



Broadcast Engineering Consultants India Limited

(A Government of India Enterprises–Under ministry of Information and Broadcasting)

Expression of Interest (EOI)

For

**Empanelment of vendors/suppliers for Procurement &
Supply of Electronic Components for 50W Transmitter Unit,
VHF FM Folded Dipole Antenna Assembly.**

Reference No: BECIL/RO/Empanelment/CRS/2023/01

Date: 08.08.2023



Broadcast Engineering Consultants India Limited

(A Govt. of India Enterprises – A Mini Ratna Company)

Office No.162, I Main, II Cross, AGS Layout, RMV II Stage, Bengaluru – 560094.

Tel: 080-2341 5853

Reference No. BECIL/RO/Empanelment/CRS/2023/01

SL. No.	Description	Details
1.	EOI No.	BECIL/RO/Empanelment/CRS/2023/01
2.	Date of issue of EOI	08.08.2023
3.	Last date of submission of EOI	17.08.2023
4.	EOI should be addressed to	The General Manager, BECIL-Regional Office, No: #162, I Cross, II Main AGS Layout, RMV II Stage, Bengaluru – 560094.
5.	EOI can be downloaded from the BECIL website	https://www.becil.com

-Sd/-

General Manager

BECIL-RO, Bengaluru.

Empanelment of Vendors/Suppliers for BECIL-RO, Bengaluru-560094.

BECIL-RO, Bengaluru intends to prepare a panel of reputed vendors/suppliers, valid for **two years**, for Procurement & Supply of Electronic Components for 50W Transmitter Unit, VHF FM Folded dipole antenna assembly and Miscellaneous items.

The application for empanelment should be made in the prescribed format which, along with the other relevant details, including terms and conditions of empanelment, can be downloaded from the BECIL website <https://www.becil.com>

The applications, duly filled in the prescribed format and complete in all respects, should be submitted in a sealed cover to the General Manager, BECIL Bengaluru Regional Office House No.162, II Main, I Cross, AGS Layout, RMV II Stage, Bangalore – 560094, Tel: 080-2341 5853.

The proposal should be submitted in the tender box available at reception. Proposal will not be accepted by hand.

The last date for submission of application is **17 August 2023** up to 15:00 hrs.

The BECIL reserves the right to reject any or all the applications without assigning any reasons thereof.

-Sd/-

General Manager
BECIL-RO, Bengaluru.

PROFILE OF BUSINESS

INTRODUCTION:

Broadcast Engineering Consultants India Limited (BECIL) an ISO 9001:2015, ISO 27001:2013 and ISO/IEC 20000:2012 certified, Mini Ratna, Central Public Sector Enterprise of Government of India was established on 24th March 1995. BECIL provides project consultancy services and turnkey solutions encompassing the entire gamut of radio and television broadcast engineering viz, content production facilities, terrestrial transmission facilities, satellite and cable broadcasting facilities in India and abroad. It also provides associated services like building design and construction related to broadcasting, human resource related activities like training and providing man power. BECIL also undertakes supply of specialized communication, ICT, monitoring, security, and surveillance systems to Defence, police and Para- military departments. BECIL has its head office in Delhi and corporate office in Noida. The regional office is in Bangalore.

Over the years, BECIL has consciously groomed and developed a team of in-house, versatile, and dedicated engineers and cultivated and harnessing a vast reservoir of professionals drawn from various fields of broadcasting industry which includes public and private broadcasters, Defence and cable industry. Through this network of resourceful technical professionals, BECIL has established its PAN India presence to serve the needs of the industry.

BECIL has a vast reservoir of experts and integrates the expertise of All India Radio (AIR) and Door darshan (DD), the national broadcaster of India, creating one of the largest Radio Networks catering to nearly a billion people and the world's largest Terrestrial Television Network supplemented by Analogue and Digital satellite Broadcasting services reaching out to millions of TV homes in India and abroad.

BECIL works as consultancy agency, system integrator as well as a turnkey solution provider in the fields of Broadcast Engineering and Information & Communication Technology.

BECIL is the professional platform which caters to all aspects of projects related to TV, Radio, Communication and CCTV from concept to completion and from regulatory to realization.

NOTICE FOR EMPANELMENT OF SUPPLIERS/VENDORS

For procurement & supply of electronic components for 50W transmitter unit, VHF FM folded dipole antenna assembly and miscellaneous items.

