

**RDSO HQ-S AND T/RDSO  
TENDER DOCUMENT**

**Tender No:** STTMSSTPASystemAud

**Closing Date/Time:** 18/08/2023 15:00

**DG/RDSO** acting for and on behalf of The President of India invites E-Tenders against Tender No **STTMSSTPASystemAud** Closing Date/Time 18/08/2023 15:00 Hrs. Bidders will be able to submit their original/revised bids upto closing date and time only. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

**1. NIT HEADER**

<b>Name of Work</b>	Supply, Installation, Wiring, Testing and Commissioning of PA System in New Auditorium along with Associated Equipments at RDSO Lucknow		
<b>Bidding type</b>	Normal Tender		
<b>Tender Type</b>	Open	<b>Bidding System</b>	Single Packet System
<b>Tender Closing Date Time</b>	18/08/2023 15:00	<b>Date Time Of Uploading Tender</b>	03/08/2023 17:38
<b>Pre-Bid Conference Required</b>	No	<b>Pre-Bid Conference Date Time</b>	Not Applicable
<b>Advertised Value</b>	11041085.36	<b>Tendering Section</b>	TMS
<b>Bidding Style</b>	Single Rate for Tender	<b>Bidding Unit</b>	Above/Below/Par
<b>Earnest Money (Rs.)</b>	205200.00	<b>Validity of Offer ( Days)</b>	60
<b>Tender Doc. Cost (Rs.)</b>	0.00	<b>Period of Completion</b>	365 Days
<b>Contract Type</b>	Works	<b>Contract Category</b>	Expenditure
<b>Bidding Start Date</b>	04/08/2023	<b>Are Joint Venture (JV) firms allowed to bid</b>	No
<b>Ranking Order For Bids</b>	Lowest to Highest	<b>Expenditure Type</b>	Capital (Works)

**2. SCHEDULE**

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule 1</b> -Supply, Installation, Wiring, Testing and Commissioning of PA System in New Auditorium along with Associated Equipments at RDSO Lucknow							11041085.36	
1	1	8.00	Numbers	277234.00	2217872.00	18.00	2617088.96	
	<b>Description:-</b> SITC Flying line arrayable 15" 2 way bi-ampable speaker having 381mm LF transducer with full symmetric drive , advance fourth order crossover network with HF protection, 51 mm diaphragm 36 mm pure exit titanium compressor driver , coverage pattern 90 x 60 degrees having freq response of 70-14000 at -3dB , recommended high pass freq 45 Hz, Max SPL /1m is 134 dB , System power handling 50 watt , nominal impedance 8 Ohms, enclosure material 13 ply weather resistant birch complete with internal cross over. As per Technical Specification Annexure 'A'							
2	2	2.00	Numbers	104600.00	209200.00	18.00	246856.00	
	<b>Description:-</b> SITC of single 18" Sub woofer with 4" voice coil, nominal impedance 8 Ohms, Freq range 30 to 150 Hz at -10dB, sensitivity 96 dB and SPL is 128 dB with a peak of 131 dB, power handling 800 Watts continuous enclosure rectangular made of 18mm plywood. As per Technical Specification Annexure 'A'							
3	3	2.00	Numbers	145600.00	291200.00	18.00	343616.00	
	<b>Description:-</b> SITC of Stage monitor With a maximum SPL rating of 121 dB and wide, even 100° x 100° coverage, capabilities defy its compact form factor and set uncompromising new benchmarks for its product segment. Core components include an 8" woofer mounted using Signal Synchronized Transducers port design, and a high-output titanium tweeter mounted onto a custom constant-directivity waveguide. Freq 60 to 20000 Hz, cross over freq 2.5 KHz, made of poly propylene with powder coated grill. As per Technical Specification Annexure 'A'							
4	4	2.00	Numbers	568428.00	1136856.00	18.00	1341490.08	
	<b>Description:-</b> SITC of Electro Voice Heavy duty high performance amplifier, Class H design. Distortion less than 1 percent Maximum power 2 x 1200 watts at 4 Ohms, Slew rate 30 V/micro sec, cross talk < -75 dB, Freq response 10 to 40000 Hz . Balanced input impedance 20 K Ohms. S/N Ratio 110 dB. Unit has 3 stage front to rear fans for cooling and has complete protection package for High temperature, DC, HF & back EMF, Unit is equipped with Audio , peak current & inrush current Limiters. As per Technical Specification Annexure 'A'							
5	5	2.00	Numbers	97200.00	194400.00	18.00	229392.00	

