प्रसार भारती/PRASAR BHARATI
भारत का लोक सेवा प्रसारक /India's Public Service Broadcaster
योजना एवं विकास एकक / Planning & Development Unit
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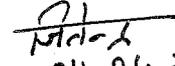नई दिल्ली/New Delhi-110001

File No. 17/41/2019-20/D(SD)E

Dated: 04/01/2021

Subject: Technical Specification for Audio Codec for Vendors/OEMs feedback and cost estimation

A draft specification for Audio Codec (04 pages) is uploaded to invite comments from Vendors/OEMs dealing with supply of such items. The interested parties are requested to provide feedback/request for modification in specification.

Vendors are requested to provide estimated cost of the Codec (As per BOM in Draft Specification).

Comments & Cost Estimation may be provided by E-mail to airstudiodesign331@gmail.com within 21 days from issue of this letter.

04.01.2021

Jitender Pruthi
DDG-E(SD)

Encl. Copy of Specification(04 pages)

PRASAR BHARATI / प्रसार भारती

(BROADCASTING CORPORATION OF INDIA) / भारतीय प्रसारण निगम

DIRECTORATE GENERAL: ALL INDIA RADIO / आकाशवाणी महानिदेशालय

PLANNING AND DEVELOPMENT UNIT / योजना एवं विकास एकक

<u>**Technical Specification for Audio Codec for AIR Stations having VPN Connectivity**</u>

SECTION-I : GENERAL

1. Background & Objective of Project

1.1   All India Radio has more than 200 Studio Setups across its network. Out of these, 47 stations have been provided VPN connectivity.

1.2   Under this project, Supply of Audio Codec are proposed to establish audio connectivity through VPN and Broadband.

2. Scope of Project

2.1   The Scope of this tender is supply of Software based Audio Codec at 47 AIR Stations (List of stations at Annexure-A).

2.2   Software shall be licensed to AIR on perpetual basis i.e. License shall be provided for life time on basis of one-time payment.

2.3   Features of these codec are given in the Clause **1 & 2 of section III**

2.4   These soft codec shall be installed on windows based PC/Laptop provided by AIR Stations and shall be compatible to all professional & commercial sound cards.

3. Documents to be submitted with Tender Document

The tenderer must submit the following documents along with the tender:

3.1   A Clause-by-clause full compliance statement in respect to this specifications.

3.2   Detailed printed literature of Soft Codecs giving complete details of features and performance data on non-returnable basis to facilitate the technical evaluation.

3.3   Back to Back Support Commitment including free updates of software for the period of five Years.

4. Tender Evaluation

4.1   The tender shall be technically evaluated on the basis of conformity of bid to Technical specifications.

(K.N. Pandey)	(Vivek Kumar)	(Sunil Bhatia)	(K.Murugan)	(JItender Pruthi)
AE(SD)	ADE(SD)	DDG(SCD)	DDG-E(SM)	DDG(SD)

4.2   Technical evaluation shall be done on the basis of compliance statement, technical literature related to quoted products.

4.3   The bids fully meeting technical specifications shall be considered technically fit.

5. INSTRUCTION MANUAL

Soft-copy of operational Manual of the Codec should be provided to each station.

6. Warranty

6.1   The necessary online support and debugging of faults shall be provided for trouble free operation of codec for a period of three years from the date of Supply.

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SECTION-II : BILL OF MATERIAL

S. No.	Item	Nos. of Licenses	Remarks
1	Audio Codec (Single Instance)	30 Nos.	
2	Audio Codec (Two Instance)	16 Nos.	
3	Audio Codec (Four Instance)	1 No.	

SECTION-III : TECHNICAL SPECIFICATIONS

1.   FEATURES OF AUDIO CODEC
Technical Specifications for IP Based Soft Codec

S.No.	Specification	Parameters
1.	IP based soft codec	IP based soft codec to feed audio feed from one AIR station to multiple AIR station and vice-versa in duplex communication mode.
2.	Communication medium support	The soft codec should work on wired internet Broadband connection, fixed IP lease line, VPN link, point to point RF link, Wi-Fi and also on 4G/5G USB Dongle.
3.	AAC Bit Rate support	The soft codec should support AAC bitrates of 24, 32, 64,128,192 and 256kbps.
4.	Bit Rate controlling	The soft codec should support parameter controlling from source side.
5.	Audio support	The soft codec should support stereo audio with high fidelity algorithm and delay less than 30 ms.
6.	Multiple audio transmission	Soft codec should support Transmission of multiple Audio (at least 8 Audio feeds) to multi destination.
7.	Dual communication	IP based soft codec should work in dual communication mode i.e. trans-receive simultaneously. For example sending station can send multiple audio feeds to multiple station simultaneously and receive multiple audio feed from different station .There should not be any crosstalk/ interference between stations audio feed.
8.	Modes	The soft codec should have two modes viz. *Send Mode and Receive Mode.*
9.	Send mode	While connecting from studio following options should be available: • Add a Receive Station for the Audio feed

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S.No.	Specification	Parameters
		• Drop a Receive Station for the Audio feed • Send text message to each Receiver • Adjust volume levels for each Receiver • Change incoming codec of each Receiver.
10.	Receive mode	*Receive* mode should have limited options as follows: • Should have auto answer facility when Send link is establish • Audio Preprocessing.
11.	Multiple feed support	The soft codec should allow more than one simultaneous feed.
12.	Text Messaging	The soft codec should allow test messaging with one or more Receiver.
13.	File Transfer	The soft codec should allow transfer of files to any Receiver and should also allow transfer of files to all the Receivers of connected feed.
14.	Auto reconnection	Should have auto launch, auto login and auto reconnection facility in case of network interruption.
15.	Feed recording	The soft codec should have facility of recording of feed.
16.	Input / Output device support	The soft codec should allow changing of input as well as output devices during a feed. It should also support use of more than one input device during a feed.
17.	Presence Information	It should continuously update availability of all the Receiving Stations.
18.	System requirements	Should work on PC running, Windows Windows 7 or above operating systems.
19.	Online Status	There should be facility of visible online status like online, busy and invisible.

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