound pressure level	104 dB or better	Yes / No / Explain		

## 6. USB 3.0 peripheral sharing switch

### Item specifications for USB 3.0 peripheral sharing switch

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Computer connections	2 or more	Yes / No / Explain		
2	Port selection	Remote port selector	Yes / No / Explain		
3	Connector (Computer)	2 x USB Type B Female or better	Yes / No / Explain		
4	Connector (Device)	4 x USB Type A Female or better	Yes / No / Explain		
5	LED indicators	Yes	Yes / No / Explain		
6	Data rate	5 Gbps or better	Yes / No / Explain		

## 7. HDMI Matrix Switcher

### Item specifications for HDMI Matrix Switcher

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Inputs	8 HDMI: on female HDMI Connectors	Yes / No / Explain		
2	Outputs	8 HDMI: on female HDMI Connectors	Yes / No / Explain		
3	Resolution	4K@60Hz (4:4:4)	Yes / No / Explain		
4	Video	HDMI Support Deep Colour, 3D, ARC, up to 7.1 uncompressed audio channel specified in HDMI 2.0. Content protection HDCP 2.2	Yes / No / Explain		

5	Maximum Data Rate	17 Gbps or better	Yes / No / Explain		
6	EDID management	Yes	Yes / No / Explain		
7	RJ-45 Ethernet port	1 or more	Yes / No / Explain		
8	RS-232 Port	1 or more	Yes / No / Explain		
9	Stereo balanced Audio Output on a 5-pin Terminal Block Connector	Yes	Yes / No / Explain		

## 8. VGA to HDMI Converter

### Item specifications for VGA to HDMI Converter

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Input - VGA port (Female)	1 or more	Yes / No / Explain		
2	Output - HDMI port (Female)	1 or more	Yes / No / Explain		
3	Supported Resolution	1920*1080p or better	Yes / No / Explain		
4	3.5 mm Stereo Audio input	1 or more	Yes / No / Explain		
5	Analog Audio Embedding	Yes	Yes / No / Explain		
6	DC Power Jack	Yes	Yes / No / Explain		
7	Necessary Power Adapter included	Yes	Yes / No / Explain		

## 9. VIDEO SCALARS

### Item specifications for VIDEO SCALARS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Inputs (HDMI)	On a female HDMI connector - 1 no. or more	Yes / No / Explain		

2	Inputs (Stereo Analog Unbalanced Audio)	On a 3.5mm mini jack - 1 no. or more	Yes / No / Explain		
3	Output (HDMI) with Up/Down Scaling support	On a female HDMI connector - 1 no. or more	Yes / No / Explain		
4	Video	4K @60Hz (4:4:4) or better	Yes / No / Explain		
5	Should support to up scale video signals up to 4K @60Hz	Required	Yes / No / Explain		
6	Should support to down scale video signals from 4K @60Hz	Required	Yes / No / Explain		
7	HDMI 2.0 Standard Compliance	Yes	Yes / No / Explain		

## 10. Computer Monitor

### Item specifications for Computer Monitor

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Technology	LED	Yes / No / Explain		
2	Type	Bezel less or frame less or slim Bezel	Yes / No / Explain		
3	Display Technology	IPS or VA	Yes / No / Explain		
4	Screen size (diagonal)	24 inches to 27 inches (Both inclusive)	Yes / No / Explain		
5	Resolution (pixels)	1920 x 1080 or better	Yes / No / Explain		
6	Aspect ratio	16:09	Yes / No / Explain		
7	Brightness Nits	250 or better	Yes / No / Explain		
8	Viewing Angle	178:178	Yes / No / Explain		
9	HDMI port	1 or more	Yes / No / Explain		
10	Height adjustable & Tilt floor mount stand	Yes	Yes / No / Explain		

## 11. HDMI table flip box for laptop

### Item specifications for HDMI table flip box for laptop

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Input	1 HDMI: on a female HDMI connector	Yes / No / Explain		
2	RJ45 port	1 or more	Yes / No / Explain		
3	Power socket	Yes	Yes / No / Explain		

## 12. DP(Male) to HDMI( Fema)converter

### Item specifications for DP(Male) to HDMI( Fema)converter

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Input - Display port (Male)	1 or more	Yes / No / Explain		
2	Output - HDMI port (Female)	1 or more	Yes / No / Explain		
3	Supported Resolution	4K@60Hz (4:4:4)	Yes / No / Explain		

