



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Designing, Supplying, Installation, Integration,
Testing and Commissioning of Audio Visual
conferencing & control system for Rajya Yojna
Aayog Bhawan, North Block, sector 19 at
Naya Raipur**

(Following Three-Envelope Tender Procedure)

**Schedule – A
Price Tender
To be submitted in ENVELOPE-3**

NIT No.: 95/Yojna-AV/EEC-IV/CE(E)/NRDA/2016-17, Naya Raipur,

Dated: 23.08.2016

Issued by: **Chief Executive Officer,**
Naya Raipur Development Authority (NRDA)
Paryavas Bhawan, North Block Sector- 19,
Naya Raipur- 492 002, Chhattisgarh
Tel No: + 91 771 2512500; Fax No.: +91 771 2512400.
Website: www.nayarapur.gov.in

Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & signed by the tenderer
- (b) All the certificates as per pre qualification criteria shall be appended with relevant forms of schedule "D"

1. PART ONE (NRDA F-1)-(Attached herewith, to be submit along the tender)

Part (A)

- a) Press Notice
- b) Detailed NIT

Part (B)

a) Schedule-A

- (i) Cost Abstract
- (ii) Bill of Quantities

- b) Schedule-B –NIL
- c) Schedule-C –NIL
- d) Schedule-D

Section-I..... (I) Letter Of Technical Tender

(ii)Tenderer's Information Sheet

(iii) Annual Turnover

(iv) Specific Construction Experience

(V)Declaration

(Vi) Check List For Technical Tender Evaluation

(Vii) Experience In Designing, Supplying, Installation, Integration, Testing And Commissioning Of Audio Visual System

(viii) Completion Certificate Of Executed Work

(Ix) Return Of Emd

(X) Integrity Pact

(XI) Undertaking

..... Section –IIScope of work

Section –III..... Technical specifications of work

Section –IV..... Special Conditions of Contract

Section –V..... List of approved makes

Section –VI..... Drawings

- e) Schedule-E
- f) Schedule-F

2. PART TWO (NRDA F-2/3)-Standard form (Not Attached herewith, and not to be submitted along the tender)

Important note: - Link site [http:// nayaraipur.com/documents/gcc.pdf](http://nayaraipur.com/documents/gcc.pdf)

1. General Guidelines
2. Tender
3. General rules and directions
4. Conditions of contract
5. Clauses of contract
6. Model rules relating to labour, water supply and sanitation in labour camps safety code
7. Contract forms
 - (a) Draft Format for Performance Security
 - (b) Earnest Money Deposit Form (Bank Guarantee)
 - (c) Format of Contract Agreement
 - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
 - (e) Indemnity Bond
 - (f) Indenture Bond
 - (g) Notice for Appointment of Arbitrator
8. Proforma of schedules (Schedule 'A' to Schedule 'F')

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Name of work : “Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur ”.

Name of Tenderer:

Details

- a) Cost of Tender Document : Rs
- b) EMD : Rs

Signature of Tenderer

Date:_____

COST ABSTRACT**"Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur"**

Sl. No.	Description of Items	Amount in INR	Amount in Words (In INR)
(I)	MEETING HALL AT GROUND FLOOR (90 PAX)	Rs. -	
(II)	MEETING HALL AT 1st FLOOR (26 PAX)	Rs. -	
(III)	BOARD ROOM AT 1st FLOOR (20 PAX)	Rs. -	
(IV)	DEPUTY CHAIRMAN ROOM AT 1st FLOOR	Rs. -	
(V)	SUB TOTAL OF CHAIRMAN ROOM, SECRETARY ROOM, MEMBER PLANNING COMMISSION	Rs. -	
	TOTAL PROJECT COST (INCLUDING ALL TAXES, DUTIES)	Rs. -	

Note:

1. It is confirmed that the rate quoted above for various Items shall be valid for the specification, makes and others details and Terms & Condition mentioned in the tender documents .
2. Minimum quoted rate will be considered for same description of Items.

BILL OF QUANTITIES

Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur

(I) AUDIO VISUAL REQUIREMENT FOR MEETING HALL AT GROUND FLOOR (90 PAX)