**NAME OF APPLICANT:
ADDRESS**

Last Date for Submission: 17.08.2023 By 15:00 Hrs.

THE GENERAL MANAGER
BECIL BENGALURU REGIONAL OFFICE,
HOUSE NO.162, II MAIN, I CROSS, AGS LAYOUT, RMV II STAGE,
BANGALORE – 560094.

Checklist of Submission of Application for Empanelment:

SL. No.	Particulars	Submitted (Yes/No)
1.	The application duly filled in submitted in a sealed envelope.	
2.	Enclosure(A) -submitted along with supporting documents.	
3.	Information duly furnished in Enclosure (B) - along with supporting documents.	
4.	The application submitted on applicant's letterhead as per given format in Enclosure (C) .	
5.	Bank details furnished in Enclosure (D) .	
6.	Application super-scribed as "Application for Empanelment of Vendors/ Suppliers for (trade to be indicated)" on the cover and addressed to: THE GENERAL MANAGER BECIL REGIONAL OFFICE, BENGALURU, HOUSE NO. 162, II MAIN, I CROSS, AGS LAYOUT, RMV II STAGE, BANGALORE – 560094.	
7.	Trade and category in which empanelment is desired is indicated on top of the envelope.	
5.	Copies of work orders, in support of experience of related trade/ business submitted.	
6.	Copies of balance sheet and profit & loss statements for the previous three years, duly certified by a practicing Chartered Accountant, in support of Average Annual Turnover.	
7.	Copy of Permanent Account Number (PAN) of the Proprietor/ Partnership Firm/ Private Limited Company/ Limited Company or Cooperative Body attached.	
8.	Copy of details of Registrations, if any, (i) Under Companies Act/ Cooperative Societies Act, (ii) GST – enclosed.	
9.	Copy of cancelled cheque enclosed.	

General Conditions of Empanelment:

Broadcast Engineering Consultants India Limited (BECIL), Bengaluru Regional Office intends to prepare a Empanel of reputed vendors / suppliers having specialization in the For procurement & supply of electronic components for 50W Transmitter Unit, VHF FM Folded dipole antenna assembly miscellaneous items. The office building is located at House No.162, II Main, I Cross, AGS Layout, RMV II Stage, Bangalore – 560094.

The empanelment will remain in force for two years i.e., from the date of empanelment subject to annual review every year. If the services provided by the vendor / supplier are found to be unsatisfactory or at any time it is found that the information provided for empanelment or for any quotation is false, BECIL reserves the right to remove such vendor / service provider from the empaneled list.

The vendor must have enough experienced personnel, technical knowhow, equipment, instruments, and other resources to complete the awarded work well in time and as per the specifications given by the BECIL.

The vendor must have an experience of having successfully completed similar works/ services in the last three years (as on 1 April 2023). At least one work should have been done in Autonomous body/ Becil / any other reputed institution. The vendor may submit performance certificates from persons/ entities/ institutions for whom they have worked in the past.

The BECIL reserves the right to inspect the facilities of the vendor to verify the genuineness and to ensure conformity with the details given in the bid. The Becil reserves the right to reject any or all the applications without assigning any reason whatsoever thereof and will not entertain any correspondence.

Disputes or differences whatsoever arising out of or relating to the scope, or effect of the agreement or the validity or the breach thereof shall be resolved amicably between the Becil representative and the vendor/ vendor's representative. In case of failure to resolve the disputes and differences amicably within 30 days of the receipt of notice by the other party, then the same shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996 and the award made in pursuance thereof shall be final, conclusive, and binding on the parties.

Vendors, Suppliers, Contractors, and Service Providers, etc. desirous of being empaneled in the BECIL approved list and those who are fulfilling the eligibility criteria as mentioned above may apply on or before the due date. Vendor will be responsible to ensure that the application reaches the Becil on or before the due date and in time. Applications received after due date and time and which are incomplete in any respect, are liable to be rejected without any notice.

Application form can be downloaded from the website <https://www.becil.com>. The application duly filled in shall be **submitted in a sealed envelope** super-subscribed as “Empanelment For procurement & supply of electronic components for 50W Transmitter Unit, VHF FM Folded dipole antenna assembly and miscellaneous items” on the cover and addressed to General Manager, BECIL, BECIL House No.162, II Main, I Cross, AGS Layout, RMV II Stage, Bangalore – 560094. on or before **3:00 PM, 17 August 2023**.

