

<b>Indent</b>	<b>Supply, installation, testing and commissioning of Audio Visual Systems for two conference halls of STS Complex, VSSC.</b>
<b>Mode of tendering</b>	Public Tender (Two part)
<b>Two part bid</b>	Techno-Commercial and Price
<b>Delivery date</b>	The work should be completed within 60 days from the acceptance of the work order.
<b>Details of work</b>	The audio visual systems have to be supplied, integrated, tested and commissioned at two conference halls at VSSC campus, Thiruvananthapuram. The size of the conference halls are 14.2 m x 11 m x 3 m and 11 m x 6.4 m x 3 m each with a seating capacity of approximately 100 and 45 respectively. The video conferencing facilities shall have simultaneous connectivity with remote centres of ISRO as well as external industries. Local audio/video as well as far end audio/video requirement is essential and content will be displayed at near end using multimedia projectors supplemented by LED displays. Details of quantity required is given in Table 1.1
<b>Annexure</b>	Annexure-I : Specifications of the Subsystems Annexure-II : General Terms And Conditions Annexure-III : Performa for Vendor Registration For VSSC Site Visit / Pre-Bid Meeting Annexure-IV : Conformance Matrix

**Table 1.1 Items, Location and Quantity**

Item No	Item description	Quantity required		Total quantity
		Confere nce hall-1	Confere nce hall-2	
1.	86 INCH UHD DISPLAY (Main wall display)	1	1	2
2.	65 INCH UHD DISPLAY(Side wall display)	4	4	8
3.	Multimedia Projector (MMP) (main wall display)	1	1	2
4.	CISCO conferencing system* <b>(FIM by VSSC)</b>	-	-	-
5.	HDMI and Audio to USB scaling bridge	1	1	2
6.	HDMI 8WAY SPLITTER	1	0	1
7.	HDMI 4WAY SPLITTER	0	1	1
8.	USB HUB 4 WAY	1	1	2
9.	TWO WAY HDMI SWITCH	1	1	2
10.	CABLE CUBBY	4	4	8
11.	DSP	1	1	2
12.	Microphone	11	7	18
13.	Loudspeaker	6	2	8
14.	Power Amplifier	1	1	2
15.	Cables, accessories and network rack			
<b>a.</b>	Cables**	1 lot	1 lot	2 lot
<b>b.</b>	Connectors & Accessories **	1 lot	1 lot	2 lot
<b>c.</b>	Network rack	1	1	2
16.	Installation, commissioning & testing charges	1	1	2

\* VSSC will supply two nos of CISCO make video conferencing endpoint as FIM. Major specifications are given in serial number 4 in Annexure-I.

\*\* All cables/accessories, as required, shall be provided by the party as per onsite requirements.

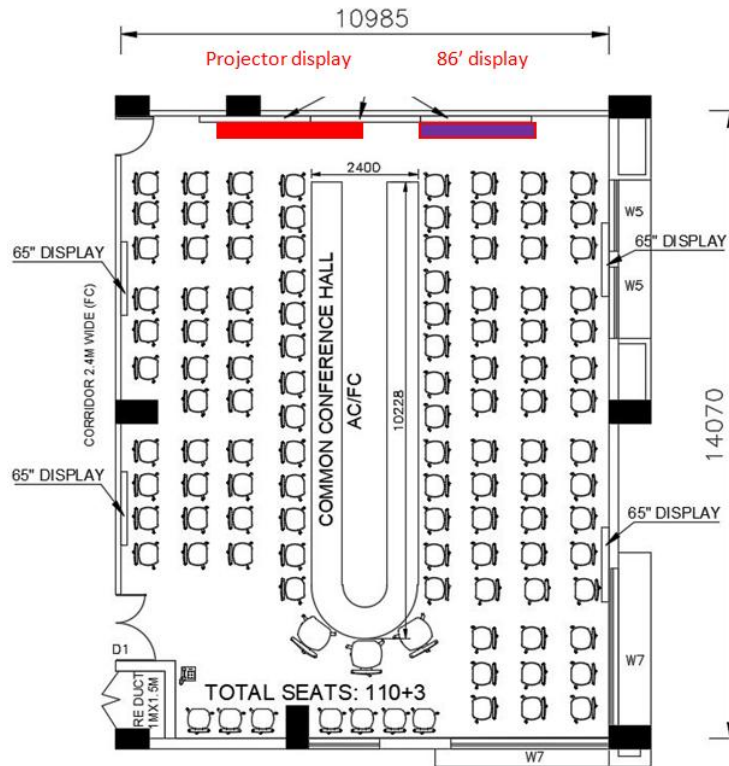


Figure 1: Layout of first floor conference hall (not to scale)