## 13. USB Hub multiport adapter

### Item specifications for USB Hub

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Input: USB Type-C male connector	1 no.	Yes / No / Explain		
2	Output: HDMI Female Connector	1 no. or more	Yes / No / Explain		
3	Output: Display port Female Connector	1 no. or more	Yes / No / Explain		
4	Output: VGA Connector	1 no. or more	Yes / No / Explain		
5	Port: USB 3.0 Type-A Connector	2 nos or more	Yes / No / Explain		

6	Port: RJ-45 Connector	1 no. or more	Yes / No / Explain		
7	Port: 3.5 mm Stereo Audio Connector	1 no. or more	Yes / No / Explain		
8	Video	3840x2160p@30Hz or better	Yes / No / Explain		
9	Dual Monitor Support	Yes	Yes / No / Explain		
10	USB Power Delivery	85 watts or better	Yes / No / Explain		

#### 14. WIRELESS KEYBOARD AND MOUSE

##### Item specifications for WIRELESS KEYBOARD AND MOUSE

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Keyboard Type	Wireless	Yes / No / Explain		
2	Mouse Type	Wireless	Yes / No / Explain		
3	USB Wireless Receiver	Included	Yes / No / Explain		
4	No. of Mouse Buttons	3 Nos	Yes / No / Explain		
5	Supported Battery Type	AA or AAA	Yes / No / Explain		
6	No. of Keys in the Keyboard	104 Nos or more	Yes / No / Explain		
7	3 button mouse with scroll wheel	Yes	Yes / No / Explain		
8	AES 128 compliant	Yes	Yes / No / Explain		

#### 15. Battery (AA rechargeable)

##### Item specifications for Battery

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type	AA Ni-MH Battery	Yes / No / Explain		

2	Capacity	2500 mAh or more	Yes / No / Explain		
3	Rechargeable Battery	Yes	Yes / No / Explain		

## 16. Battery (AAA rechargeable)

### Item specifications for Battery

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type	AAA Ni-MH Battery	Yes / No / Explain		
2	Capacity	800 mAh or more	Yes / No / Explain		
3	Rechargeable Battery	Yes	Yes / No / Explain		

## 17. Battery Charger (For AA & AAA Rechargeable Batteries)

### Item specifications for Battery Charger

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	No. of batteries charged at a time	4 Nos or more	Yes / No / Explain		
2	Type of batteries Supported	AA & AAA	Yes / No / Explain		
3	Charging Time for 4 Nos of AA 2500 mAh Batteries	4 Hours or less	Yes / No / Explain		
4	Charging Time for 4 Nos of AAA 800 mAh Batteries	4 Hours or less	Yes / No / Explain		
5	LED Indicators for Battery Status	4 Nos or more	Yes / No / Explain		
6	Compatibility with Item No: 15 & 16	Yes	Yes / No / Explain		

## 18. Rack and accessories

### Item specifications for Rack and accessories

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Type of Rack	Portable Rack	Yes / No / Explain		
2	Usable height	15 U	Yes / No / Explain		
3	Usable width	19 inches	Yes / No / Explain		
4	Overall Width	600 mm	Yes / No / Explain		
5	Overall Depth	600 to 800 mm	Yes / No / Explain		
6	Mount Type	Free-Standing	Yes / No / Explain		
7	Front glass Door	Yes	Yes / No / Explain		
8	Removable Side Panels	Yes	Yes / No / Explain		
9	Heavy Duty Caster Wheels	4 nos (minimum 2 nos with brake)	Yes / No / Explain		
10	Secure Locks	Yes	Yes / No / Explain		
11	Support cable entry from top or bottom	Yes	Yes / No / Explain		
12	No. of Fan for Heat dissipation	1 or more	Yes / No / Explain		
13	No. of Rack trays	2 or more	Yes / No / Explain		
14	6 Outlet Power strip with 6A universal socket	3 nos or more	Yes / No / Explain		
15	Mounting screws and all other accessories required for installation	Yes	Yes / No / Explain		

## 19. HDMI cables - 3 feet

### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	3 Feet	Yes / No / Explain		

2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		
3	Supported Resolution upto 3 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

## 20. HDMI cables - 6 feet

### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	6 Feet	Yes / No / Explain		
2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		
3	Supported Resolution upto 6 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

## 21. HDMI cables - 10 feet

### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	10 Feet	Yes / No / Explain		
2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		
3	Supported Resolution upto 10 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

## 22. HDMI cables - 15 feet

### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	15 Feet	Yes / No / Explain		
2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		
3	Supported Resolution upto 15 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