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(A) Audio Conferencing							
A.1	Conference Controller	Supply, Installation , Testing & commissioning of Fully Digital Central Conference Controller Unit, Frequency response 20 Hz to 16 kHz or better, Insertion for SD card up to 32 GB and record button to record audio signals, System Connection 2 x RJ45 socket, Conrol/ Service RS 232 interface 9-pin Sub-D socket, Temperature range 0 to +40 °C etc.	No.	1			Rs. -
A.2	Chairman Microphone	Supply, Installation , Testing & commissioning of Fully Digital Tabletop Chairman Microphone Unit with Gooseneck microphone with illuminated ring, 3 microphone buttons with LED, clear button and configurable function button in the housing, 5-pin XLR connection with hidden lock for removable gooseneck microphone length 400mm or better, Frequency response 50 - 19,000 Hz or better, Polar Pattern Cardioid or better, 2x RJ45 socket, CAT5 Cable etc.	No.	1			Rs. -
A.3	Delegate Microphone	Supply, Installation , Testing & commissioning of Fully Digital Tabletop Delegate Microphone Unit with Speaker, Gooseneck microphone with illuminated ring, Single microphone button with LED, 5-pin XLR connection with hidden lock for removable gooseneck microphone length 400mm or better, Frequency response 50 - 19,000 Hz or better, Polar Pattern Cardioid or better, 2x RJ45 socket, CAT5 Cable etc.	No.	24			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(B) Sound Reinforcement System							
B.1	FOH Speakers	Supply, Installation , Testing & commissioning of FOH Speaker, Frequency Range (-10 dB): 80 Hz to 15 kHz, Power Capacity: 150 Watts Continuous Program, Transformer: 70V/100V, Crossover Frequency: 3.0 kHz, LF Driver: 135 mm (5.25 in) Polypropylene coated paper w/WeatherEdge, HF Driver: 19 mm (.75 in) Titanium coated polycarbonate, Components: 5¼" Polypropylene coated woofer, ¾" Titanium coated horn loaded tweeter, 90° x 90° high frequency horn etc..	No.	2			Rs. -
B.2	Ceiling Speakers	Supply, Installation , Testing & commissioning of Ceiling Speaker, Frequency Range: 75 Hz - 20 kHz, Power Capacity: 75 Watts Continuous Pink Noise, 150 Watts Continuous Program Power, Nominal Sensitivity: 89 dB SPL, 1W @ 1 m (3.3 ft), 110° conical coverage, Rated Maximum SPL: 107 dB, Low-Frequency transducer: 165 mm (6.5 in) Polypropylene-coated 1" coil on aluminum former & High-Frequency transducer: 19 mm (¾ in) Titanium coated polyester, Transformer taps: 70V/100V etc.	No.	10			Rs. -
B.3	Audio Amplifier	Supply, Installation , Testing & commissioning of Eight Channel Power Amplifier, 75W @ 4/8 Ohm per channel to drive Power to Monitoring Speakers with Frequency Response (at 1W, 4/8 ohms): ± 0.5dB @ 4/8 ohms; Total Harmonic Distortion (THD) : < 0.05%; Signal-to-Noise Ratio: 110dB, Crosstalk: <75 dB, CMR: > 55 dB, typically > 70 dB etc.	No.	1			Rs. -
B.4	Audio Amplifier	Supply, Installation , Testing & commissioning of Four Channel Power Amplifier, 125 Watt @ 8 Ohm per channel to drive Power to Monitoring Speakers with Frequency Response (at 1W, 4/8 ohms): ± 0.5dB @ 4/8 ohms; Total Harmonic Distortion (THD) : < 0.05%; Signal-to-Noise Ratio: 110dB, Crosstalk: <75 dB, CMR: > 55 dB, typically > 70 dB etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
B.5	Audio DSP	Supply, Installation , Testing & commissioning of 10 Input 6 Output DSP, Feed back eliminator, Graphik EQ, Mixers: standard, automatic, matrix, combiners, Equalizers: graphic, parametric, feedback, Controls: levels, presets, logic, RS-232, etc.	No.	1			Rs. -
B.6	Wireless Handheld Microphone	Supply, Testing & commissioning of UHF true diversity wireless system, cpl. with UHF Diversity Receiver and Handheld Transmitter, PLL, pilot tone, ACT/SCAN-function, 16 pre-programmed frequencies, incl. softcase, batteries, rack mount brackets and switching power supply	No.	1			Rs. -
		Rugged 9.5" metal housing					
		16 pre-programmed UHF frequencies					
		AutoScan/ACT-function					
		PLL-synthesised technology					
		Adjustable Squelch This function allows you to make fine adjustments to the squelch. This is mostly necessary when several wireless systems are used simultaneously and there is interference on individual channels.					
		Pilot tone recognition Pilot tone recognition allows the receiver to remain inactive until the transmitter is switched on. This prevents unwanted noise.					
Removable antennas (TNC), antenna sockets with power supply (+8 V) for remote antenna amplifiers.							
		Supply, Testing & commissioning of UHF true diversity wireless system, cpl. with UHF Diversity Receiver, Beltpack Transmitter and lavalier microphone, PLL, pilot tone, ACT/SCAN-function, 16 pre-programmed frequencies, incl. softcase, batteries, rack mount brackets and switching power supply					Rs. -
		Rugged 9.5" metal housing					

