

Name of Work:

Comprehensive Annual maintenance contract for Audio Visual Projection system & Sound Re-enforcement system Audio conferencing system for Media Room at MORTH, Transport Bhawan, New Delhi-110001.

Corrigendum No. I

Sr. No.	Reference of RFP	Clause No.	Existing Provision	Modified Provision
1.	List of equipment installed	Appendix-III of RFP	-	As per attached Annexure-A
1.	Schedule of Bidding Process	Clause 4 of NIT	i) Bid Due Date : 13.09.2017 upto 15:00 hrs ii) Physical Submission of Bid Security/POA etc: 13.09.2017 upto 15:00 hrs iii) Opening of Technical bids: 14.09.2017 upto 15:30 hrs	i) Bid Due Date : 21.09.2017 upto 15:00 hrs ii) Physical Submission of Bid Security/POA etc: 21.09.2017 upto 15:00 hrs iii) Opening of Technical bids: 22.09.2017 upto 15:30 hrs



G.M(T)

कनल (सं.नि.) राजीव सूद
Colonel (Retd) RAJEEV SOOD
महानगरपालिका (तकनीकी) / General Manager (Tech)
राज्य राजमार्ग एवं अवसंरचना विकास निगम लिमिटेड
Na. Highways & Infrastructure Development Corporation Limited
रा. उच्चक श्रेणी एवं सार्वजनिक क्षेत्र / A Public Sector Undertaking
भारत सरकार एवं राजमार्ग मंत्रालय के अधीन
Under the Ministry of Road Transport & Highways
भारत सरकार / Govt of India

Annexure-A

Details of Equipments installed in Media Centre, Transport Bhawan, New Delhi-110001

1. SITC of 3x2 video wall with 55 thin bezel HD resolution LED (6 NOS) backlit panels, brightness should be 500 units or better, contrast ratio 1400:1 or better , Bezel size should not exceed 3.5 mm, viewing angle must be 178 degrees. Including all the mounting accessories required. [Make: Delta – LW 5580]
2. SITC of 2 x 2 video wall with 55 thin bezel HD resolution LED (4 NOS) backlit panels, brightness should be 500 units or better, contrast ratio 1400:1 or better, Bezel size should not exceed 3.5 mm, viewing angle must be 178 degrees. Including all the mounting accessories required. [Make: Delta – LW 5580]
3. SITC of 70 inch LED Display with wall swivel mount. [Make. Panasonic]
4. SITC of Tilt up lid Cable Access Enclosure with one universal AC power socket, Pass through holes for VGA with Audio, HDMI & Network cable (For Podium & Stage table). [Make: Extron Cable Cubby – 202 MULTI]
5. Supply, Installation, testing & Commissioning of 12 input & 16 output Modular Digital Matrix Switcher with redundant power supply. Twisted pair as per as HDMI inputs and Twisted pair as per as HDMI output, 12.5 Gbps or more backplane bandwidth, supporting upto 2K or more resolution and doing HDMI audio embedding & deembedding. Twisted pair Input/ Output supporting audio video, control, Ethernet.
6. SITC of Multifformat wall mount Twisted pair transmitters for HDMI, VGA with Audio, Controls Rs 232/ IR and Ethernet upto 100mtr for stage tables as per specifications. [Extron – XTP T UWP 202]
7. SITC for HDMI & Control Rs 232/ IR Twisted Pair Receiver, receiving HDMI, control signals till a distance atleast upto 100 mtrs as per specification. [Extron – XTP R HDMI]
8. SITC of HDCP- Compliant Annotation Processor with HDMI, VGA inputs with output on HDMI as well as Twisted Pair for long distance transmission of upto 100 mtr as per specification. For live annotation on presentation or video with twisted pair as well as HDMI output option. Supporting inputs of VGA 15 pin HD & HDMI / Display port feed with auto switching between inputs & scaling capability. With two or more USB
9. SITC of one HDMI input & four Twisted pair output distribution amplifier for 17^{inch} monitors on stage table , [Extron – DTP HD DA4 4K 230]



10. SITC of HDMI twisted pair Receiver for annotation monitor compatible with the annotation processor supporting a distance of 100 mtr as per specifications. [Extron- DTP HDMI 4K 230 Px1]
11. Supply, Installation, testing & Commissioning of PTZ, Camera with HD Resolution Real High Definition Image with 1/3 inch or better, high quality HD CMOS sensor, 1920x 1080 super high quality video, 30x or more zoom with 12 x or more digital Zoom, Pan Range with 12x or more with HDMI/ DVI output interface for video.
12. SITC of full HD recording & streaming processor , supporting H. 264, with PIP facility & inbuilt recording with HDD capacity of 80 GB or more, external recording on USB or network drive along recording on USB or network drive along with media server software for multicasting . [Extron – SMP 351]
13. SITC of software license for Media server with Transcoder and DVR along with server grade hardware.
14. SITC of HDMI to 3G SDI Scaler cum convertor required for broadcast feed. [Extron – DSC HD- 3G A]
15. SITC of wall plate with 8 nos. of XLR and 8 Nos of HD- SDI connector for Broadcast. [make : customized]
16. SITC of AV controller with Rs. 232, IR, Relay & Ethernet control facility as per specification. [Make: Extron IPCP Pro 550]
17. SITC of Wired Touch Control System with 10” Touchpanel with PoE, 1024 X 600 25 resolution, with Ethernet Processor & required ID Probes to control the Audio Visual system & 9.7 inch ipad as secondary wireless control interface. [Extron – TLP]
18. SITC of wireless router with min 4 LAN ports.
19. Supply installation testing commissioning of the Chair arm Flush mount Chairman conferencing unit consisting of interface unit to provide mode selection and for connecting all the unit and panels used in the system including 18.9 Pluggable long cardioidmicrophone , Microphone priority panel for priority function for the chairmen, including sockets for connecting headphones complete as required. Matching end caps shall give a finishing touch to the flush mounted devices two end cans shall:
 - Frequency response : 16 KHZ
 - Directional pattern : Transducer type: Microphone length : 470 mm
 - Sensitivity 85 dB SPL
 - Max. SPL for THD < 3%
 - 100Hz to