All payments will be made by the Bank by adopting electronic clearing system and electronic fund transfer. For this purpose, please furnish the information in **Enclosure (D)**.

Other Conditions:

Intending applicants are required to furnish details about their Organisation, technical experience, competence, and evidence of their financial standing as per **Enclosure (B)** in order to be considered for empanelment.

While deciding upon the selection of Contractors, emphasis will be given on the ability and the competence to do good quality work in accordance with the specifications and within the time schedule.

Information furnished in the proforma will be kept confidential.

The entire application form and each part of the proforma shall be signed by a person on behalf of the Organisation, who is duly authorized to do so.

If the space in the proforma is insufficient for furnishing full details, such information may be supplemented on a separate sheet of paper duly signed stating therein the proforma's part number and serial number of item.

Clarification, if any, may be obtained from Manager, BECIL Bengaluru regional office, House no.162, II main, I cross, AGS layout, RMV II stage, Bengaluru – 560094.on any working day **between 10:00 am and 05:00 pm. Contact telephone number 080-23415853.**

Enclosures:

- (A) - Trade wise list of items along with description.**
- (B) - Basic Information (General & Financial details).**
- (C) - Covering letter to be submitted on applicant's letterhead.**
- (D) - Details of Bank account of the applicant.**

Enclosure (A)

Trade wise list of items for Procurement & supply of electronic components for 50W Transmitter unit, VHF FM Folded dipole antenna assembly and miscellaneous item, at BECIL Office.

SL. No.	Trade/Nature of Works	Description
1	Procurement & supply of electronic components for 50W Transmitter unit, VHF FM Folded dipole antenna assembly and miscellaneous items.	Refer annexure V

Note: The above list is only illustrative. The trades may include all the necessary items which are required by the Becil from time to time.

Eligibility Criteria:

SL. No.	Eligibility Criteria	Proof of Documents required / must be submitted
1.	Bidder should be a limited company (Public/Private) registered in India under the Companies Act, 1956/2013 for the last 3 years as on EOI issuance date.	1. Certificate of Incorporation issued by Registrar of Companies along with 2. Copies of Memorandum of Association 3. Copies of Articles of Association 4. Shareholding pattern 5. Partnership Deed 6. PAN,TAN,GSTIN Certificate and any other tax related document if applicable is required to be submitted along with the eligibility bid. 7. MSME Registration certificate (if applicable).
2	Bidder should be a financially sound and profitable firm/company and they must have earned profit during any two of the last 3 financial years i.e., 2019-20, 2020-21 and 2021-22 (Audited Balance Sheets / Auditor's Certificate for the last three financial years to be submitted).	Copy of the audited balance sheet, certificate from the Chartered Accountant with turnover of the company for the consecutive last three financial years i.e., 2019-20, 2020-21 and 2021-22 .
3	<ul style="list-style-type: none"> ➤ They should have completed minimum of 03 (three) similar work in the last five years . ➤ The firm should have full-fledged set-up in Bengaluru, with valid license/ registration etc.... 	Work Oder /Supply Order for Similar Works

Enclosure (B): Basic Information
General Information

1.	Name of the applicant organization/ vendor/ supplier/ service providers.	
2.	Address for communication and contact details.	
3.	Telephone number (landline).	
4.	Telephone number (mobile).	
5.	Type of the organization (whether sole proprietorship, partnership, private limited or limited company or cooperative society, etc....).	
6.	Name of the proprietor/partners or directors in the organisation.	
7.	Details of Registration – (whether partnership firm, company, society, etc.) Registering Authority, Date, Registration No., etc., mentioning the business/ activity of the firm (A copy to be enclosed).	
8.	Whether empaneled with Government/ Semi Government/ Municipal Authorities or any other organization and if so, give the details of the same and nature of contract.	
9.	Number of years of experience in the field/ trade applied for.	
10.	Have you in the past carried out any works for BECIL ? If yes, give details.	
11.	Address of Office through which the proposed work will be handled. The name, designation and contact details of the officer in charge for the EOI document.	
12.	Contact details of Authorized signatory in reference to this EOI.	
13.	Any other relevant information.	