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
B.7	Wireless Headset Microphone	16 pre-programmed UHF frequencies	No.	1			
		AutoScan/ACT-function					
		PLL-synthesised technology					
		Adjustable Squelch This function allows you to make fine adjustments to the squelch. This is mostly necessary when several wireless systems are used simultaneously and there is interference on individual channels.					
		Pilot tone recognition Pilot tone recognition allows the receiver to remain inactive until the transmitter is switched on. This prevents unwanted noise.					
		Removable antennas (TNC), antenna sockets with power supply (+8 V) for remote antenna amplifiers.					
		Ergonomic design					
		Housing with non-slip rubber pad					
(C) Display Devices							
C.1	Laser Technology LCD / DLP Projector with Lens as per site requirement	Supply, Installation , Testing & commissioning of LCD / DLP Projector having 4000 lumens or better brightness with Pure Laser Technology, 20,000 hrs Lamp Life, Edge Blending, contrast ratio 5000:1 or better, 1920x1200 native resolution 16:10, Inputs 1 x RGB D-Sub 15pin, 5 x BNC, 2 x Stereo Mini Jack, 1 x DVI-D, 1 x HDMI, 1 x S-Video, 1 x Composite Video, Outputs 1 x RGB D-Sub 15pin, 1 x Stereo Mini Jack, Control 1xRS-232C, 1xLAN RJ-45 etc	No.	1			Rs. -
C.2	Projector Mounting Bracket	Supply, Installation , Testing & commissioning of Projector Mounting Bracket etc. complete as required.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
C.3	Motorized Screen	Supply, Installation , Testing & commissioning of Motorized Projection Screen size 65" x 116" (133" Diagonal), Matte White, 16:9 HDTV Format with IR remote control complete with installation as per the site requirement.	No.	1			Rs. -
C.4	Full HD LED Display with Mounting Bracket	Supply, Installation , Testing & commissioning of 55-inch LED Display, Type 120 Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.21 mm (H) x 0.63 mm (V), Active Display Area 1,209.6 mm (H) x 680.4 mm (V), Brightness 350nit, Contrast Ratio 5,000:1, Built in Speaker (10 W + 10 W), Inputs: Analog D-SUB, DVI-D, HDMI, RS-232C remote control etc. complete as required.	No.	2			Rs. -
(D) Control Devices							
D.1	Digital Matrix Switcher-cum-Scaler	Supply, Installation, Testing and commissioning of 16x16 Modular matrix Switcher with option for various type of inputs & outputs such as HDMI / HDBaseT / VGA / OFC, with the Frame and inbuilt power supply, control module, should have internal color test pattern, should have high speed switching, should be supplied with following inputs & output cards: 1. Four Nos. HDBaseT Twisted Pair Inputs 2. Two Nos. HDMI Inputs 3. Four Nos. HDBaseT Twisted Pair outputs 4. Two Nos. HDMI outputs The switcher should be fully compliant with HDCP & EDID Minder etc complete as required.	Set	1			Rs. -
D.2	Active Wall Plate Transmitter	Multiformat 4K Active Wall Plate – HDMI & Computer Graphics with Ethernet, Bidirectional RS-232 & Stereo Audio HDBaseT Transmitter, HDTV Compatible, should be fully compliant with HDCP & EDID Minder to be installed in the table mount enclosure for computer presentation from the table etc complete as required.	No.	2			Rs. -
D.3	HDMI Transmitter	4K HDMI, Bidirectional RS-232 & IR over HDBaseT Twisted Pair Transmitter for the camera & video conferencing, Input: 1 HDMI connector & Output: HDBaseT twisted pair RJ-45 connector etc complete as required.	No.	2			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
D.4	HDMI Receiver	4K HDMI, Bidirectional RS-232 & IR over HDBaseT Twisted Pair Receiver for Projector, Input: HDBaseT twisted pair on RJ-45 connector & output on HDMI Connector etc. complete as required.	No.	1			Rs. -