**RDSO HQ-S AND T/RDSO  
TENDER DOCUMENT**

**Tender No:** STTTMSSTPASystemAud

**Closing Date/Time:** 18/08/2023 15:00

				<b>Description:-</b> SITC of class H power amplifier 800 x 2 @ 8 gives 1360 watt at 2 Ohms & 3000 watt @ 4 Ohms in bridge mode, damping factor > 300, Freq response 20 Hz to 20000 Hz, S/N ratio 106 dB, Amplifier protection against short circuit, output DC, thermal, RF, internal fault, input overload, HF overload, mismatch load, mains inrush current. Unit is equipped with DIP switch for stereo, parallel, bridge. Dip switch for 2 sensitivity settings. As per Technical Specification Annexure 'A'			
6	6	1.00	Numbers	116970.00	116970.00	18.00	138024.60
				<b>Description:-</b> SITC of 24 channel mixer compact with 20 mic & 2 stereo inputs, high-Performance small format analogue mixers with onboard effects Mic preamps with low noise performance, EQ with sweep-able mid-bands per channel Tap Delay on select models BT to connect tab or phone, USB rec and playback 32bit 48kHz Effects Engine featuring Reverb, Delay, Chorus and Modulation. Trim Limiters on input channels Combo inputs for guitars, basses and other instruments Hi-Pass Filters (low-cut) and 48V Phantom Power on all mic channels, Smooth premium-quality faders, Robust polymer lightweight construction for tour-grade build quality and reliability Internal universal power supply, DC 5V lamp onnector+48V phantom power, XLR balanced outputs. Freq 10 to 90000Hz, built in graphic equalizer 9 band stereo. Unit has 99 effects DSP based. As per Technical Specification Annexure 'A'			
7	7	4.00	Numbers	105600.00	422400.00	18.00	498432.00
				<b>Description:-</b> SITC of wireless microphones working on UHF freq band hand held type dual units working on single receiver. Carrier wave freq range 865 to 867 MHz, stability 10ppm, Sensitivity -105dB, image rejection 85 dB typical, Freq response 40 to 18000 Hz, AF output impedance 2.2K Ohms, transmitter power 30 mW. As per Technical Specification Annexure 'A'			
8	8	4.00	Numbers	47200.00	188800.00	18.00	222784.00
				<b>Description:-</b> SITC of EV Ultra compact 5.25 inch 2 way full range speaker made of vented trapezoidal enclosure of high impact polystyrene with passive crossover with power protection, Freq 85-20000 Hz, SPL 85 dB @ 1Mtr & Max SPL 113 dB , power rating 120 Watt , coverage 100 x 10 degrees , HF Transducer 1" soft dome, Impedance 4 Ohms with clamp. As per Technical Specification Annexure 'A'			
9	9	1.00	Numbers	158600.00	158600.00	18.00	187148.00
				<b>Description:-</b> SITC of commercial power amplifier with built in thermal / electrical protection. Amplifier rated power output is 2 x 450 watt @ 4 Ohms , Slew rate 28at 1kHz/V/μs Bridge mode output 900 Watt @ 8 Ohms, Stepped rear panel level attenuation,, Freq response 10 to 40000 Hz, Input impedance > 20 K Ohms, Crosstalk < -75 dB, Multi voltage operation from 110 to 240 VAC, Unit has 3 stage front to rear fans. As per Technical Specification Annexure 'A'			
10	10	4.00	Numbers	71400.00	285600.00	18.00	337008.00
				<b>Description:-</b> SITC of Electro Voice desk top gooseneck mike 18" multi pattern versatility, choose between omni, cardioid, super cardioid or hyper cardioid to easily adapt to any situation. Switch can be programmed to operate as either latching on/off or momentary push-to-mute / push to-talk. Compatible with echo cancellation for conference applications, High visibility blue LED clearly displays mic status to the user. Sensitivity, Open Circuit Voltage, 1 kHz: 5.6mV/Pascal Output Impedance, 1 kHz:200 ohms Clipping Level (1% THD): >135 dB SPL Equivalent Noise:<26 dB SPL "A" weighted. As per Technical Specification Annexure 'A'			
11	11	6.00	Numbers	16230.00	97380.00	18.00	114908.40
				<b>Description:-</b> SITC of cobalt series vocal cum instrument microphone with cardiode polar pattern having dynamic element with 600Ohms impedance low z balanced, open circuit voltage 2.2mV/pascal, Audio freq 50 - 18000Hz, in die cast zinc with cobalt finish. As per Technical Specification Annexure 'A'			
12	12	2.00	Numbers	17670.00	35340.00	18.00	41701.20
				<b>Description:-</b> SITC of Premium Dynamic vocal microphone, super cardiode polar pattern , power full Noedium magnetic structure, shock mount capsule, super off axis rejection, Freq range 80 to 16000 Hz, impedance 600 Ohms, sensitivity 2.2 mv/pascal Textured black satin handle with Memraflex TM grille. As per Technical Specification Annexure 'A'			
13	13	6.00	Numbers	46370.00	278220.00	18.00	328299.60
				<b>Description:-</b> SITC of hanging mike wih cardiode pattern complete with internal pre amplifier , very uniform polar pattern, integrated 25 feet low noise cable shielded, Freq 75 to 15000 Hz, Diameter max 13 mm, element condenser, open circuit voltage 27 mV/pascal, power 9-52 Volts DC. As per Technical Specification Annexure 'A'			
14	14	4.00	Numbers	46370.25	185481.00	18.00	218867.58
				<b>Description:-</b> SITC of boundary layer half cardiode polar pattern boundary layer microphone, ultra thin profile 16 m m housing, Rubber non-slip bottom pad and strong steel screen Integrated pop filter. Unit has built in equalization, Freq 80 to 15000 Hz fitted with back electrets condenser, open circuit voltage 25 mV/pascal. As per Technical Specification Annexure 'A'			
15	15	1.00	Numbers	187800.00	187800.00	18.00	221604.00