### 23. HDMI cables - 25 feet

#### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	25 Feet	Yes / No / Explain		
2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		
3	Supported Resolution upto 25 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

### 24. HDMI cables - 35 feet

#### Item specifications for HDMI cables

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	35 Feet	Yes / No / Explain		
2	Connectors	1 HDMI Type A male to 1 HDMI Type A Male gold plated connector	Yes / No / Explain		

3	Supported Resolution upto 35 feet Length	4K@60Hz (4:4:4) or better	Yes / No / Explain		
4	Data transfer rate	17 Gbps or better	Yes / No / Explain		

## 25. USB 3.0 cable Type-A to Type-B - 3 feet

### Item specifications for USB 3.0 cable

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	3 feet	Yes / No / Explain		
2	Data rate	4.8 Gbps or better	Yes / No / Explain		
3	USB 3.0 Compliant	Yes	Yes / No / Explain		
4	Connector A	USB 3.0 type-A male	Yes / No / Explain		
5	Connector B	USB 3.0 type-B male	Yes / No / Explain		

## 26. USB 3.0 cable Type-A to Type-B - 6 feet

### Item specifications for USB 3.0 cable

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	6 feet	Yes / No / Explain		
2	Data rate	4.8 Gbps or better	Yes / No / Explain		
3	USB 3.0 Compliant	Yes	Yes / No / Explain		
4	Connector A	USB 3.0 type-A male	Yes / No / Explain		
5	Connector B	USB 3.0 type-B male	Yes / No / Explain		

## 27. USB 3.0 cable Type-A to Type-A - 6 feet

### Item specifications for USB 3.0 cable

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	6 feet	Yes / No / Explain		
2	Data rate	4.8 Gbps or better	Yes / No / Explain		
3	USB 3.0 Compliant	Yes	Yes / No / Explain		
4	Connector A	USB 3.0 type-A male	Yes / No / Explain		
5	Connector B	USB 3.0 type-A male	Yes / No / Explain		

## 28. USB 3.0 cable (Active extender) - 25 feet

### Item specifications for USB 3.0 cable

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	25 feet	Yes / No / Explain		
2	Data rate	4.8 Gbps or better	Yes / No / Explain		
3	USB 3.0 Compliant	Yes	Yes / No / Explain		
4	Connector A	USB 3.0 type-A male	Yes / No / Explain		
5	Connector B	USB 3.0 type-A female	Yes / No / Explain		

## 29. USB 3.0 cable (Active extender) - 35 feet

### Item specifications for USB 3.0 cable

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Length	35 feet	Yes / No / Explain		
2	Data rate	4.8 Gbps or better	Yes / No / Explain		
3	USB 3.0 Compliant	Yes	Yes / No / Explain		

4	Connector A	USB 3.0 type–A male	Yes / No / Explain		
5	Connector B	USB 3.0 type–A female	Yes / No / Explain		

### 30. EQUIPMENT INSTALLATION SERVICES

#### Item specifications for EQUIPMENT INSTALLATION SERVICES

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Installation, Programming, Configuration & Integration with existing System	Required	Yes / No / Explain		
2	Necessary cables, connectors, brackets, grommet hole covers etc (as given in Sl. no. 30 of Detailed specifications document), which are required for installation, should be provided.	1 lot	Yes / No / Explain		

#### Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Make and model number of all items quoted should be explicitly mentioned by the supplier in the technical bid. Datasheet of quoted items, with specifications highlighted / marked, should be included along with the bid.	Required	Yes / No / Explain		