D.5	HDMI Wall Plate Receiver	HDMI Wall Plate, Bidirectional RS232, IR over Twisted Pair HDBaseT Receiver for various display panels, 2K & 4K Support, should be fully compliant with HDCP & EDID Minder etc. complete as required.	No.	5			Rs. -
D.6	Audio De-embedder	HDMI Audio De-embedder, 1 HDMI inputs & Outputs: 1 HDMI connector and audio outputs etc. complete as required.	No.	1			Rs. -
D.7	Cable Cubby	Table Mount Enclosure - Black Anodized Aluminum Top to be supplied with dual universal power socket, Space for HDMI & VGA Transmitter wall plate insert alongwith Dual RJ45 insert plate etc. complete as required.	No.	4			Rs. -
D.8	Touch Panel Control System	Supply, Installation, Testing & commissioning of Touch Panel Control System including Single / Multiple Controllers for PORTS: 12 RS-232 & RS-485, 12 GPI/O and terminal block connectors; 1 Ethernet on an RJ-45 connector; 1 infrared built-in receiver, 6 infrared ports and required outputs for catering IR & Relays alongwith Ethernet to Serial Port & IR Controller, IR Probes, Apple iPad with Control Software etc. complete as required.	Set	1			Rs. -
D.9	WiFi Router	Supply, Installation, Testing & commissioning of 4 Port Wireless Network Switch etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
D.10	Blu-Ray Disc Player	Supply, Installation , Testing & commissioning of Blu-ray Disc Player, Full HD 1080p playback, Super Quick Start for faster start-up & loading, DTS (Digital Theatre Systems)/Dolby Digital 2ch , Wider CODEC formats playability, 1 x USB port, Easy navigation remote controller, Wi-Fi Ready, Input/Output: 1 x HDMI Output, 1 x Optical / Coaxial Audio Output, 1 x USB Port & 1 x Ethernet Port etc.	No.	1			Rs. -
(E) Cables & Connectors							
E.1	Speaker Cable	Supply, laying, testing and commissioning of 16 AWG Speaker Cable, PVC color coded: red, black, Outer Jacket Color: Light gray with blue lettering etc.	Rmt.	100			Rs. -
E.2	Audio Cable	Supply laying, testing and commissioning of high-quality shielded Microphone cable designed for routing balanced mono or unbalanced stereo mic or line level audio signals, Quality Construction - Conductors and drain wire are stranded 20AWG tinned copper, Rugged and Flexible Jacket - With sequential markings every meter, Easy Stripping - Exceptionally easy to strip because the foil shield is bonded to the inside of the jacket. etc.	Rmt.	100			Rs. -
E.3	Control System Cable	Supply laying, testing and commissioning of high-quality dual shielded pair style cable designed for audio / control in commercial or residential AV systems etc. complete with installation as per the site requirement.	Rmt.	100			Rs. -
E.4	Digital Twisted Pair Cable	Supply laying, testing and commissioning of Digital Shielded twisted pair (STP) Data Cable, 4 shielded twisted pairs CAT6 of 23 AWG solid copper conductors are cabled together in an unshielded outer jacket use with digital transmitter-receiver sets, Terminate with shielded RJ-45 connectors etc.	Rmt.	100			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
E.5	Connectors	Supply, Installation & Testing of Audio Video Conectors as per site requirement.	Lot	1			Rs. -
E.6	DVI-D to HDMI Adapter	Supply, Installation & Testing of DVI-D (Male) to HDMI (Female) adaptor etc.	No.	2			Rs. -
E.7	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 6 feet Long etc.	No.	10			Rs. -
E.8	HDMI Cable	Supply, Installation & Testing of HDMI To HDMI Male cable with moulded connectors - 10 Feet etc.	No.	8			Rs. -
E.9	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 3 feet long.	No.	4			Rs. -
(F) Services							
F.1	Equipment Rack	Equipment Rack for placing AV Devices complete with power strip, cooling fan, back and front door (lockable) alongwith equipment rack tray & wheels etc.	No.	1			Rs. -
SUB TOTAL OF AUDIO VISUAL REQUIREMENT FOR MEETING HALL AT GROUND FLOOR (90 PAX)							Rs. -