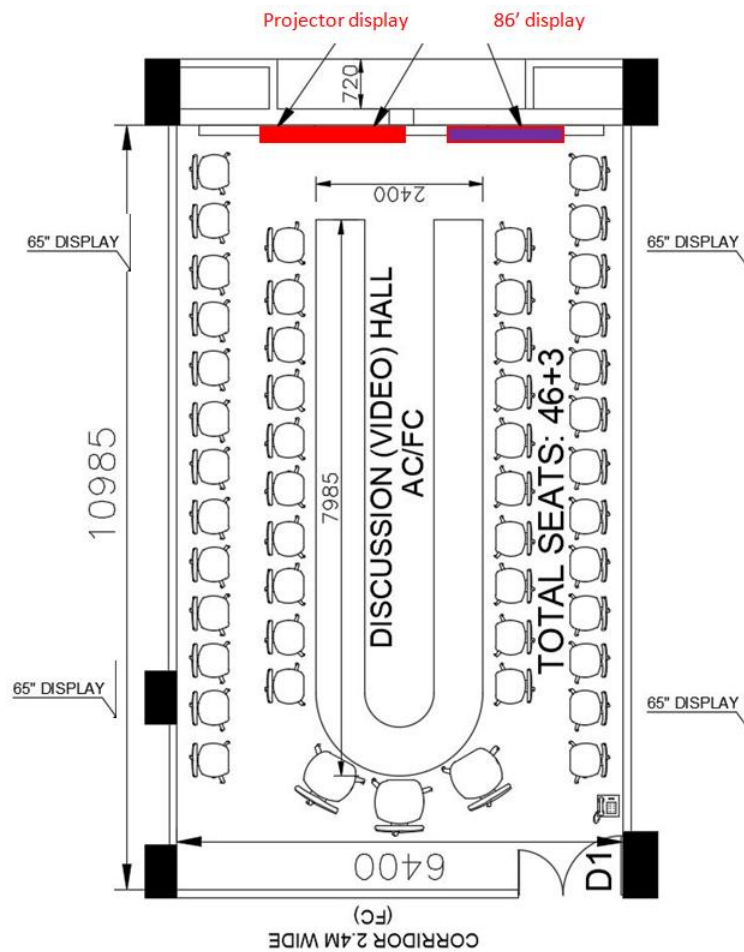


Figure 2 Layout of ground floor conference hall(not to scale)

## Annexure-I: Specifications of the Subsystems

### 1) **86 inch 4K UHD display (Main display-2)**

Quantity: 2 Nos.

Screen size	86 inch diagonal
Brightness	Minimum 500 nits
Panel Technology	LCD/LED
Native resolution	Minimum 3840 x 2160 (UHD)
Contrast Ratio	Minimum 1000:1
Input connection	Minimum 3 HDMI
OPS compatibility	OPS compatibility needed
Speaker	Yes

### 2) **65 inch 4K UHD display(Side wall display)**

Quantity: 8 Nos.

Screen size	65 inch diagonal
Brightness	Minimum 500 nits
Panel Technology	LCD/LED
Native resolution	Minimum 3840 x 2160 (UHD)
Contrast Ratio	Minimum 1000:1
Input connection	Minimum 3 HDMI
OPS compatibility	OPS compatibility needed
Speaker	Yes

### 3) **Multimedia Projector (MMP) (5000 lumens installation projector with lenses) (Main display-1)**

Quantity: 2 Nos.

Technology	LCD
Native Resolution	Min 1920 X 1080, Full HD Aspect ratio 16:9
Brightness (Minimum)	Minimum 5000 Lumens
Contrast Ratio (Min)	Minimum 200000:1
Lens	Manual / Motorized focus
Throw Ratio	0.27 to 0.37 : 1, Focal Length Min 3.90 mm
Screen Size	Should deliver an image from 75 inch to 120 Inch from a distance less than 60 cm from the wall to the front of the projector
Features	Operating noise<35dB normal mode and 25dB in the quiet mode
Light Source	Laser
Light Source Life (Min)	20000 Hrs. Normal mode
Input/Output connection	1 x HDBaseT, 2xHDMI IN, Audio IN and OUT - 3.5 stereo,
Keystone Correction	Vertical/Horizontal Keystone Minimum $\pm 3^\circ$ / $\pm 3^\circ$
Network	Wireless LAN & Wired LAN: RJ45 x 1
Digital Input HDCP compliance	Minimum HDCP2.3 for HDMI &HDBaseT
Control	LAN and RS232

### 4) **Video Conferencing End Point system with camera and mount(VSSC supplied FIM and hence party need not quote. Specification is given for information)**

Quantity: FIM.