- Cardioids Condenser
- Minimum
- 9.3mV at 110dB

20. Supply installation testing commissioning of the Chair arm Flush mount Chairman conferencing unit (to be shared by adjacent delegates) consisting of interface unit to provide mode selection and for connecting all the unit and panel used in the system including 18.9 Pluggable long micro phone cardioid , Microphone on / off button, red mic on indicator, green request indicator, orange VIP indicator, including 2 no sockets for headphone jacks completed as required. Matching end caps shall give a finishing touch to the flush mounted devices. Two end caps shall be needed per flush mount:

- Frequency response: 16 KHZ
- Directional pattern: Transducer type: Microphone length: 470 mm
- Sensitivity 85 dB SPL
- Max. SPL for THD < 3%
- Cardioids Condenser
- Minimum 9.3mV at 110dB
- 100Hz to

21 Supply installation testing commissioning of dual delegate interface unit which shall have the following feature: [Make DIS – MU 6040 C + MU 6040DI]

- Interface unit shall be surface mounted type for easy mounting under table.
- It shall be digital type for routing of audio and control signal in digital domain only.
- It shall have direct connectivity with main network as well as associate contribution.
- Equipments like delegate, chairman, voting panel language selector intercom handset etc without need of any extra hardware. The Dual Delegate Interface has the following interconnections.
- Two RJ11 connectors for Micro phone
- Control Panel, Priority panel, Voting
- Panel, voting and card panel
- RJ11 connector for intercom Handset.
- Two balance audio inputs for line (0 dB), or Microphone (-60 dB) source, with or without a phantom power supply (2 x eight- pole 262 DIN type Socket)
- Six- Pole circular connector for loop- through system cabling.
- 2 m (78.7 in) cable terminated with a molded six- pole circular connector.
- Two 3.5 mm (0.14 in) stereo jack sockets for connection to headphones of loudspeaker panel.



22 CENTRAL CONTROL UNIT Supply Installation testing commissioning of CCU consisting of:

- Facility to connect multiple conference delegate units, conference chairman unit etc. providing audio conference system. Diagnostic feature to test all connected unit.
- Shall have inbuilt digital processing and control/ transmission of digital audio signals.
- Shall include provision for upgrading to add simultaneous interpretation for 31 language, voting management feature, camera control feature, microphone management, delegate database, synoptic control feature, displaying the results on large screens or hall displays, attendance registration using access control etc without changing the control unit.
- 2x16 character LCD display for status information and configuration.
- Adjustable sensitivity for the audio inputs Audio insertion facility to connect External audio processing devices or telephone couplers Configuration of CCU and system via a display and a single rotary push button. The CCU can be assigned a unique name by the installer for easy identification.

24 Supply installation testing commissioning of feedback suppressor shall have the following functional and technical specification:

- Balanced line or microphone input with phantom supply.
- Second microphone input with automatic mixer.
- Phantom power 16V (Mic only, switchable). Frequency response 125Hz to 15000Hz
Distortion <.1% at 1Khz
Signal delay < 11ms
CMRR>25db (50Hz-20kHz)
- Suppresses feedback before it occurs with feedback suppression algorithm.

25. Extension Power Supply Supply installation testing commissioning of Extension Power supply,

- Maximum supply power of 255W.
- Allows installation at any convenient point in the system cabling.
- Loop-through cabling for units.
- Switches on automatically when the main controller is switched ON.
- All outputs are protected against short

26 Supply installation testing commissioning drawing of conference trunk cable for digital conference system.. The cable should be from the OEM as of the conference system complete.



27. Supply installation testing commissioning all accessories like connectors, clamps splitters, end transmission caps, etc for smooth working of conference system as required as per manufacturer guidelines
28. SITC of wireless Lapel microphone
29. SITC of wireless Hand Held microphones
30. SITC of 12 input 8 output Audio DSP with min 8 channel of AEC & 478V Phantom power with POTS
31. SITC of full-range ceiling speakers with 4" Low Profile Back can and 70/100 V Transformer
32. SITC of wall mount Two-Way Surface Mount Speakers with 6.5 Woofer
33. SITC of Two Channel Amplifier-200 Watts per Channel 100V Class D Amplifier
35. SITC male to male VGA and Audio Cables –Modeled connectors
36. SITC of 6ft long ultr flexible high speed HDMI Cables
37. SITC of Shielded Twisted pair cable
38. SITC of Shielded RJ-45 Plug kit
39. SITC of 19inch 30U Equipment rack
40. SITC of RG6 digital coaxial cable