Note:

1. It is confirmed that the rate quoted above for various Items shall be valid for the specification, makes and others details and Terms & Condition mentioned in the tender documents .
2. Minimum quoted rate will be considered for same description of Items.

BILL OF QUANTITIES

Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur

(II) AUDIO VISUAL REQUIREMENT FOR MEETING HALL AT 1st FLOOR (26 PAX)

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(A) Audio Conferencing							
A.1	Conference Controller	Supply, Installation , Testing & commissioning of Fully Digital Central Conference Controller Unit, Frequency response 20 Hz to 16 kHz or better, Insertion for SD card up to 32 GB and record button to record audio signals, System Connection 2 x RJ45 socket, Conrol/ Service RS 232 interface 9-pin Sub-D socket, Temperature range 0 to +40 °C etc.	No.	1			Rs. -
A.2	Chairman Microphone	Supply, Installation , Testing & commissioning of Fully Digital Tabletop Chairman Microphone Unit with Gooseneck microphone with illuminated ring, 3 microphone buttons with LED, clear button and configurable function button in the housing, 5-pin XLR connection with hidden lock for removable gooseneck microphone length 400mm or better, Frequency response 50 - 19,000 Hz or better, Polar Pattern Cardioid or better, 2x RJ45 socket, CAT5 Cable etc.	No.	1			Rs. -
A.3	Delegate Microphone	Supply, Installation , Testing & commissioning of Fully Digital Tabletop Delegate Microphone Unit with Speaker, Gooseneck microphone with illuminated ring, Single microphone button with LED, 5-pin XLR connection with hidden lock for removable gooseneck microphone length 400mm or better, Frequency response 50 - 19,000 Hz or better, Polar Pattern Cardioid or better, 2x RJ45 socket, CAT5 Cable etc.	No.	13			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(B) Sound Reinforcement System							
B.1	FOH Speakers	Supply, Installation , Testing & commissioning of FOH Speaker, Frequency Range (-10 dB)1: 80 Hz to 15 kHz, Power Capacity: 150 Watts Continuous Program, Transformer: 70V/100V, Crossover Frequency: 3.0 kHz, LF Driver: 135 mm (5.25 in) Polypropylene coated paper w/WeatherEdge, HF Driver: 19 mm (.75 in) Titanium coated polycarbonate, Components: 5¼" Polypropylene coated woofer, ¾" Titanium coated horn loaded tweeter, 90° x 90° high frequency horn etc..	No.	2			Rs. -
B.2	Ceiling Speakers	Supply, Installation , Testing & commissioning of Ceiling Speaker, Frequency Range: 75 Hz - 20 kHz, Power Capacity: 75 Watts Continuous Pink Noise, 150 Watts Continuous Program Power, Nominal Sensitivity: 89 dB SPL, 1W @ 1 m (3.3 ft), 110° conical coverage, Rated Maximum SPL: 107 dB, Low-Frequency transducer: 165 mm (6.5 in) Polypropylene-coated 1" coil on aluminum former & High-Frequency transducer: 19 mm (¾ in) Titanium coated polyester, Transformer taps: 70V/100V etc.	No.	8			Rs. -
B.3	Audio Amplifier	Supply, Installation , Testing & commissioning of Eight Channel Power Amplifier, 75W @ 4/8 Ohm per channel to drive Power to Monitoring Speakers with Frequency Response (at 1W, 4/8 ohms): ± 0.5dB @ 4/8 ohms; Total Harmonic Distortion (THD) : < 0.05%; Signal-to-Noise Ratio: 110dB, Crosstalk: <75 dB, CMR: > 55 dB, typically > 70 dB etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
B.4	Audio Amplifier	Supply, Installation , Testing & commissioning of Four Channel Power Amplifier, 125 Watt @ 8 Ohm per channel to drive Power to Monitoring Speakers with Frequency Response (at 1W, 4/8 ohms): $\pm 0.5\text{dB}$ @ 4/8 ohms; Total Harmonic Distortion (THD) : < 0.05%; Signal-to-Noise Ratio: 110dB, Crosstalk: <75 dB, CMR: > 55 dB, typically > 70 dB etc.	No.	1			Rs. -
B.5	Audio DSP	Supply, Installation , Testing & commissioning of 10 Input 6 Output DSP, Feed back eliminator, Graphik EQ, Mixers: standard, automatic, matrix, combiners, Equalizers: graphic, parametric, feedback, Controls: levels, presets, logic, RS-232, etc.	No.	1			Rs. -
B.6	Wireless Handheld Microphone	Supply, Installation , Testing & commissioning of UHF true diversity wireless system, cpl. with UHF Diversity Receiver and Handheld Transmitter, PLL, pilot tone, ACT/SCAN-function, 16 pre-programmed frequencies, incl. softcase, batteries, rack mount brackets and switching power supply	No.	1			Rs. -
	Rugged 9.5" metal housing						
	16 pre-programmed UHF frequencies						
	AutoScan/ACT-function						
	PLL-synthesised technology						
	Adjustable Squelch This function allows you to make fine adjustments to the squelch. This is mostly necessary when several wireless systems are used simultaneously and there is interference on individual channels.						
	Pilot tone recognition Pilot tone recognition allows the receiver to remain inactive until the transmitter is switched on. This prevents unwanted noise.						
	Removable antennas (TNC), antenna sockets with power supply (+8 V) for remote antenna amplifiers.						