Construction	Collaboration device with 4K PTZ camera
Video Input	3 HDMI with minimum 1080p @ 60Hz
Video output	Minimum 2 HDMI output with 4K@ 60KHz
Video standards	H.264 and H.265, H.239 for dual stream
Protocols	H.323, SIP, WebEx
Network features	QoS, Differentiated services, DHCP, URI dialling, Automatic gate keeper recovery, Lip sync buffering, IPv6 network support, Minimum 2 network port
Bandwidth	Up to 6 Mbps point to point
Audio	Input Min 3 Mic, Output Min 1 output, AGC, Noise Reduction, G.711, G.722.1 , G.729 ACC-LD , • High-quality 20-kHz audio
Embedded encryption	H.323 and SIP point to point, Standards-based: H.235 v3 and Advanced Encryption, Standard (AES), Automatic key generation and exchange
Camera system	Minimum 20x optical zoom and 10x digital zoom, Pan and Tilt range +/-160 degree and +/-10, Field of view minimum 70 degree, Camera interface HDMI, PoE compatible
Camera mount	Yes
Approved brand	CISCO

### 5) HDMI Scaler Receiver & Audio to USB scaling bridge

Quantity: 2 Nos.

Video input and loop through	<b>Number/signal type:</b> 1 HDMI/DVI 1 HDMI/DVI loop-through
	<b>Connectors:</b> 1 female HDMI 1 female HDMI loop-through
	<b>Resolution support :</b> 640x480 through 1600x1200, 1920x1200 (with reduced blanking), 480i, 576i, 480p, 720p, 1080i, and 1080p,4K
Video output	<b>Number/signal type:</b> 1 USB digital video
	<b>Connectors:</b> 1 female USB type B
	<b>USB scaled resolutions:</b> 320x180 through 1080p
Audio input:	<b>Number/signal type:</b> <ul style="list-style-type: none"> <li>• 1 stereo, de-embedded from HDMI (PCM only)</li> <li>• 1 stereo line level, balanced or unbalanced</li> <li>• 1 mono mic/line level, balanced or unbalanced (with available phantom power)</li> <li>• 2 stereo USB, embedded (communications and program audio)</li> </ul>
	<b>Connectors:</b> 1 female HDMI (1) 3.5 mm, 5 pole captive screw, for line level (stereo) (1) 3.5 mm, 3 pole captive screw, for mic/line level 1 female USB B
Audio output:	<b>Number/Signal type:</b> 1 stereo, balanced or unbalanced, on a 3.5 mm, 5 pole captive screw connector. Can be configured as stereo or dual mono (variable). 2 mono, balanced or unbalanced (variable), on a shared

	5 pole captive screw connector 1 stereo USB (embedded) 1 HDMI (loop output embedded)
	<b>Connectors :</b> (2) 3.5 mm, 5 pole captive screw 1 female USB type B 1 female HDMI
	<b>Output volume range :-</b> 100 dB to 0 dB, in 0.1 dB increments

### 6) HDMI Splitter 8 way

Quantity: 1 Nos.

Switching Speed	200 ns max.
Type of switching	Matrix
Video Bandwidth	600MHz/18Gbps
Input/ Output Ports	8 x HDMI Type A Female (Black)
Max. Resolution	4K
Digital LED Display	Yes
Remote control	Yes

### 7) HDMI Splitter 4 way

Quantity: 1 Nos.

Switching Speed	200NS max.
Type of switching	Matrix
Video Bandwidth	600MHz/18Gbps
Input/ Output Ports	4x HDMI Type A Female (Black)
Max. Resolution	4K
Digital LED Display	Yes
Remote control	Yes

### 8) USB hub 4-way over Ethernet Extender, 4-Port Device

Quantity: 2 Nos.