A. Financial Information:

14.	Balance sheet and profit & loss statement for the previous three years, duly certified by a practicing Chartered Accountant in support of Average Annual Turnover	
15.	Annual turnover during the last three years.	
16.	Any other Additional information.	

Place:
Date:

Enclosure (C):

Annexure- I

PROPOSAL COVERING LETTER

(On Bidder's Letterhead)

To,

The General Manager,
BECIL-Regional Office, Bengaluru,
Office No. #162, I Main, I Cross,
AGS Layout, RMV II Stage,
Bengaluru – 560094.

Subject: Submission of the Proposal for <insert EOI Name> <EOI No.>

Dear Sir,

1. We, the undersigned, offer to provide services to BECIL with reference to your Expression of Interest <insert EOI Name> dated <insert EOI date> and our Proposal. We are hereby submitting our proposal.
2. We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.
3. We agree to abide by all the terms and conditions of all the volumes of this EOI document. We would hold the terms of our proposal valid for the number of days as stipulated in the EOI document.

Yours sincerely,

Authorized Signatory on behalf of Agency:

Name:

Address:

Mobile:

Email ID:

Place:

Date:

Annexure- II

SELF DECLARATION FOR THE CODE OF INTEGRITY

(To be included in the EOI)

I/We shall maintain a high degree of integrity during the course of my/our dealings business/contractual relationship with BECIL. If it is discovered at any stage that any business/ contract was secured by playing fraud or misrepresentation or suspension of material facts, I/We authorize BECIL to term such contract as voidable at its sole option and take suitable action as deemed fit.

Authorized Signatory on behalf of Agency:

Name:

Address:

Mobile:

Email ID:

Place:

Date:

Annexure- III

UNDERTAKING & ACCEPTANCE LETTER BY THE BIDDER
(To be included in the EOI)

I/We have carefully gone through the various terms and conditions listed in the EOI Document for providing Services/Supplies at BECIL as an empaneled agency. I/We agree to all these conditions and offer to provide Services/Supplies at BECIL and submitting this EOI after carefully reading the conditions and understanding the same without any kind of pressure or influence from any source whatsoever. I/We hereby sign this undertaking in token of our acceptance of various conditions listed in the EOI document.

Authorized Signatory on behalf of Agency:

Name:

Address:

Mobile:

Email ID:

Place:

Date:

Annexure- IV

UNDERTAKING FOR NON-BLACKLISTING

(On 100 Rs. Stamp paper)

We, M/s _____ hereby undertake that,

1. In case the documents submitted by me/ us is found to be forged/ false at any stage, I/we may be debarred from BECIL for taking participation in all future BECIL works and any other suitable action may be taken against our company/ firm as deemed fit by BECIL.
2. I/We state the firm or its partners or its Directors have not been listed or any case is pending or any complaint regarding irregularities is pending against them, in India or abroad by any global international body like world Bank/ International Monetary fund/ world health origination etc. or any Indian State/ Central Government Departments or Public Sector Undertaking of India.

Authorized Signatory on behalf of Agency:

Name:

Address:

Mobile:

Email ID:

Place:

Date:

Annexure-V

BECIL-RO BANGALORE				
ITEMS REQUIRED FOR PROCURMENT OF FM 50W TRANSMITTER UNIT.				
SL NO	MATERIAL DESCRIPTION	SPECIFICATION	MAKE	MODEL
1.	FM LOW PASS FILTER WITH DIRECTIONAL COUPLER	1200W	BROADCAST CONCEPTS	#LPF2013 Rev A
2.	RF POWER AMPLIFIER PCB	80W	BROADCAST CONCEPTS	#MR173
3.	FM EXICTER TX280A	VHF 2W FM EXCITER	TUGICOM	TX280A
4.	RF MOSFET/ TRANSISTOR MPX170S	STEREO ENCODER	TUGICOM	MPX170S
5.	SMPS LRS-150-24	O/P:- 24V DC 6.5A (ADJUSTABLE POT)	MEAN WELL	LRS-150-24
6.	SMPS RT -65C	O/P:- V1=5V 4.0A DC V2=15V1.5A DC V3=- 15V 0.5A DC (ADJUSTABLE POT)	MEAN WELL	RT-50C
7.	SMPS RS-15-12	O/P:- 12V 3A (ADJUSTABLE POT)	MEAN WELL	RS-15-12
8.	FAN DC BRUSHLESS	12V DC	ADDA	ADMS-GSO
9.	HEAT SINK ALUMINIUM FOR PA	HEAT SINK N3-270mm WITH TAP AND TREADING SURFACE FINISH		
10.	XLR CONNECTOR (F) PANEL MOUNT	FEMALE, 3PIN, PANEL MOUNT	NEUTRIK	NC3FD-LX
11.	FRONT PANEL STICKER MONO	AS PER BECIL REQUIREMENT		
12.	FRONT PANEL STICKER STEREO	AS PER BECIL REQUIREMENT		
13.	POWER RESISTOR 0.1OHM 5W	0.1OHM, 5W, 1%, HEAT SINK BASE	MEGA	OE1 5W MPHR
14.	POWER INLET HIGH PERFORMANCE FILTER	RFI / EMI FILTER KV AC	ELCOM	EF - 1B003C02E - B04
15.	FUSE 3A	F3A L 250V	PROTECTRON	3A
16.	N CONNECTOR (F) PANEL MOUNT	DIN / 1.6 / 5.6 RT	LIMAI ELECTRONIS	571-402-02
17.	GRAPHICAL LCD DISPLAY PCB ASSAMBLY	ODM20216-2SLWAX	ORIOLE	LCD 20*2
18.	ELECTRICAL WIRE RED	1.0 SQMM, 1100V, COLOUR: RED	FINOLEX	IS 694
19.	ELECTRICAL WIRE BLACK	1.0 SQMM, 1100V, COLOUR: BLACK	FINOLEX	IS 694
20.	ELECTRICAL WIRE GREEN	1.0 SQMM, 1100V, COLOUR: BLACK	FINOLEX	IS 694
21.	RF CABLE RG-58	BELDEN 8259 RG-58A/U	BELDEN	RG-58A/U
22.	RF CO-AXIAL CABLE RG-316	LOW LOSS RF CO AXIAL CABLE	STANDARD	RG-316 ,50 OHM

23.	AUDIO CABLE 2 CORE	SHIELDED CABLE 26 AWG	CHETAN	2 CORE
24.	RIBBON CABLE IDC 16 PIN	VW-1 ,105 °C ,300V, 28AWG, 16P	TOP ASIA	AWM 2651
25.	POWER CORD 3 PIN	6A, 250VAC, 3X1.0 mm2	VOLEX	IS 694-90
26.	BOLT M2*10, CSK	M2*10, CSK	STANDARD	
27.	BOLT M3*6, CSK	M3*6, CSK	STANDARD	
28.	BOLT M3*10, CSK	M3*10, CSK	STANDARD	
29.	BOLT M3*15, CSK	M3*15, CSK	STANDARD	
30.	BOLT M3*20, CSK	M3*20, CSK	STANDARD	
31.	BOLT M3*45, CSK	M3*45, CSK	STANDARD	
32.	BOLT M4*6, CSK	M4*6, CSK	STANDARD	
33.	BOLT M4*10, CSK	M4*10, CSK	STANDARD	
34.	BOLT M4*15, CSK	M4*15, CSK	STANDARD	
35.	NUT M2	M2	STANDARD	
36.	NUT M3	M3	STANDARD	
37.	WASHER M2	M2	STANDARD	
38.	WASHER M3	M3	STANDARD	
39.	WASHER M4	M4	STANDARD	
40.	METAL SPACERS 10MM, M4 SIZE	10MM FEMALE	STANDARD	
41.	LUG 1.5SQMM(STUD)	1.5SQMM(STUD)	STANDARD	
42.	LUG 1.5SQMM(FORK)	1.5SQMM(FORK)	STANDARD	
43.	LUG 2.5SQMM(FORK)	2.5SQMM(FORK)	STANDARD	
44.	HEAT SHRINKABLE SLEEVE (DIA: 1.5MM)	DIA: 1.5MM	WOER	1.5/0.85 RSFR-H
45.	HEAT SHRINKABLE SLEEVE (DIA: 3.0MM)	DIA: 3.0MM	WOER	3.0/1.5 RSFR-H
46.	HEAT SHRINKABLE SLEEVE (DIA: 5.0MM)	DIA: 5.0MM	WOER	5.0/2.5 RSFR-H
47.	HEAT SHRINKABLE SLEEVE (DIA: 8.0MM)	DIA: 8.0MM	WOER	8.0/4.0 RSFR-H
48.	PLASTIC SPACERS	PLASTIC	STANDARD	
49.	GLUE TUBES	TRANSPARENT	STANDARD	
50.	PMC WIH CABLE 2 PIN	2 PIN, FEMALE	STANDARD	
51.	PMC WIH CABLE 3 PIN	3 PIN, FEMALE	STANDARD	
52.	PMC WIH CABLE 5 PIN	5 PIN, FEMALE	STANDARD	
53.	RMC WIH CABLE 2 PIN	2 PIN, FEMALE	STANDARD	
54.	RMC WIH CABLE 3 PIN	3 PIN, FEMALE	STANDARD	