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
B.7	Wireless Headset Microphone	Supply, Installation , Testing & commissioning of UHF true diversity wireless system, cpl. with UHF Diversity Receiver, Beltpack Transmitter and lavalier microphone, PLL, pilot tone, ACT/SCAN-function, 16 pre-programmed frequencies, incl. softcase, batteries, rack mount brackets and switching power supply	No.	1			Rs. -
		Rugged 9.5" metal housing					
		16 pre-programmed UHF frequencies					
		AutoScan/ACT-function					
		PLL-synthesised technology					
		Adjustable Squelch This function allows you to make fine adjustments to the squelch. This is mostly necessary when several wireless systems are used simultaneously and there is interference on individual channels.					
		Pilot tone recognition Pilot tone recognition allows the receiver to remain inactive until the transmitter is switched on. This prevents unwanted noise.					
		Removable antennas (TNC), antenna sockets with power supply (+8 V) for remote antenna amplifiers.					
		Ergonomic design					
Housing with non-slip rubber pad							

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(C) Display Devices							
C.1	LCD / DLP Projector with Lens as per site requirement	Supply, Installation , Testing & commissioning of LCD / DLP Projector having 4000 Lumens brightness with HDBaseT Connectivity Technology, UHP 250W Lamp with 4000 hrs or better Lamp Life, contrast ratio 2500:1 or better, WUXGA 1920x1200 native resolution 16:10, Inputs: VGA with Audio, HDMI, S-Video, Composite Video & HDBaseT RJ45 Play & Outputs: VGA with Audio, Control RS-232C, LAN RJ-45 etc.	No.	1			Rs. -
C.2	Mounting Bracket for Projector	Supply, Installation , Testing & commissioning of Mounting Bracket for Projector etc.	No.	1			Rs. -
(D) Control Devices							
D.1	Digital Matrix Switcher-cum-Scaler	Supply, Installation , Testing & commissioning of Digital Matrix Switcher-cum-Scaler for HDMI & HDBaseT / Digital CAT RJ45 having 8 inputs & 4 outputs alongwith 4 Nos digital twisted pair inputs/HDBaseT & 4 Nos. outputs on HDBaseT / Digital Twisted Pair ouput and paralel HDMI outputs with separate audio input & audio output, built in audio DSP, RS232 & Eathernet Control ports etc	No.	1			Rs. -
D.2	HDMI Transmitter	HDMI Twisted Pair Transmitter, Max. Data Rate - 1.65Gbps, HDTV Compatible, HDCP Compliant, HDMI Support - HDMI (V.1.4 with Deep Color, x.v.Color, Lip Sync, HDMI Uncompressed Audio Channels, Dolby TrueHD, DTS-HD), 3D Pass-Through etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
D.3	HDMI Receiver	HDMI Twisted pair receiver for HDMI signals, converts the twisted pair signal back to an HDMI signal, Max. Data Rate - 1.65Gbps, HDTV Compatible, HDCP Compliant, HDMI Support - HDMI (V.1.4 with 3D, Deep Color, x.v.Color, HDMI Uncompressed Audio Channels, Dolby TrueHD, DTS-HD), 3D Pass-Through etc.	No.	4			Rs. -
D.4	Cable Cubby	Table Mount Modular Multi-Connection Solution, Manually opens & closes cover with internal framer, Universal Power Supply & Cable Pass Through, UL and CE Qualified etc.	No.	2			Rs. -
D.5	Active Wall Plate Transmitter	Multiformat 4K Active Wall Plate – HDMI & Computer Graphics with Ethernet, Bidirectional RS-232 & Stereo Audio HDBaseT Transmitter, HDTV Compatible, should be fully compliant with HDCP & EDID Minder to be installed in the table mount enclosure for computer presentation from the table etc complete as required.	No.	2			Rs. -
D.6	Touch Panel Control System	Supply, Installation , Testing & commissioning of Touch Panel Control System including Sinle / Multiple Controllers for 8 RS-232 & RS-485, 12 GPI/O and terminal block connectors; 1 Ethernet on an RJ-45 connector; 1 infrared built-in receiver, 4 Infrared ports & required outputs for catering IR & Relays alongwith Ethernet to Serial Port & IR Controller, IR Probes, Apple iPad with Software etc. complete as required.	Lot	1			Rs. -
D.7	WiFi Router	Supply, Installation , Testing & commissioning of 4 Port Wireless Network Switch etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
D.8	Blu-Ray Disc Player	Supply, Installation , Testing & commissioning of Blu-ray Disc Player, Full HD 1080p playback, Super Quick Start for faster start-up & loading, DTS (Digital Theatre Systems)/Dolby Digital 2ch , Wider CODEC formats playability, 1 x USB port, Easy navigation remote controller, Wi-Fi Ready, Input/Output: 1 x HDMI Output, 1 x Optical / Coaxial Audio Output, 1 x USB Port & 1 x Ethernet Port etc.	No.	1			Rs. -
(E) Cables & Connectors							
E.1	Speaker Cable	Supply, laying, testing and commissioning of 16 AWG Speaker Cable, PVC color coded: red, black, Outer Jacket Color: Light gray with blue lettering etc.	Rmt.	100			Rs. -
E.2	Audio Cable	Supply, laying, testing and commissioning of high-quality shielded Microphone cable designed for routing balanced mono or unbalanced stereo mic or line level audio signals, Quality Construction - Conductors and drain wire are stranded 20AWG tinned copper, Rugged and Flexible Jacket - With sequential markings every meter, Easy Stripping - Exceptionally easy to strip because the foil shield is bonded to the inside of the jacket. etc.	Rmt.	50			Rs. -
E.3	Control System Cable	Supply, laying, testing and commissioning of high-quality dual shielded pair style cable designed for audio / control in commercial or residential AV systems etc. complete with installation as per the site requirement.	Rmt.	100			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
E.4	Digital Twisted Pair Cable	Supply, laying, testing and commissioning of Digital Shielded twisted pair (STP) Data Cable, 4 shielded twisted pairs CAT6 of 23 AWG solid copper conductors are cabled together in an unshielded outer jacket use with digital transmitter-receiver sets, Terminate with shielded RJ-45 connectors etc.	Rmt.	150			Rs. -
E.5	Connectors	Supply, Installation & Testing of Audio Video Conectors as per site requirement.	Lot	1			Rs. -
E.6	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 6 feet Long etc.	No.	6			Rs. -
E.7	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 3 feet long.	No.	2			Rs. -
(F) Services							
F.1	Equipment Rack	Equipment Rack for placing AV Devices complete with power strip, cooling fan, back and front door (lockable) alongwith equipment rack tray & wheels etc.	No.	1			Rs. -
SUB TOTAL OF AUDIO VISUAL REQUIREMENT FOR MEETING HALL AT 1st FLOOR (26 PAX)							Rs. -

- Note:
1. It is confirmed that the rate quoted above for various Items shall be valid for the specification, makes and others details and Terms & Condition mentioned in the tender documents .
 2. Minimum quoted rate will be considered for same description of Items.

BILL OF QUANTITIES

Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur

(III) AUDIO VISUAL REQUIREMENT FOR BOARD ROOM AT 1st FLOOR (20 PAX)

