



PRASAR BHARATI
(India's Public Service Broadcaster)
New Broadcasting House, Akashvani Delhi
New Delhi-110001.

No. J-16029(16)/13/2026-ENGG-AIR DELHI

Dated: 25/06/2026

Subject: Draft Technical Specifications for Supply of Digital Phone-in-Console for various Akashvani Stations for seeking Vendors/OEMs Feedback and Budgetary Quote.

1. Technical Specifications for supply of Digital Phone-in-Console for Akashvani, Stations are being uploaded to invite feedback from Vendors/OEMs dealing with supply of such equipment. Interested parties are requested to provide their comments/feedback on these technical specifications.
2. The budgetary prices of the offered equipment/items may also be submitted.
3. The above information may be provided by e-mail to ddgenbh@prasarbharati.gov.in and enggstorenbh@gmail.com on or before 10/07/2026.

25.06.2026

(JITENDER PRUTHI)

Dy. Director General (E)

जितेन्द्र प्ररुथी / Jitender Pruthi
उप महानिदेशक (अधि.) / DDG (E)
आकाशवाणी / All India Radio
नई दिल्ली / New Delhi

Bill of Materials

Sl. No.	Description of Item	Unit	Qty.
1	Digital Phone-in-Console (as per Technical Specifications)	Nos.	10
2	Mating Connectors required for complete installation of Phone-in-Console	Set	10
3	Surge Protection Device (SPD) for Telephone Lines	Nos.	20
4	Telephone Set (Two-Line) with Display, Call Register and Ring Indication	Nos.	10
5	On-site Operational & Maintenance Training for Engineers/Technical Staff	Job	1

Note: The bidder shall supply all accessories, interface cables, power cords, mounting hardware, software, documentation and any other items required for complete installation, testing, commissioning and satisfactory operation of the Phone-in-Consoles. No additional payment shall be made for such items.

TECHNICAL SPECIFICATIONS

1. ESSENTIAL FEATURES OF DIGITAL PHONE-IN-CONSOLES

Sr. No	Specifications	Compliance	Reasons for Deviations (if any)	Details
1.1	The Phone-in-console should be compact ergonomically designed professional product and suitable for reliable operation on 24x7hrs working.			
1.2	It should be housed in rust-proof pre-painted cabinet/Anodized Metal cabinet.			
1.3	The Digital Phone-in-console may be Self Contained Unit consisting of a 19” Rack mountable base unit & a wired Remote Control Unit Operation. OR Software running from a LAN Connected PC shall also be acceptable as Remote control Unit and in that case existing PC available with AIR Stations shall be used and only software shall be provided by tenderer.			
1.4	The layout of modules / parts / components in the Phone-in-console should be professional to permit easy access to the wiring, inspection, repairs / servicing.			
1.5	Phone-in-console should be DSP based and all the processing in the console shall be performed in the digital domain.			
1.6	The Analogue line level inputs and outputs shall be balanced. These should be available on balanced 3-pin XLR.			
1.7	Digital input and output should be available on 3-pin XLR.			
1.8	Console shall be capable of interfacing two Telephone (PSTN) lines.			

Sr. No	Specifications	Compliance	Reasons for Deviations (if any)	Details
1.9	Console shall have two telephone hybrids.			
1.10	It should be possible to connect two lines ON-AIR at a time independently or simultaneously in conference mode.			
1.11	It should also be possible to internally conference two callers with-in the phone-in console. The composite output of two callers should be available on one of balanced XLR connector in both analogue and digital formats.			
1.12	The Phone-in-Console/Telephone Hybrid shall have one input ("Send to Caller") to send the Mix-Minus signal from the Studio Console to the selected (ON-AIR) telephone line. The equipment shall provide this input in both analogue (balanced 3-pin XLR) and digital (AES/EBU on balanced 3-pin XLR) formats.			
1.13	It should be possible to control the levels of send (i.e. Studio console's Mix-Minus Output) & Receive (i.e. Caller's voice) signals.			
1.14	The console should have facility for screening the incoming calls, putting them on hold/ON-AIR and disconnecting them etc.			
1.15	Console shall have Call control system and dialer, Visual telephone Lines's status (i.e. indication of connected lines, Calls on hold, Ready caller status and callers ON-AIR Status etc.).			
1.16	Audio level meters for send and receive shall be available on the front panel of the console/Control Unit.			
1.17	Operating Environmental conditions: The consoles shall be able to work without any problem in the following			

Sr. No	Specifications	Compliance	Reasons for Deviations (if any)	Details
	conditions: Operating Temperature: From 10° C to 35° C Operating Humidity: Up to 80% RH (non-condensing) at 30° C.			
1.18	Certificates of EMC & Electric safety			

2. Audio Specifications of Phone-in-Consoles

Sr. No	Specifications	Compliance	Reasons for Deviations (if any)	Details
2.1	Telephone Lines : 2 PSTN			
2.2	Hybrids : 2 Nos			
2.3	Maximum Callers (ON-AIR) : 2 Nos			
2.4	Maximum Callers On hold : 2 Nos			
2.5	PSTN Line Interface : Standard			
2.6	Line Input (“Telephone Transmit To Caller”)			
2.6.1	Input Type : Analogue(Balanced on XLR connectors)			
2.6.2	Input Level : 0 dBu (Nominal) & 10 dBu maximum			
2.6.3	Input Impedance : ≥ 5 k Ohm			
2.7	Line Output (“Telephone Receive From caller”)			
2.7.1	Output Type :Analogue(Balanced on XLR			

Sr. No	Specifications	Compliance	Reasons for Deviations (if any)	Details
	connectors)			
2.7.2	Output Level : 0 dBu (Nominal) & 10 dBu maximum			
2.7.3	Output Impedance : ≤ 200 ohms			
2.8	Digital input& output: AES/EBU with XLR Connector)			
2.9	Isolation between send & Receive : >50 dB			
2.10	Digital Signal Processing: With in-built DSP (12 bit or better)			
2.11	Audio Performance (On both Receive & Transmit Ckt)			
2.11.1	Frequency response : 300 Hz – 3400 Hz, ± 3 dB			
2.11.2	THD + N : $<0.5\%$			
2.11.3	Signal to Noise Ratio : > 55 dB			
2.12	Power Supply: 230 V $\pm 5\%$ AC 50 ± 2 Hz , Single Phase supply			