55.	RMC WIH CABLE 4 PIN	4 PIN, FEMALE	STANDARD	
56.	RMC WIH CABLE 6 PIN	6 PIN, FEMALE	STANDARD	
57.	RMC WIH CABLE 8 PIN	8 PIN, FEMALE	STANDARD	
58.	IDC 16 PIN CRIMP TYPE (16PIN)	16 PIN,FEMALE	STANDARD	
59.	CONTROL BOARD PCB BLANK	AS PER BECIL REQUIREMENT		PTH/SMOBC/LP/CNC/FPT
60.	DISPLAY BOARD PCB BLANK (MONO)	AS PER BECIL REQUIREMENT		PTH/SMOBC/LP/CNC/BBT
61.	DISPLAY BOARD PCB BLANK (STEREO)	AS PER BECIL REQUIREMENT		
62.	AUDIO PEAK DETECTOR (STEREO)	AS PER BECIL REQUIREMENT		
63.	IC MICROCONTROLLER (AT89S52)	AT89S52-24PU (40 PIN)	ATMEL	STANDARD DIP
64.	IC MULTIPLEXER (CD4051BE)	CD4051BE (16 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
65.	IC DEFFIRENTIAL AMP (INA126)	INA126P (8 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
66.	IC ADC (ADC7819)	AD7819YNZ (16 PIN)	ANALOG DEVICES	STANDARD DIP
67.	IC LINE RECEIVER (INA134)	INA134PA (8 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
68.	IC SPST SWITCH (ADG441BNZ)	ADG441BNZ (16 PIN)	ANALOG DEVICES	STANDARD DIP
69.	IC OP-AMP (TL072)	TL072CP (8 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
70.	IC-COMPARATOR (LM339)	LM339AN (14 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
71.	IC 8 I/P OR GATE (74HC4078B)	CD4078BE (14 PIN)	TEXAS INSTRUMENTS	STANDARD DIP
72.	IC INVERTER (74LS04)	HD74LS04P	TEXAS INSTRUMENTS	STANDARD DIP
73.	IC AND GATE (74LS08P)	HD74LS08P	TEXAS INSTRUMENTS	STANDARD DIP
74.	IC OR GATE (74LS32)	SN74LS32N	TEXAS INSTRUMENTS	STANDARD DIP
75.	IC BAR GRAPH DRIVER (LM3916)	LM3916N-1	TEXAS INSTRUMENTS	STANDARD DIP
76.	IC BAR GRAPH DRIVER (LM3915)	LM3915N-1	NATIONAL SEMICONDUCTORS	STANDARD DIP
77.	IC LED DRIVER (74LS244)	SN74LS244N	TEXAS INSTRUMENTS	STANDARD DIP
78.	IC TIMER (LM555)	NE555P	TEXAS INSTRUMENTS	STANDARD DIP
79.	IC-TEMPERATURE SENSOR LM35DT	LM35DT	TEXAS INSTRUMENTS	STANDARD DIP
80.	BAR GRAPH DISPLAY (20 SEGMENT)	DC-20/20EWA M3	KINGBRIGHT	STANDARD DIP
81.	IC BASE (8 PIN)	8 PIN	STANDARD	DIP SOCKETS
82.	IC BASE (14 PIN)	14 PIN	STANDARD	DIP SOCKETS
83.	IC BASE (16 PIN)	16 PIN	STANDARD	DIP SOCKETS
84.	IC BASE (18 PIN)	18 PIN	STANDARD	DIP SOCKETS
85.	IC BASE (20 PIN)	20 PIN	STANDARD	DIP SOCKETS