Communication support	Ethernet 100Base-T or 1000Base-T, Layer 2
Speed	Up to 480 Mbps
USB Support	Minimum USB 1.1 and 2.0
Support Connection to	USB 2.0 host ports for connection of USB mice, keyboards, whiteboards, game controllers, cameras, mobile devices, printers, flash drives, hard drives, hubs, and other USB devices
Connectors	4 nos USB Type A female

### 9) TWO WAY HDMI SWITCH (Modular switcher)

Quantity: 2 Nos.

Construction	Modular multi format matrix switcher with redundant power supply
Resolution support	4K 60 4:4:4
Inputs	Minimum 4 HDBasT inputs & 4 HDMI inputs.
Outputs	Minimum 6 HDBaseT outputs, 2 HDMI Scaled outputs
Input Expansion	All HDBaseT& HDMI Inputs shall have a buffered HDMI or DP Output for reference with a resolution of 4K60 4:4:4
Output expansion	Inbuilt Or External HDMI Pass through with Additional DA for every HDBaseT input.
Audio OUT	Audio de-embedding for all inputs, either from the input card or output card.
USB Support	Support Minimum 4 Nos USB HID
Communication support	HDCP 2.2, EDID, CEC, RS-232, PoE, PoE+, Ethernet

Security	Hardware security using 802.1x authentication, SSL ,SSH,SFTP,TLS
Backplane data rate	Min 12 Gbps

### 10)Cable cubby (Cable Management System)

Quantity: 8 Nos.

Cable Management	Minimum 4 pass through capacity
Retractors	Support minimum 2 cable retractors for future upgradation
Power	1 no. Indian
Cut-out dimension	Should be less than or equal to 7 in x 4 in
Resolution support	4K 60 4:4:4
Inputs	Minimum 2 HDMI, 1 DP
Outputs	Minimum 1 HDMI & 1 no HDBaseT
Signal connectivity	Twisted pair between Transmitter and Receiver
Audio IN/OUT	HDMI,DP
Control	LAN or RS232
USB Support	Should support USB HID device and host signal extension ports.
Switching	Auto
Compliance	HDCP 2.2 and EDID, HDR10
Approved Brand	Crestron or any other equivalent brand

### 11)DSP

Quantity: 2 Nos.

Construction	Open Architecture, Rack mountable Digital Audio Mixer with GPIO ports.
Input	Minimum 12 Mic/Line input
Output	Minimum 8 Line output
GPIO Logic ports function	Minimum 4 GPIO
VOIP & Telephone Interface	DSP shall integrate to Voice Over Internet Protocol (VoIP) systems on a RJ-45 connector and shall support Session Initiation Protocol (SIP) v2.0 or later. The fixed I/O DSP shall integrate to standard telephony communications on a RJ-11 connector for a single line of telephone communication
AEC processing	Minimum 12 channels
Features	AGC, Noise cancellation
AEC tail length	Minimum 200 ms
Sampling Rate	Minimum 48 Khz
Frequency response	20Hz -20 KHz
USB Audio	8 channels configurable
Port authentication	Via IEEE 802.1X.
Control	LAN or RS232

### 12)Goose Neck Microphone

Quantity: 18 Nos.

Construction	Mini shotgun Gooseneck microphone with shock mount, Independent flush mountable look at me feature button through a under table mount connectivity box. Must also be finished with a durable anti-reflective matte black coating and have a pre-amp housed with its XLR-5 connector housing
Gooseneck length	40 cm
Pick up pattern	Super-cardioid / lobar

Switch	Programmable switch button with Push to Talk, Push to Mute, ON/Off
Status Indicator	Bi-colored LED
Frequency range for the microphone	40 Hz to 20 kHz
Phantom support	12 V - 48 V
SPL range of the microphone	125-130dB
Current consumption of microphone	Less than 4mA
Connector type for microphone	3 pin XLR
Connector type for button	XLR-5M out, Pin assignment: 1 = Ground, 2 = Switch, 3 = LED Red, 4 = LED Green, 5 = LEDs +12 V
Features of under table box	Powering of the button, control the microphone using switchable microphone activation modes (PTT, PTM, toggle ON/off, permanent on).TTL logic, enabling the user to trigger the camera
Current consumption of Button	3mA
Phantom support for the button	12 V
Current consumption of under table box	4.5mA
Phantom support for the under table box	Up to 48V

### 13) Wall Speakers

Quantity: 8 Nos.