#### Supporting Documents required from Vendor

**1. Manufacturer Authorization Form (MAF) from OEM for 7 items identified in Detailed specifications document**

**2. Compliance matrix (Given in Annexure IV)**

**3. Document containing quote of 2 year comprehensive AMC after Warranty period (Price Bid Related)**

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	As the scope of work involves installation and configuration of AV equipment in conference halls, splitting of the Purchase Order to multiple parties shall not be carried out	Yes / No / Explain	
2	Pre bid visit: Interested parties can visit the halls for getting an idea about AV facility to be established. For this, bidders may contact SPSO (Ph:04712567726/7727) by sending a mail to pso_2@lpSC.gov.in & spso_purchase@lpSC.gov.in	Yes / No / Explain	
3	10 weeks for delivery from the date of placement of P.O , 4 weeks for installation after the acceptance of items and intimation of site readiness by LPSC	Yes / No / Explain	
4	Comprehensive AMC: Rates for the next 2 years after the completion of the warranty period shall be quoted for commitment purpose, explicitly in a separate document uploaded with the price bid	Yes / No / Explain	
5	Warranty:- All the items shall have a warranty period of three years from the date of acceptance of the systems. In case OEM provides more than 3 years comprehensive warranty, the same shall be passed on to LPSC	Yes / No / Explain	
6	Authorization certificate from OEM stating back-to-back onsite comprehensive warranty support for 3 years & support for spares should be submitted for the 7 items listed in Sl. no. ii) of Terms and conditions in Detailed specification document	Yes / No / Explain	
7	The configuration file of the Audio DSPs installed and programmed, should be handed over to LPSC at the time of commissioning the facility.	Yes / No / Explain	
8	Party shall be ready for a demonstration of the sample of the offered products at LPSC at the time of technical evaluation if requested. A confirmation for this demonstration has to be included in the technical offer.	Yes / No / Explain	

9	MII content of items quoted in percentage of total value & the location at which value addition is made should be specified by the suppliers along with offer. A minimum of 20% MII content is required for the total items quoted.	Yes / No / Explain	
10	The system integration document with all installation details and the operation manual for the user need to be provided at the time of commissioning of the system.	Yes / No / Explain	
11	Training on the facility operation should be given to LPSC officials, including hands on sessions	Yes / No / Explain	
12	Updates/renewal of licenses: For all the licensed products, required licenses shall be submitted with appropriate authorization. Updates/renewal of such licenses during warranty & AMC periods will be the responsibility of the vendor.	Yes / No / Explain	
13	Installation & commissioning has to be carried out as per LPSC requirement & connectivity to existing systems/facilities has to be carried out by supplier. Necessary cables, connectors, converters, consumables & accessories required should be supplied	Yes / No / Explain	
14	As per the Rule 144(xi) of General Financial Rule ,2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy service and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority ie., Department for Promotion of Industry and Internal Trade (DPIIT). Hence, Vendors or Agents of a Vendor (Indian or others) from a country sharing border with India shall submit copy of valid registration made with Department for Promotion of Industry and Internal Trade (DPIIT), Government of India along with the tender mandatorily, without which the offer will be treated as invalid.	Yes / No / Explain	
15	Whether applicable GST percentage mentioned in your offer. (GST shall be at actuals as per HSN code)	Yes / No / Explain	

16	Installation Charges, if any, (If mentioned as EXTRA OR INCLUDED in your quote, please mention the percentage in Remarks Column).	Yes / No / Explain	
17	Delivery Term :- FOR : LPSC, VALIAMALA In case of Foreign orders, FOB or FCA.  If "NO" specify the exact delivery term with relevant details in remarks column	Yes / No / Explain	
18	Delivery Period (If any specific delivery period is mentioned in the tender, please comply the same. If not agreed, please mention your delivery period in remarks column OR if already mentioned in your quote please mention as already furnished in the quote)	Yes / No / Explain	
19	Payment Term :- (a)100% payment shall be made through RTGS within 30 days of receipt and acceptance of the item at our site. (b)In case of Foreign orders, Payment term shall be SIGHT DRAFT / 80% BY IRREVOCABLE LETTER OF CREDIT AND BALANCE 20% BY WIRE TRANSFER AFTER RECEIPT & ACCEPTANCE OF THE ORDERED ITEM.	Yes / No / Explain	
20	Liquidated Damages (LD) :- If the ordered items are not supplied within the delivery schedule, LD shall be levied from your bill @ 0.5% per week for the undelivered items subject to a maximum of 10% of the order value for the delayed period.	Yes / No / Explain	
21	Warranty :- Warranty for the offered item shall be from the date of installation/acceptance of the item at our site for a minimum period of one years or as specified in the tender document.	Yes / No / Explain	