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(A) Audio Conferencing							
A.1	Conference Controller	Supply laying, testing and commissioning of Fully Digital Central Conference Controller Unit, Frequency response 20 Hz to 16 kHz or better, Insertion for SD card up to 32 GB and record button to record audio signals, System Connection 2 x RJ45 socket, Control/Service RS 232 interface 9-pin Sub-D socket, Temperature range 0 to +40 °C etc.	No.	1			Rs. -
A.2	Chairman Microphone	Supply laying, testing and commissioning of Fully Digital Boundary Chairman Unit Consisting of Boundary microphone, Frequency Response 50 - 18,000 Hz or better, Half-cardioid with Speaker, Press Button, clear button and configurable function button, Shielded metal housing under table box, Phoenix connectors for buttons, microphone, headphone, Two RJ45 sockets to connect the system unit to the control unit or another microphone unit/system unit alongwith CAT5 patch cord & Shcok mount etc.	No.	1			Rs. -
A.3	Delegate Microphone	Supply laying, testing and commissioning of Fully Digital Boundary Delegate Unit Consisting of Boundary microphone, Frequency Response 50 - 18,000 Hz or better, Half-cardioid with Speaker, Press Button and configurable function button, Shielded metal housing under table box, Phoenix connectors for buttons, microphone, headphone, Two RJ45 sockets to connect the system unit to the control unit or another microphone unit/system unit alongwith CAT5 patch cord & Shcok mount etc.	No.	9			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(B) Sound Reinforcement System							
B.1	FOH Speakers	Supply laying, testing and commissioning of FOH Speaker, Frequency Range (-10 dB): 80 Hz to 15 kHz, Power Capacity: 150 Watts Continuous Program, Transformer: 70V/100V, Crossover Frequency: 3.0 kHz, LF Driver: 135 mm (5.25 in) Polypropylene coated paper w/WeatherEdge, HF Driver: 19 mm (.75 in) Titanium coated polycarbonate, Components: 5¼" Polypropylene coated woofer, ¾" Titanium coated horn loaded tweeter, 90° x 90° high frequency horn etc..	No.	2			Rs. -
B.2	Audio Amplifier	Supply laying, testing and commissioning of Four Channel Power Amplifier, 125 Watt @ 8 Ohm per channel to drive Power to Monitoring Speakers with Frequency Response (at 1W, 4/8 ohms): ± 0.5dB @ 4/8 ohms; Total Harmonic Distortion (THD) : < 0.05%; Signal-to-Noise Ratio: 110dB, Crosstalk: <75 dB, CMR: > 55 dB, typically > 70 dB etc.	No.	1			Rs. -
B.3	Audio DSP	Supply laying, testing and commissioning of 10 Input 6 Output DSP, Feed back eliminator, Graphik EQ, Mixers: standard, automatic, matrix, combiners, Equalizers: graphic, parametric, feedback, Controls: levels, presets, logic, RS-232, etc.	No.	1			Rs. -
(C) Display Devices							
C.1	LED Display with Mounting Bracket on Wall	Supply laying, testing and commissioning of 75-inch LED Display, Type 120Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.2865mm (H) x 0.8595mm (V), Active Display Area 1650.24mm (H) x 928.26mm (V), Brightness 320 nit, Contrast Ratio 4000:1, nputs: Inputs: Analog D-SUB, DVI-D, HDMI, Component (CVBS Common), RS-232C remote control etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(D) Control Devices							
D.1	Switcher-cum Scaler	Supply laying, testing and commissioning of Analog & HDMI ProScale Presentation Digital Scaler/Switcher supports upto 2K input and output resolution, inputs: 4 HDMI, 2 computer graphics video on 15-pin HD connectors, 2 composite video on RCA connectors and 2 component video on RCA connectors and simultaneous 3 outputs i.e. RGBHV, Video, HDMI & RS-232 / IR Control etc.	No.	1			Rs. -
D.2	Cable Cubby	Table Mount Modular Multi-Connection Solution, Manually opens & closes cover with internal framer, Universal Power Supply & Cable Pass Through, UL and CE Qualified alongwith VGA, HDMI & LAN inputs etc.	No.	2			Rs. -
(E) Cables & Connectors							
E.1	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 15 Meter Long etc.	No.	3			Rs. -
E.2	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 1.8 meter Long etc.	No.	2			Rs. -
E.3	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 15 meter long.	No.	2			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
E.4	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 1.8 meter long.	No.	1			Rs. -
E.5	Speaker Cable	Supply, Installation & Testing of 16 AWG Speaker Cable, PVC color coded: red, black, Outer Jacket Color: Light gray with blue lettering etc.	Rmt.	50			Rs. -
E.6	Audio Cable	Supply, Installation & Testing of high-quality shielded Microphone cable designed for routing balanced mono or unbalanced stereo mic or line level audio signals, Quality Construction - Conductors and drain wire are stranded 20AWG tinned copper, Rugged and Flexible Jacket - With sequential markings every meter, Easy Stripping - Exceptionally easy to strip because the foil shield is bonded to the inside of the jacket. etc.	Rmt.	50			Rs. -
E.7	Audio Video Connectors	Supply, Installation & Testing Audio Video Conectors as per site requirement.	Lot	1			Rs. -
(F) Services							
F.1	Equipment Rack	Suitable Equipment Rack for placing AV Devices complete with power strip, cooling fan, back and front door (lockable) alongwith equipment rack tray & wheels etc.	No.	1			Rs. -
SUB TOTAL OF AUDIO VISUAL REQUIREMENT FOR BOARD ROOM AT 1st FLOOR (20 PAX)							Rs. -

- Note:
1. It is confirmed that the rate quoted above for various Items shall be valid for the specification, makes and others details and Terms & Condition mentioned in the tender documents .
 2. Minimum quoted rate will be considered for same description of Items.