86.	IC BASE (40 PIN)	40 PIN	STANDARD	DIP SOCKETS
87.	IDC PCB MOUNT (10 PIN)	10 PIN, MALE	STANDARD	
88.	IDC PCB MOUNT (16 PIN)	16 PIN, MALE	STANDARD	
89.	TRANSISTOR (2N2222)	2N2222A		
90.	ZENER DIODE (IN4148)	1N4148		
91.	RESISTOR (27E)	27E, ¼ W, TOL:1%	STANDARD	
92.	RESISTOR (50E)	50E, ¼ W, TOL:1%	STANDARD	
93.	RESISTOR (100E)	100E, ¼ W, TOL:1%	STANDARD	
94.	RESISTOR (120E)	120E, ¼ W, TOL:1%	STANDARD	
95.	RESISTOR (470E)	470E, ¼ W, TOL:1%	STANDARD	
96.	RESISTOR (1K)	1K, ¼ W, TOL:1%	STANDARD	
97.	RESISTOR (1.2K)	1.2K, ¼ W, TOL:1%	STANDARD	
98.	RESISTOR (1.5K)	1.5K, ¼ W, TOL:1%	STANDARD	
99.	RESISTOR (2.7K)	2.7K, ¼ W, TOL:1%	STANDARD	
100.	RESISTOR (3.6K)	3.6K, ¼ W, TOL:1%	STANDARD	
101.	RESISTOR (3.9K)	3.9K, ¼ W, TOL:1%	STANDARD	
102.	RESISTOR (4.7K)	4.7K, ¼ W, TOL:1%	STANDARD	
103.	RESISTOR (5.9K)	5.9K, ¼ W, TOL:1%	STANDARD	
104.	RESISTOR (6.7K)	6.7K, ¼ W, TOL:1%	STANDARD	
105.	RESISTOR (10K)	10K, ¼ W, TOL:1%	STANDARD	
106.	RESISTOR (12K)	12K, ¼ W, TOL:1%	STANDARD	
107.	RESISTOR (14K)	14K, ¼ W, TOL:1%	STANDARD	
108.	RESISTOR (15K)	15K, ¼ W, TOL:1%	STANDARD	
109.	RESISTOR (20K)	20K, ¼ W, TOL:1%	STANDARD	
110.	RESISTOR (62K)	62K, ¼ W, TOL:1%	STANDARD	
111.	RESISTOR (100K)	100K, ¼ W, TOL:1%	STANDARD	
112.	RESISTOR (200K)	200K, ¼ W, TOL:1%	STANDARD	
113.	RESISTOR (330K)	330K, ¼ W, TOL:1%	STANDARD	
114.	RESISTOR (10M)	10M, ¼ W, TOL:1%	STANDARD	
115.	NETWORK RESISTOR (PULL UP)	A103J		
116.	POT (1K)	1KΩ	ROHS SEMICONDUCTOR	
117.	POT (10K)	10KΩ	ROHS SEMICONDUCTOR	
118.	CAPACITOR (0.1uF, CEREMIC)	0.1uF ,ELECTROSTATIC, DISC, CERAMIC,	AKH	CODE : BC 104