Construction	2 way loud speaker with multi-ply hard wood with 4" woofer and Horn-loaded titanium dome tweeter
Impedance	8 Ohms
Speaker output	Continuous power minimum 100 watts
Driver	4" polypropylene woofer and 0.79 inch titanium dome, 90° conical horn loaded
Frequency range	80 Hz - 18 kHz
Crossover frequency	2.5 kHz
Sensitivity	Min 85 dB @ 1W/1m

### 14) Multi Channel Power Amplifier

Quantity: 2 Nos.

Construction	Rack mountable Class D Digital Amplifier
Power rating	Minimum 150W per channel @ 8 ohms
Frequency response	20 Hz to 20 KHz
Network connection	The amplifier and Digital Audio Mixer should be connected via network
Audio input	Analog and Digital
Features	Software configuration, control, and monitoring
Monitor and Control	LAN or RS232

### 15) Cables, Accessories & Network rack

#### a. Cables & connectors

Tentative list of cables required are PC to AV rack, PC to Camera, Camera to Matrix switcher, Projector to AV rack & Side displays to AV rack. All cables and interconnections required shall be provided by the party as per site requirement.

**b. Accessories**

Standard accessories such as projector mounting stand, display mounting bracket etc. as required shall be provided by the party.

**c. Network rack (27U AV Rack)**

Quantity: 2 Nos.

Construction	27U, 19", 800 mm depth
Features	Fan, Castor wheels, Front door with lock, minimum 5 shelf, Power strip with 15 IEC socket
1 U Blank plates	10 numbers

16) **Installation, commissioning & testing should be done by the party.**



## Annexure-II: General Terms and Conditions

### A) General Conditions

Vikram Sarabhai Space Centre (VSSC) is the lead Centre of Indian Space Research Organization (ISRO) under the Department of Space (DOS), Government of India. VSSC pioneers in rocket research and launch vehicle projects of ISRO.

To have reliable and hassle free post installation services, certifications & prior experience of the party are deemed essential for short listing vendors.

#### I. About the vendor

- a. Must have completed at least 3 years in the market as a source for supplying & installing similar requirements. Necessary documents to this effect shall be submitted in the Techno-Commercial bid. The documents must include minimum two purchase orders and performance reports.
- b. Shall have proven track record of similar installations as per the specifications. The Vendor should have executed at least a single PO in the related field of value not less than Rs.40 lakhs or two separate orders of value not less than Rs.30 lakhs each or three orders of not less than Rs.25 lakhs each within the previous 5 financial years. Copies of above Purchase Orders and corresponding performance reports shall be furnished in the Techno-Commercial bid. In addition, Purchase Order copies and work completion certificates of completed projects at ISRO or other Central Govt. Research / Academic organizations shall be submitted along with the Techno-Commercial bid in the following format.

LIST OF CLIENTS						
<u>At least two Government Organizations / Institutions should be served.</u>						
S. No:	Name and Address of the Client's	Client contact number	Period of Contract		Order copy enclosed At Page No.	Contract value (Rs.)
			From	To		

Supporting documents like copies of work orders, completion certificates and performance certificates from the client in support of each of the above projects to be furnished.

(a) List of clients including PSUs mentioning the period of contract and value thereof.  
 (b) Any other information.

Signature of the Tenderer

Date: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Place: \_\_\_\_\_  
 Designation: \_\_\_\_\_  
 Office Seal: \_\_\_\_\_

Note: Please read Tender carefully and fill up the above information

**Figure 3: Format for furnishing previous purchase orders**

- c. Shall provide minimum performance warranty of 3 years for the supplied items and total installation and shall be capable and willing to provide post installation

services/AMC if demanded beyond the warranty period. Documentary proofs of having provided such AMC services shall be submitted in the Techno-Commercial bid.

- d. Product data sheet, Quality Standard Certificate, Environmental Certificate, etc. of the offered product have to be submitted. All the necessary accessories/consumable for installation/commission should be provided by the Vendor.
- e. The tender shall be submitted online in two parts, viz., Techno-Commercial bid (See clause 1 of Section C) and Price bid (See clause 2 of Section C).
- f. Should be a reputed company registered in India.
- g. Shall be a manufacturer / OEM of the Audio and video system elements or shall be manufacturer's authorized / certified integrator for the offered items. Certificates to this effect shall be submitted in the Techno-Commercial bid.

