Scope of work for Auditorium at LPSCB

I) Introduction:

Scope of work is for the upgradation of Auditorium at LPSC, Bangalore. Main objective is to conduct live programs locally, streaming the live program to LPSC Valiamala, streaming of live telecast of satellite launches and conducting live interactive sessions in online VC platforms with other ISRO centres with an immersive AV experience. This involves supply of deliverables, installation, commissioning, testing and demonstration of AV facility at Auditorium, LPSC Bangalore. At present, to display the video content, projector and screen is available and for audio, analog audio mixer and speakers are available. Existing audio system need to be integrated to the new solution to be implemented. Details of existing system given in technical specification Annexure-1A

II) Scope of work is defined in three sections :

Section-1 describes on Supply of deliverables, installation, commissioning, testing & demonstration of Audio Video facility with

- ➤ LED Video Wall Display of dimension 6 mts x 3.3 mts with complete floor mounting support. Dimension details of the wall and room arrangement are given in drg 1&2 below.
- ➤ LED Video wall controller & processor with built-in wall management software. Preset Layouts required for LPSC is as given in drg 3.
- PTZ cameras and audio system comprising microphones, Speakers, Power Amplifiers, digital automatic audio processors and integration of AV facility.
- > Touch control for controlling the complete AV facility as required.
- Cables, connectors, racks, switchers and accessories.

Section-2 covering Warranty for 3 years and Comprehensive Service Maintenance Contract support for 3 years on expiry of warranty period. Details in Annexure – 2

Section-3 regarding Operational support for 3+ 3 years Period. Details in Annexure – 2

Section - 1:

Supply of deliverables, installation, commissioning, testing and demonstration of AV facility at Auditorium, LPSC Bengaluru and making the facility functionally operational. In this context, Deliverables to be supplied are as listed below.

1.1 Deliverables:

SI. No.	ltem	Qty.
1	Indoor active LED video wall with mounting structure and controller	1 No.
2	LED video wall processor	1 No.
3	55 inch professional display	2 Nos.
4	Monitor 27 inches	2 Nos.

5	PTZ Camera	5 Nos.
6	Camera mounting kit - roof /wall mount type	5 Nos.
7	Podium	1 No.
8	Laptop	1 No.
9	24 inches Gooseneck microphone	2 Nos.
10	15 inches Gooseneck microphone	3 Nos.
11	Wireless handheld mic	4 Nos.
12	Head worn mic	2 Nos.
13	Collar mic (transmitter & receiver)	2 Nos.
14	Antenna	2 Nos.
15	Antenna cable	2 Nos.
16	Antenna Distribution system	1 Set
17	Control room monitoring speakers	1 pair
18	Analog Audio Mixer	1 No.
19	Digital audio processor	2 Nos.
20	AV over IP Encoder	20 Nos.
21	AV over IP Decoder	13 Nos.
22	AV Over IP Controller Appliance / software solution	1 No
23	Portable Touch Panel with Room controller	1 set
24	Layer 2 managed AV Over IP, PoE network switch	2 Nos.
25	Access point	1 No.
26	Streaming and recording encoder	1 No.
27	HDMI input to USB convertor	2 Nos.
28	Wireless presentation system	1 No.
29	Camera controller with Joystick	1 No.
30	Rack	2 Nos.
31	Audio, video, control cables, connectors and accessories at actuals	1 Lot
32	Additional Items if any	1 Lot
33	Installation, Testing, Commissioning, Documentation	1 Lot

1.2 Installation:

Installation and commissioning have to be carried out as per LPSC requirements and the connectivity to the existing systems/facilities has to be carried out by the Bidder. LED video wall Mounting structure shall be designed & supplied as per OEM approved drawing and shall be certified by OEM engineers. Premium certified HDMI cables (4K @60Hz) with premium logo printed on the label to be used. Standard brands of audio/video cables, connectors, converters, consumables, and other accessories required for the installation and integration with existing facility has to be supplied by the Vendor which will be paid at actuals.

Section - 2:

Warranty and Comprehensive Service Maintenance Contract:

2.1 Warranty

Warranty shall be for 3 (three)years and Comprehensive service maintenance contract support for 3 (three)years beyond warranty period for the entire AV system installed at LPSC, Bengaluru covering video wall, video wall controller, processor, wall management software and all associated audio video equipments. In case, the OEM provides more than three years of comprehensive warranty support, the same shall be passed on to LPSC. This period shall include maintenance and replacement of defective/failed parts at free of cost. Bidder has to attend unlimited breakdowns calls. Warranty conditions to be complied are given in Annexure— 2. Effective date of warranty shall be from the date of installation completion.