**RDSO HQ-S AND T/RDSO  
TENDER DOCUMENT**

**Tender No:** STTTMSSTPASystemAud

**Closing Date/Time:** 18/08/2023 15:00

	<b>Description:-</b> SITC of state of art DSP 2 in -6 out digital signal processor for loudspeaker management & optimization, unit has USB port for advance editing and control, accurate input measuring assures proper gain staging, RS232 port for master slave connection, built in unique delay adjustment, A/D conversion 24 Bit sigma Delta sample rate 48 KHz & internal processing 32 Bit floating, output impedance 50 Ohms, Freq response 10 to 22000 Hz, Dynamic range 111 dB un weighted, DC ONE. As per Technical Specification Annexure 'A'						
16	16	14.00	Numbers	7850.00	109900.00	18.00	129682.00
	<b>Description:-</b> SITC of Making of mike points						
17	17	300.00	Metre	161.40	48420.00	18.00	57135.60
	<b>Description:-</b> SITC of 2.5 Sq mm 2 core copper flexible cable balanced low impedance for speakers.						
18	18	300.00	Metre	174.50	52350.00	18.00	61773.00
	<b>Description:-</b> SITC of 2 core shielded microphone balanced cable						
19	19	1.00	Numbers	144722.00	144722.00	18.00	170771.96
	<b>Description:-</b> SITC of Custom built 19" professional metallic rack powder coated with front door of transparent acrylic sheet , fan cooled , completely wired to accommodate offered amplifiers.						
20	20	1.00	Set	56219.00	56219.00	18.00	66338.42
	<b>Description:-</b> SITC of Connectors as per site						
21	21	2.00	Numbers	148540.00	297080.00	18.00	350554.40
	<b>Description:-</b> SITC of Line Array Hanging arrangement						
22	22	1.00	Job	162697.00	162697.00	18.00	191982.46
	<b>Description:-</b> Testing and commissioning of complete PA system as per scope and instructions of Engineer In Charge.						
23	23	2.00	Numbers	368428.00	736856.00	18.00	869490.08
	<b>Description:-</b> SITC of class H power amplifier 1000 x 2 @ 8 gives 1700 watt at 2 Ohms & 3700 watt @ 4 Ohms in bridge mode, damping factor > 300, Freq response 20 Hz to 20000 Hz,S/N ratio 105 dB, Amplifier protection against short circuit, output DC, thermal, RF, internal fault, input overload, HF overload, mismatch load, mains inrush current. Unit is equipped with DIP switch for stereo, parallel, bridge. Dip switch for 2 sensitivity settings. As per Technical Specification Annexure 'A'						
24	24	1.00	Numbers	1742489.00	1742489.00	18.00	2056137.02
	<b>Description:-</b> Supply, Installation, Testing &Commissioning of Layer 3 Core Switch with 40G Advance Enhanced Data Center Switch (4810GbE (SFP+) +640GbE (QSFP+), Default with two hot swap AC power supply, As per Technical Specification Annexure 'A'						