## **B) Scope of Work**

1. The scope of work concerned is the supply, installation, testing and commissioning of Audio Visual Systems for two conference halls in VSSC, Thiruvananthapuram using the listed items in Annexure-I.
2. All the necessary accessories/consumable for installation/commissioning other than the listed items also as required should be provided/arranged by the Vendor.
3. The video conferencing units (CISCO make: 2 nos) will be supplied as FIM by VSSC.
4. After successful commissioning of the system suitable training to be imparted as well as user manual to be supplied to VSSC.
5. Warranty support of all supplied systems and installation shall be provided for 3 years. After successful commissioning, any system failure during warranty period has to be attended within 48 hours and in case of any component/part replacement is warranted the same has to be rectified within maximum 10 days from the date of intimation from VSSC.
6. The installation shall be done on week-days 0900 to 1700 hrs excluding public holidays.
7. All expenses of the installation team shall be exclusively borne by the party.

## **C) Submission of Tender**

The tender shall be submitted online in two parts as **detailed below after completion of mandatory site visit/ onsite Pre-bid discussions at VSSC**

- Techno-Commercial bid
- Price Bid.

### **Pre-bid onsite visit / discussion:**

Prior to submission of bids, a pre-bid onsite visit / discussion is arranged at VSSC, Thiruvananthapuram, Kerala as detailed in Section D.

**It may be noted that pre-bid discussions and site visit by interested vendors is mandatory and vendors registering and participating in the pre-bid discussions / onsite visit only will be considered for further evaluation for the subject requirement.**

Any further clarifications from VSSC shall be sought within 3 days from the prebid meeting through email for submitting techno-commercial bid. No communication will be entertained beyond this period and no clarifications thereafter sought will be attended to.

**Based on the pre-bid onsite visit / discussions at VSSC, the Techno-commercial & price bids shall be submitted separately by the vendor as detailed below within 30 days from the date of tender.**

## **1. Techno-Commercial bid**

The following documents are to be furnished by the Vendor as part of Techno-commercial bid within 30 days from the date of tender:

- i) Vendor details as per General Conditions of T&C (Section A).
- ii) Signed and scanned copy of valid Establishment registration certificate of the vendor. Quality certifications preferred (ISO 45001:2018(OHS)/ISO 9001:2015(QMS) / ISO 14001:2015 (EMS) etc.).
- iii) Details of TIN,TAN/GST registration certificate to be attached in the Techno-Commercial bid.
- iv) Product data sheet, Quality Standard Certificate, Environmental Certificate, etc. for each of the of the offered product to be attached.
- v) **Price details should NOT BE DISCLOSED in the Techno-Commercial bid.** Any other mention of pricing aspects in the techno-commercial bid shall lead to the irrevocable exclusion of the offer from further proceedings without any communications. Price bid shall be submitted separately as per clause 2 of section C [Price bid] in Annexure II .
  - Vendor shall submit all the relevant documents sought as per section C and shall submit the conformance matrix as per Annexure IV along with the techno-commercial bid. The conformance matrix shall be submitted in exactly the same format as prescribed.
  - Absence of relevant documents or incomplete conformance matrix or submission of conformance in a different format shall lead to the exclusion of the vendor's offer from the subsequent evaluation process without any further clarification or intimation. Submission of the conformance matrix with full detailing on all the informations as sought by the preforma is mandatory for considering the offer for evaluation in the techno-commercial bid.
  - Shortlisted vendors based on satisfactory conformance to the requirements as detailed in the pre-bid and Techno-Commercial bid requirements (section C&D of annexure II) will be advised over email by VSSC for **arranging onsite visits as per Section 'F' subsequently.**

## **2. Price Bid**

The Vendors satisfying all the criteria as required by Techno-Commercial bid and having submitted all the necessary documentary evidence thereof and subsequent physical assessment and acceptance by VSSC as per section 'G' only will be considered for commercial bid.

The Price Bid shall be submitted separately after acceptance of Techno commercial bid only and shall contain the following:

- i) Price for each item as per Annexure I shall be shown separately.
- ii) The price to be inclusive of all charges including transportation cost, assembly and installation charges of items, cost of all product related accessories, warranty. Basic price and price after tax should be shown separately.
- iii) Annual Maintenance Charges(AMC) to be quoted for 5 years beyond warranty period in the commercial bid. However this will not be considered for arriving at L1 cost.

#### **D) VSSC Site Visit:**

**Date of Site Visit/ Onsite Discussions: 3 day window will be intimated**

Prior to submission of bids, a pre-bid onsite visit/discussion is arranged at VSSC, Thiruvananthapuram, Kerala on the above dates. Party is free to choose any of the date mentioned above. It may be noted that pre-bid discussions and site visit by interested vendors is **mandatory and vendors registering and participating in the pre-bid discussions / onsite visit only will be considered for further evaluation** for the subject requirement.