2.2 Comprehensive Service Management Contract:

Comprehensive SMC for the entire system for a period of 3 years after the completion of the warranty period is mandatory for evaluation of bids. CSMC Rates shall be quoted mandatorily in the bid. Scope of work, terms & conditions for the Comprehensive maintenance contract beyond warranty period are given in Annexure – 2.

Section - 3:

Operational support:

- 3.1 For the operational support of the AV facility, Vendor should deploy one ITI (Electronics) technician at LPSC Bangalore campus for the 3+3 years period for the operation and maintenance of AV facility on day today basis.
- 3.2 Operational support to be deployed, after completion of installation and making the facility fully operational.
- 3.3 Commencement date of operational support shall start after Installation and acceptance by LPSC stating the facility is fully operational.
- 3.4 Resident operational support to be made available for facility operations and maintenance on day-today basis during 3 year warranty period and 3 year Comprehensive Service Maintenance contract period at LPSCB.(total Six years)as per details given in Annexure 2. In addition to that, Instructions to the Vendor are given in Annexure 3.

Auditorium

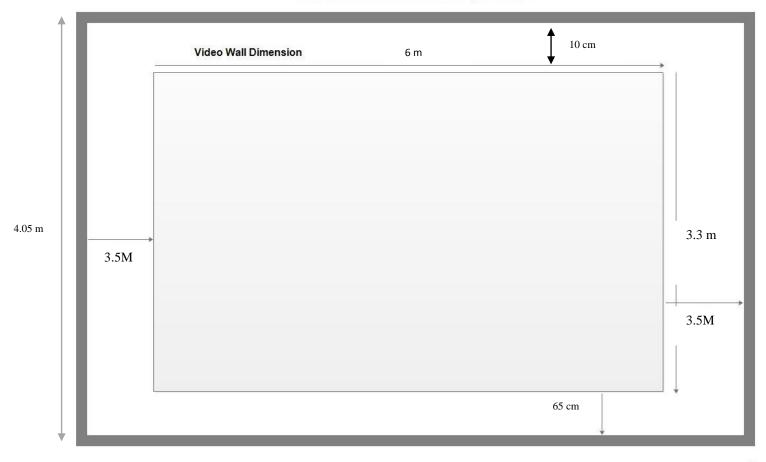


Note:

- 1)Cameras 1 & 2 are to be firmly mounted and suspended from the roof of auditorium facing the dias.
- 2)Cameras 3 & 4 are to be firmly mounted to the side walls of the auditorium facing the Audience.

Dimension details of the wall in Auditorium AV facility and for positioning of video wall

AUDITORIUM VIDEO WALL, LPSCB

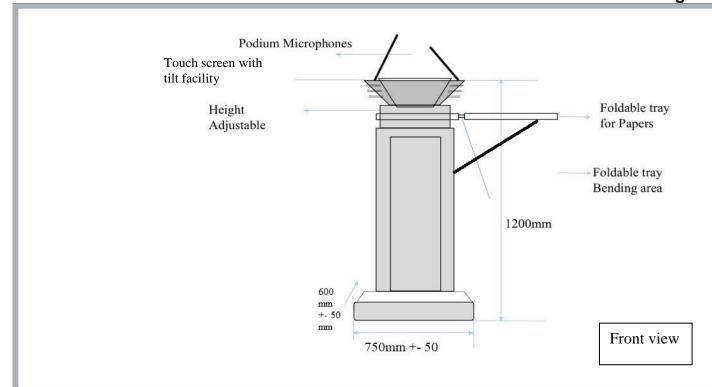


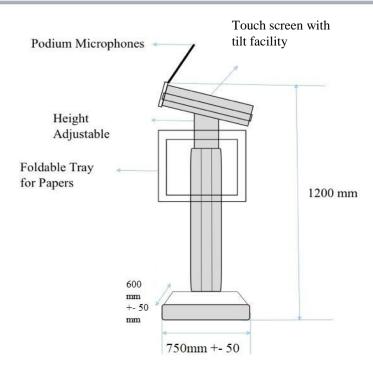
13 m

Pre-set Layout

SI.No.	Description	Specification
1	1	Yes
2	1 2	Yes
3	1	Yes
4	2 3	Yes
5	1 2 3 4	Yes

Note: As per the above, layouts are to be configured in the video wall processor and presets shall be available for Auditorium AV facility.





Side view