BILL OF QUANTITIES

Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur”

(IV) AUDIO VISUAL REQUIREMENT FOR DEPUTY CHAIRMAN ROOM AT 1st FLOOR

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(A) Display Devices							
A.1	LED Display with Mounting Bracket on Wall	Supply laying, testing and commissioning of 65-inch LED Display, Type 60Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.248 mm (H) x 0.744mm (V), Active Display Area 1428.48mm (H) x 803.52mm (V), Brightness 400 nit, Contrast Ratio 4000:1, nputs: Inputs: Analog D-SUB, DVI-D, HDMI, Component (CVBS Common), RS-232C remote control etc	No.	1			Rs. -
A.2	DTH	Supply laying, testing and commissioning of DTH with required HDMI cables, connectors & Mounting Hardware with one year subscription etc.	No.	1			Rs. -
A.3	Cable Cubby	Table Mount Modular Multi-Connection Solution, Manually opens & closes cover with internal framer, Universal Power Supply & Cable Pass Through, UL and CE Qualified alongwith VGA, HDMI & LAN inputs etc.	No.	1			Rs. -

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(B) Cables & Connectors							
B.1	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 15 Meter Long etc.	No.	1			Rs. -
B.2	HDMI Cable	Supply, Installation & Testing of HDMI cable with Ethernet 1.8 meter Long etc.	No.	1			Rs. -
B.3	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 15 meter long.	No.	1			Rs. -
B.4	VGA with Audio Cables	Supply, Installation & Testing of Male to Male VGA Molded Connectors with Audio Cables 1.8 meter long.	No.	1			Rs. -
SUB TOTALAUDIO VISUAL REQUIREMENT FOR DEPUTY CHAIRMAN ROOM AT 1st FLOOR							Rs. -

It is confirmed that the rate quoted above for various Items shall be valid for the specification, makes and others

Note: details and Terms & Condition mentioned in the tender documents .

2.Minimum quoted rate will be considered for same description of Items.

BILL OF QUANTITIES

Designing, Supplying, Installation, Integration, Testing and Commissioning of Audio Visual conferencing & control system for Rajya Yojna Aayog Bhawan, North Block, sector 19 at Naya Raipur

(V) AUDIO VISUAL REQUIREMENT FOR CHAIRMAN ROOM AT 1st FLOOR

Sl. No.	Item	Description	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
(a) Display Devices							
A.1	Full HD LED Display with Mounting Bracket	55-inch LED Display, Type 120 Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.21 mm (H) x 0.63 mm (V), Active Display Area 1,209.6 mm (H) x 680.4 mm (V), Brightness 350nit, Contrast Ratio 5,000:1, Built in Speaker (10 W + 10 W), Inputs: Analog D-SUB, DVI-D, HDMI, RS-232C remote control etc. complete as required.	No.	1			Rs. -
A.2	TataSky	TataSky with required HDMI cables, connectors & Mounting Hardware with one year subscription etc.	No.	1			Rs. -
TOTAL OF AUDIO VISUAL REQUIREMENT FOR CHAIRMAN ROOM AT 1st FLOOR							Rs. -

(b) AUDIO VISUAL REQUIREMENT FOR MEMBER SECRETARY ROOM AT 1st FLOOR						
(A) Display Devices						
A.1	LED Display with Mounting Bracket on Wall	Supply laying, testing and commissioning of 46-inch LED Display, Type 60 Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.17675 mm (H) x 0.53025 (V), Active Display Area 1018.08 mm (H) x 572.67 mm (V), Brightness 350nit, Contrast Ratio 5,000:1, Built in Speaker (10 W + 10 W), Inputs: Analog D-SUB, DVI-D, HDMI, Component (CVBS Common), RS-232C remote control etc.	No.	1		Rs. -
A.2	DTH	Supply laying, testing and commissioning of DTH with required HDMI cables, connectors & Mounting Hardware with one year subscription etc.	No.	1		Rs. -
TOTAL OF AUDIO VISUAL REQUIREMENT FOR MEMBER SECRETARY ROOM AT 1st FLOOR						Rs. -

© AUDIO VISUAL REQUIREMENT FOR MEMBER PLANNING COMMISSION ROOMS AT 1st FLOOR							
(A) Display Devices							
A.1	LED Display with Mounting Bracket on Wall	Supply laying, testing and commissioning of 40-inch LED Display, Type 60 Hz LED BLU, Resolution 1920 x 1080 (16:9), Pixel Pitch(mm) 0.15375 mm (H) x 0.46125 (V), Active Display Area 885.6 mm (H) x 498.1 mm (V), Brightness 350nit, Contrast Ratio 5,000:1, Built in Speaker (10 W + 10 W) Inputs: Analog D-SUB, DVI-D, HDMI, Component (CVBS Common), RS-232C remote control etc	No.	3			Rs. -
A.2	DTH	Supply laying, testing and commissioning of DTH with required HDMI cables, connectors & Mounting Hardware with one year subscription etc.	No.	3			Rs. -
		TOTAL OF AUDIO VISUAL REQUIREMENT FOR MEMBER PLANNING COMMISSION ROOMS AT 1st FLOOR					Rs. -
		Sub Total of Chairman Room, Secretary Room, Member Planning Commission					Rs. -

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 - 2.Minimum quoted rate will be considered for same description of Items.