Interested vendors shall fill the Proforma for registration as per Annexure III and send to Sr. Purchase & Stores officer, MME Unit, VSSC within 7 days from the date of tender. It may be noted that VSSC campus is of strategic importance that necessitates elaborate procedures and security measures involving CISF (Central Industrial Security Forces). Therefore no separate correspondences expressing willingness & requesting participation in the discussion / site visit will be entertained beyond the stipulated period.

Communications devoid of completely filled Proforma for registration will not be entertained and such requests will be rejected without assigning any reasons thereof. Vendors who have received confirmatory intimation regarding acceptance of their registration from VSSC only will be allowed to participate in the discussions / site visit. Reconfirm the receipt of registration prior to 2 days of the pre-bid visit. If not received any intimation send the reminder mail to **Sr. Head, Purchase & Stores, VSSC, Thiruvananthapuram**. All expenses of travel and stay shall be borne by the Vendor.

#### **E) Audio Video systems design / Layout modification:**

Any modification in the design and Layouts suggested by the Vendor in their Techno-Commercial bid will be reviewed by VSSC Thiruvananthapuram. VSSC reserves the right to accept or reject the modifications and will have the sole authority to reject any offer accordingly in the Techno-Commercial bid.

#### **F) Factory / Worksite/ onsite visit:**

On request from VSSC, the party shall arrange facility / factory / worksite visits for installation / operation / verification / assessment of the products and associated workmanship by VSSC representatives at any of the vendor's ongoing/ completed projects/facility comprising of the offered items. The vendor shall schedule the visits within 10 days from the date of intimation and shall finalize and intimate the schedule at least 5 days prior to the date of visit in consultation with VSSC. The decision to visit or not will solely be under the rights of VSSC.

#### **G) Communication of Acceptance / Right of Acceptance :**

VSSC, Thiruvananthapuram, reserves all right to reject any tender including of those Vendors who fail to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of this Institute in this regard will be final and binding. Any failure on the part of the contractor to observe the prescribed procedure and any attempt to canvass the work will prejudice the contractor's quotation.

**H) Combined Bank Guarantee for SD & PBG** – Successful bidder shall submit a combined Bank guarantee towards SD(Security Deposit) and PBG (Performance Bank Guarantee) within 2 weeks along with order acknowledgement, equivalent to 3% of order value. The BG shall cover the delivery period and warranty period and shall be valid upto a period of 60 days from the date of completion of warranty period and will be returned upon completion of all contractual obligations.

**I) Guarantee / Warranty:**

- The on-site warranty of all the supplied items shall remain valid for a period of 36 months (minimum) from the date of recording of satisfactory completion and installation & commissioning for acceptance of goods at site.
- During warranty period, the vendor is required to visit VSSC, Thiruvananthapuram, site at least once in 3 months commencing from the date of delivery of the commissioning for preventive maintenance of the full system.
- If the vendor, having been notified, fails to respond to take action to replace / service the defect(s) within 10 days, VSSC may proceed to take remedial action(s) as deemed fit.

**J) Liquidated Damages (LD)**

If the vendor fails to deliver / install any or all of the goods or fails to perform the service within the time frame(s) incorporated in the PO, VSSC, Thiruvananthapuram on account of delay from the vendor, shall, without prejudice to other right and remedies available to VSSC, Thiruvananthapuram, under the tender, deduct from the quoted price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part there off on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the value of the undelivered portion. Once maximum LD is reached VSSC, Thiruvananthapuram, may consider termination of the contract.

**K) Payment Terms** : 100% within 30 days on receipt, installation, testing and acceptance of item at our site.

However, vendors are free to quote their own payment terms. Milestone payment terms are acceptable. In case advance is required, interest @ prevailing rate will also be loaded for a period of 60 days or the delivery period offered by the vendor, whichever is higher to arrive at the lowest offer.

**L) Force Majeure:**

If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikes lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 15 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be

final and conclusive. Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, VSSC, Thiruvananthapuram, may, at least reserve option to terminate the contract.