### 3. ITEM BREAKUP

No item break up added	
------------------------	--

### 4. ELIGIBILITY CONDITIONS

#### Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The tenderer must have successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: Three similar works costing not less than the amount equal to 30% of advertised value of the tender, or Two similar works costing not less than the amount equal to 40% of advertised value of the tender, or One similar work costing not less than the amount equal to 60% of advertised value of the tender.	No	No	Allowed (Mandatory)

#### Special Financial Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	As Per Tender Document	No	No	Allowed (Mandatory)

#### Submission of Document Verification Certificate

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
-------	-------------	-----------------------	-----------------	---------------------

**RDSO HQ-S AND T/RDSO  
TENDER DOCUMENT**

**Tender No:** STTMSSTPASystemAud

**Closing Date/Time:** 18/08/2023 15:00

1	Please submit a certificate in the prescribed format (please download the format from the link given below) for verification / confirmation of the documents submitted for compliance of eligibility / qualifying criteria. Non submission of the certificate, or submission of certificate either not properly filled in, or in a format other than the prescribed format shall lead to summary rejection of your offer. (Click here to download the Format of Self Certification)	No	No	Allowed (Mandatory)
---	--	----	----	------------------------

**5. COMPLIANCE**

**Commercial-Compliance**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The Tenderer shall upload self-certification with completed details as Form-1 (Format for self certification regarding local content (LC) for telecom product, Services or works) issued by Department of Telecommunications, Ministry of communications vide notification published in the Gazette of India Extraordinary (Part I Sec. I), New Delhi, the 29th August-2018.	Yes	Yes	Allowed (Mandatory)
2	Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.	No	Yes	Allowed (Optional)

**General Instructions**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	For those conditions for which standard formats have been given in the uploaded documents titled Formats for uploading of various format.The information should only be submitted in these standard formats.	No	No	Not Allowed
2	Rates are inclusive of all taxes/octroi,license fee, royalty charges etc legally leviable by state , Central Govt and/or any other local authority.	No	No	Not Allowed
3	Certificates from private individuals for whom such works are executed being executed is not acceptable.	No	No	Not Allowed
4	Tenderers are required to submit authenticated certificate along with the tenders from officers of govt or semi-govt/public sector undertaking under whom the work has been executed indicating there in the name of work executed, value of works/payment details and period during which completed. Such certificate should have signature and seal of the concerned officer. in the absence of such certificate the tender may not be considered.	No	No	Not Allowed
5	Tenderer shall submit all the documents in support of minimum eligibility criteria/ credentials along with the tender offer. no document in support of minimum eligibility criteria/credential will be considered /accepted /entertained after closing of tender and the decision will be taken based on the document submitted by the tenderer along with the offer only.	No	No	Not Allowed

**Technical-Compliances**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Submission of details of the qualification and experience of the personal identified for execution of work.	Yes	No	Allowed (Mandatory)
2	Submission of list of construction machinery, tools & plants, test & measuring instruments etc. required for execution of work.	Yes	No	Allowed (Mandatory)
3	Submission of list of works in hand with details of location & it's value.	Yes	No	Allowed (Mandatory)
4	Tenderer shall submit all mandatory documents as mentioned in SN-20 of Chapter III Special Condition of Contract at the time of bid, else the offer of tenderer shall be treated as rejected.	Yes	Yes	Allowed (Mandatory)

**6. Documents attached with tender**

S.No.	Document Name	Document Description
1	AuditoriumTender.pdf	Auditorium Tender

**RDSO HQ-S AND T/RDSO  
TENDER DOCUMENT**

**Tender No:** STTTMSSTPASystemAud

**Closing Date/Time:** 18/08/2023 15:00

---

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017 and amendments/ revisions thereof.

As a Tender Inviting Authority, the undersigned has ensured that the issue of this tender does not violate provisions of GFR regarding procurement through GeM.

**Signed By:** VIJAY GARG

**Designation :** Dir Tele-I