119.	CAPACITOR (3.3uF, 63V, POLAR)	3.3uF, 63V (ELECTROLYTIC, POLAR)	INCAP	
120.	CAPACITOR (10uF, 63V,(25v) POLAR(8:2))	10uF, 63V (ELECTROLYTIC, POLAR)	JWEO	
121.	CAPACITOR (100uF, 25V, POLAR)	100uF, 25V (ELECTROLYTIC, POLAR)	KELTRON	
122.	CAPACITOR (100uF, 16V, POLAR)	100uF, 16V (ELECTROLYTIC, POLAR)	KELTRON	
123.	CAPACITOR (10uF 25V,(63V) NON- POLAR)	10uF 25V,(63V) (ELECTROLYTIC, NON- POLAR)	KELTRON	
124.	CAPACITOR (33PF, CERAMIC)	33pF, CERAMIC	AKH	
125.	CRYSTAL (11.0592MHz)	CREC11.0592	QUARTZ	
126.	RESET SWITCH	4 LEG	OMRON	B3F
127.	TOGGLE SWITCH	SPDT, 3A, 250VAC	CALONIX	P10X
128.	LED 5MM RED	5MM, COLOUR:RED, MEDIUM BRIGHT		
129.	LED 5MM GREEN	5MM, COLOUR:GREEN, MEDIUM BRIGHT		
130.	PMC MALE (2PIN)	2 PIN, MALE		
131.	PMC MALE (3PIN)	3 PIN, MALE		
132.	PMC MALE (5PIN)	5 PIN, MALE		
133.	RMC MALE (2PIN)	2 PIN, MALE		
134.	RMC MALE (3PIN)	3 PIN, MALE		
135.	RMC MALE (4PIN)	4 PIN, MALE		
136.	RMC MALE (6PIN)	6 PIN, MALE		
137.	RMC MALE (8PIN)	8 PIN, MALE		
138.	VGA CONNECTOR FEMALE	9 PIN, FEMALE		
139.	EXCITER 2PIN JUMPER CAP	2 PIN		
140.	SERIES SOLVENT	1000 SERIES SOLVENT	HYBRID METALS PVT. LTD.	
141.	NO CLEAN FLUX	810 NO CLEAN FLUX	HYBRID METALS PVT. LTD.	
142.	HYBRID SOLDER CORE WIRE	SOLDERING LEAD (ALLOY Sn/Pb= 63/37)	HYBRID	GAUGE 22 SWG
143.	HEAT SINK PASTE	ANABOND HEAT SINK COMPOUND	ANABOND 652C	
144.	HAND GLOVES FOR SOLDERING			
145.	WRAPPING SLEEVE	3MM		
146.	HEAT SHRINK SLEEVE	22MM WOER	HEAT SHRINK SLEEVE	
147.	HEAT SHRINK SLEEVE	15MM WOER	HEAT SHRINK SLEEVE	

BECIL RO BANGALORE

ITEMS REQUIRED FOR PROCUREMENT OF VHF FM ANTENNA

SL NO	MATERIAL DESCRIPTION	SPECIFICATION	MAKE
1	TWO BAY VHF FM ANTENNA ASSY	89.6MHz, 90MHz, 90.4MHz, 90.8MHz. 91.2MHz	BECIL MAKE
2	TWO BAY VHF FM ANTENNA ASSY	107.8MHz	BECIL MAKE
3	LMR-400-UF,RG-213,CO-AXIAL CABLE	50-OHMS CABLE	TIMES MICROWAVE
4	RG-63B,CO-AXIAL CABLE	125-OHMS	TECHNO CABLES PVT. LTD.
5	N(M) CONNECTOR	CRIMP TYPE	FOURESS TECHNOLOGY
6	N(F) CONNECTOR	PANEL MOUNT EXTENDED BERLIUM FLANGE	
7	FEEDER LINE CABLE	SLO12R PE 1/2" ROSENBERGER	STANDARD
8	N(M) CONNECTOR	53S1C7-C03N1 ROSENBERGER	
9	HEAT SHRINK SLEEVE	22MM WOER	
10	HEAT SHRINK SLEEVE	15MM WOER	
11	CPVC PLASTIC PIPE	I/D-17MM, O/D-22MM	
12	INSULATION TAPE	ELECTRICAL SINGLE SIDED ADHESIVE (ACME WONDER)	
13	THAR TAPE	WEATHERING INSULATION TAPE	
14	NYLONE TIE	WEATHER PROOFING CABLE TIE	
15	BONDING PASTE	ADHESIVE BOND (ARALDITE)	
16	CLEANING POWDER	CLEANING COPPER METAL (PITAMBARI)	
17	FRICTION POWDER	AVOIDING CABLE FRICTION IN BAY (555 BRAND)	
18	HYBRID LEAD ROLE 22SWG	22SWG (HYBRID SOLDER)	
19	SOLID FLUX	QUICKFIX	
20	COPPER SHINING PASTE	FOR SHINNING COPPER METAL (PRIDILITE BRITE)	

Enclosure (D): Details of Bank Account

1.	Name of the Vendor/Firm	
2.	Name of the Account Holder	
3.	Address of the Vendor/Firm	
4.	Name of the Bank, Branch and Address	
5.	Bank Code and Branch Code	
6.	IFSC Code of the Bank Branch	
7.	Type of Account (Saving/Current/Cash Credit)	
8.	Account Number	

Note:

A copy of cancelled cheque and PAN in respect of the above account which is operated by the vendor must be enclosed.

End of the Document