## **Annexure-III**

### **Proforma For Vendor Registration For VSSC Site Visit / Pre-Bid Meeting**

<b>Company Name</b>			
<b>Address</b>			
<b>Email id</b>			
<b>Contact No.</b>			
<b>GSTIN</b>			
	✓	X	
Whether manufacturer/OEM of the basic system elements or manufacturer's certified integrator / authorized agent			
Any other relevant certification			
Years of experience in market			
Any other remarks			
<b>Details of visiting persons (maximum 3 persons)</b>			
	1	2	3
Name			
Designation			
Id proof type and number			
Ph No.:			
Preferred date of visit			

**Name and signature**

(Authorized Signatory with Company Seal)

## Annexure-IV

### Conformance Matrix

(To be compulsorily submitted by the vendor in Techno-commercial bid)

**Any mention of pricing aspects shall lead to the irrevocable exclusion of the offer** from further proceedings without any further communications.

Sl.	Specification/ Criteria/ Certification etc.	Compliance (Yes/No)	Certificate/ Declaration/ Acceptance Ref. no. (wherever applicable)	Page no. of the offer document
1.	Vendor is the manufacturer of the basic system elements or shall be manufacturer's certified integrator for the offered items. Certificates to this effect submitted in the Techno-Commercial bid			
2.	Vendor must have been in the market as a source for similar requirements			
	a. Purchase orders submitted			
	b. Performance reports submitted			
3.	The Vendor should have executed a single PO in the related field of value not less than Rs.40 lakhs/ or two separate orders of value not less than Rs.30 lakhs each/ or three orders of not less than Rs.25 lakhs each within the previous 5 financial years			
	a. Purchase order copies submitted			
	b. Post installation / commissioning performance reports submitted			
4.	Vendor may provide warranty of 3 years minimum and shall be capable and willing to provide post installation services/AMC if demanded beyond the warranty period			



Sl.	Specification/ Criteria/ Certification etc.	Compliance (Yes/No)	Certificate/ Declaration/ Acceptance Ref. no. (wherever applicable)	Page no. of the offer document
	a. Documentary proofs of having provided such services submitted			
5.	Component / system elements data sheets, Quality Standard Certificate, Environmental Certificate, etc. of the offered products submitted			
6.	All the necessary accessories/consumable for installation/commission as per site reports will be provided by the Vendor			
7.	Original Catalogue containing all technical specifications provided			
8.	Detailed drawings of system layout generated by the vendor based on the onsite visit is submitted.			
9.	Specifications of the items offered are as required by Annexure I and the item wise details and conformance is ensured and submitted.			
	<i>1. Conference Hall1</i>			
	<i>2. Conference Hall2</i>			
10.	Separate Price bid submitted as per clause 2 of section C of Annexure II			
11.	Charges of non-comprehensive AMC for 5 years (beyond 3 year warranty period) indicated along with item wise cost of spares. <u>It may be noted that the AMC charges thus indicated will not be considered for evaluation in</u>			

<b>Sl.</b>	<b>Specification/ Criteria/ Certification etc.</b>	<b>Compliance (Yes/No)</b>	<b>Certificate/ Declaration/ Acceptance Ref. no. (wherever applicable)</b>	<b>Page no. of the offer document</b>
	<u>the price-bid]</u>			
12.	Price for each item as per Table 1.1 are shown separately in the price bid.			
13.	Prices in the price bid are inclusive of all charges like packing, transportation, assembly and installation charges, cost of all accessories, warranty and applicable taxes etc. Basic price and tax of each item are separately shown.			
14.	The vendor is willing to arrange facility / factory / worksite visits for assessment at an ongoing/ completed projects/facility by VSSC representatives (on demand).			
15.	The vendor is capable and willing to furnish interest free Security Deposit / PBG by way of Bank Guarantee/FDR/ISB for 3% of the total order value.			
16.	The vendor is willing to offer guaranty / warranty as detailed in Section 'I' of annexure II and is agreeable to all the terms mentioned in Techno-commercial bid.			
17.	The vendor is agreeable to the terms pertaining to 'Liquidated Damages' as mentioned in Section 'J' of annexure II.			
18.	Vendor is agreeable to the payment terms as detailed in			

Sl.	Specification/ Criteria/ Certification etc.	Compliance (Yes/No)	Certificate/ Declaration/ Acceptance Ref. no. (wherever applicable)	Page no. of the offer document
	the Section 'K' of annexure II			
19.	The vendor acknowledges that non-conformance to any of the specifications/ certificates/ conditions etc. as demanded by this document, absence of relevant documents or incomplete conformance matrix or submission of conformance in a different format shall lead to the exclusion of the vendor's offer from the subsequent evaluation without any further clarification or intimation			

**Name and signature** (Authorized Signatory with Company Seal)