22	<p>Security Deposit (SD) :- (only for order value above Rs.5 Lakh)  You have to furnish a Bank Guarantee for 3% of the order value (from a bank of international repute in case of foreign vendors) within 10 days of receipt of Order towards the faithful execution of the order valid till the completion of the scope of work as per order plus sixty days. (This will be returned to you immediately on execution of the order satisfactorily as per order terms. In case of non-performance / poor performance, the amount will be forfeited).</p>	Yes / No / Explain	
23	<p>Performance Bank Guarantee (PBG) :-  You have to submit a PBG from a Nationalised / Scheduled Bank (from a bank of international repute incase of foreign vendors) for 3% of the order value towards the performance of the system at the time of supply valid till the completion of warranty period plus 60 days as per the format provided by the Department.  OR  3% OF THE ORDER VALUE SHALL BE WITH HELD TILL THE COMPLETION OF WARRANTY PERIOD PLUS 60 DAYS.</p>	Yes / No / Explain	
24	<p>In case, if parties are unable to provide two separate BGs, i.e., one for SD and one for PBG, they can submit a combined BG for SD &amp; PBG within 10 days of receipt of order for 3% of order value valid till the completion of total contractual obligation (i.e., supply period plus warranty period plus 60 days) as per the format provided by the Department.</p>	Yes / No / Explain	
25	<p>Insurance :-  Being a Govt. Of India Dept., Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper AIR / SEA / ROAD worthy packing.</p>	Yes / No / Explain	

26	<p>Validity of Offer :-</p> <p>(a)The validity of the offers should be 90 days (in case of single part tender) from the date of opening of the tenders.</p> <p>(b)The validity of the offers should be 120 days (in case two part tender) from the date of opening of the tenders.</p> <p>Note :- Tenders shorter than offer validity mentioned above will not be considered for evaluation.</p>	Yes / No / Explain	
27	Bank Details, viz., Bank Name, Branch, Address, Account No., IFSC (Details to be given in Vendor Terms Column)	Yes / No / Explain	
28	PAN No. (Details to be furnished in Vendor Terms Column)	Yes / No / Explain	
29	GST No. (Details to be given in Vendor Terms Column)	Yes / No / Explain	
30	Purchase Order to be placed on whom (Please mention the Address, Phone No. & E-mail id )	Yes / No / Explain	
31	HSN Code of offered items	Yes / No / Explain	
32	Local content involved in the quoted item shall be declared/ certified in percentage.	Yes / No / Explain	
33	Furnish the details of place(s) where the value addition for the quoted item takes place.	Yes / No / Explain	
34	State whether MSE or not. If yes, please provide the necessary documentary proof	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Other Costs, if any	Remark
1	Boundary layer microphone	26.00 Nos.		-			
2	Wireless Microphone (Collar) with transmitter and receiver unit	2.00 Nos.		-			
3	Audio Digital Signal Processor	2.00 Nos.		-			

4	AUDIO AMPLIFIER	3.00 Nos.	-				
5	Ceiling Mount Speakers	6.00 Nos.	-				
6	USB 3.0 peripheral sharing switch	3.00 Nos.	-				
7	HDMI Matrix Switcher	2.00 Nos.	-				
8	VGA to HDMI Converter	2.00 Nos.	-				
9	VIDEO SCALARS	3.00 Nos.	-				
10	Computer Monitor	2.00 Nos.	-				
11	HDMI table flip box for laptop	2.00 Nos.	-				
12	DP(Male) to HDMI(Fema)converter	4.00 Nos.	-				
13	USB Hub multiport adapter	2.00 Nos.	-				
14	WIRELESS KEYBOARD AND MOUSE	5.00 Nos.	-				
15	Battery (AA rechargeable)	20.00 Nos.	-				
16	Battery (AAA rechargeable)	20.00 Nos.	-				
17	Battery Charger (For AA & AAA Rechargeable Batteries)	4.00 Nos.	-				
18	Rack and accessories	2.00 Nos.	-				
19	HDMI cables - 3 feet	10.00 Nos.	-				

20	HDMI cables - 6 feet	10.00 Nos.		-			
21	HDMI cables - 10 feet	10.00 Nos.		-			
22	HDMI cables - 15 feet	10.00 Nos.		-			
23	HDMI cables - 25 feet	10.00 Nos.		-			
24	HDMI cables - 35 feet	10.00 Nos.		-			
25	USB 3.0 cable Type-A to Type-B - 3 feet	5.00 Nos.		-			
26	USB 3.0 cable Type-A to Type-B - 6 feet	5.00 Nos.		-			
27	USB 3.0 cable Type-A to Type-A - 6 feet	5.00 Nos.		-			
28	USB 3.0 cable (Active extender) - 25 feet	5.00 Nos.		-			
29	USB 3.0 cable (Active extender) - 35 feet	5.00 Nos.		-			
30	EQUIPMENT INSTALLATION SERVICES	1.00 Lot		-			

**Common charges (Applicable for all items)**

<b>Additional Costs, if any</b>	
<b>Additional Costs, if any (Value)</b>	