



**KERALA STATE COASTAL AREA  
DEVELOPMENT CORPORATION LIMITED  
(A Government of Kerala Undertaking)**

Makayiram, T.C 16/1709, Ulloor Lane,  
Near DPI, Jagathy, Thiruvananthapuram, Kerala  
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**Tender Notice**

No. 1577/A/KSCADC/2013

29.08.2013

The Managing Director KSCADC invites sealed tenders for the following items. The tender forms will be available at Office of the KSCADC. For more details visit [www.keralacoast.org](http://www.keralacoast.org)

Sl. No.	Name of Item	Qty	EMD (Rs.)	Cost of Tender (Rs.)
I	VHF Repeater stations	3 Nos.	2748/-	450 + 5% VAT
II	VHF Base stations	20 Nos.	4500/-	700 + 5% VAT
III	Flake ice unit	3 Nos.	28000/-	4200 + 5% VAT
IV	Solar street lighting	3 Nos.	52500/-	7900 + 5% VAT

Date of Closure of Sale of Tender : 19/09/2013 11 AM

Last date of receipt of Tender : 19/09/2013 4 PM

Date of opening a Tender : 19/09/2013 4.30 PM

Sd/-  
Managing Director

## **I) VHF REPEATER STATIONS – 3 Nos. (Approx.)**

Competitive bids are invited for the supply, installation, testing and commissioning of 3 numbers (Approx) of VHF repeater units from the firms/companies having experience in the establishment of VHF repeater units.

### **A. Technical Specifications**

Operating Voltage - 12 V DC

Frequency - All permitted marine channels having two frequencies as well as non - marine channels.

Transmitter Out put power - minimum 45 W

Receiver Audio out put: 3 - 4.5W (Fist mike with speaker facility)

Capability Expansion – be expanded through the addition of special options:

Community Repeater Capability – lets multiple groups share the same radio channel.

Telephone Interconnect – lets radio users access a local landline tele-phone network, further expanding the communications reach.

Smarr Trunk II<sup>TM</sup> Trunking – provides faster access to channels, security, privacy, and telephone access.

Metal Housing with Temperature Controlled Fan Assembly

Mounting Bracket

Interconnection Cables

Service Manual

Power Supply with Switchable Primary Voltage

Programmable Dip Switch

Hang Time 0, 1.5 or 3 seconds

Audio Path Capability

Bi-Directional or Uni-Directional Operation

Front Panel “Repeater Enable Control”

Variable level Repeat Audio Path

Compatible with RapidCall Signalling

2 PRO Series Mobile Radios

Duplexer

Note: The cost shall include charges for erection, installation and programming.

### **B. Tender Conditions**

1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC at payable at Trivandrum.
2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized Banks for a period of one year from the date of issue of satisfactory completion report.

4. The VHF repeater units shall be commissioned at the site as specified by KSCADC.
5. There shall be a replacement warranty period of 3 years for all the components of VHF repeater units.
6. The VHF repeater shall be commissioned within two months on receipt of the supply order.
7. The rates quoted must be inclusive of all taxes, duties, freight, installation charges, labour charges etc.
8. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.
9. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
10. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
11. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
12. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.
13. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
14. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

Note:-

- a) The tender shall be put in a single sealed cover super scribing the wordings "Bid for supply and installation of VHF Repeater units."
- b) The following certificates shall be submitted along with the tender,
  - (i) The bidder shall submit Customer Satisfaction Report from at least one customer to prove his experience in establishment of VHF Repeater unit.
  - (ii) OEM certificate from the manufacturer of the VHF Repeater unit.

## **II) VHF BASE STATIONS – 20 Nos. (Approx.)**

Competitive bids are invited for the supply, installation, testing and commissioning of 20 numbers (Approx) of VHF base units from the firms/companies having experience in the establishment of VHF base station.

### **A. Technical Specifications**

Operating Voltage - 12 V DC

Squelch control

Frequency - All permitted marine channels as well as non - marine channels

Transmitter Out put power - 25 W (High) and 1W (Low) selectable

Receiver Audio out put: 3 - 4.5W (Fist mike with speaker facility)

Note: The cost shall include charges for erection, installation and programming.

### **B. Tender Conditions**

1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC at payable at Trivandrum.
2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized Banks for a period of one year from the date of issue of satisfactory completion report.
4. The VHF base units shall be commissioned at the site as specified by KSCADC.
5. There shall be a replacement warranty period of 3 years for all the components of VHF base units.
6. The VHF base units shall be commissioned within two months on receipt of the supply order.
7. The rates quoted must be inclusive of all taxes, duties, freight, installation charges, labour charges etc.
8. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.
9. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
10. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
11. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
12. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and

workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.

13. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
14. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

Note:-

- a) The tender shall be put in a single sealed cover super scribing the wordings “Bid for supply and installation of VHF base stations”.
- b) The following certificates shall be submitted along with the tender,
  - (i) The bidder shall submit Customer Satisfaction Report from at least one customer to prove his experience in establishment of VHF base stations.
  - (ii) OEM certificate from the manufacturer of the VHF base stations.

### **III. FLAKE ICE UNIT - 3 Nos. (Approx.)**

Competitive bids are invited for the supply, installation, testing and commissioning of flake ice unit having 1 ton per day production capacity along with refrigerated insulated storage at various hygienic fish markets being established by KSCADC from the firms/companies having experience in the installation of flake ice unit for the production of flake ice having 1.6 – 1.9 mm thickness.

#### **A. Technical Specifications**

##### **1. Flake ice maker**

Refrigerant: R404a.

Refrigeration capacity: 4700 kcal/h.

Condenser & Compressor: Air-Cooled Condensing Unit with Semi-Hermetic imported compressor (4 HP), Split type.

Ambient condition- 40 Deg C

Condensing temperature: 48-50 Deg C

Power supply: 3ph-400v-50 Hz ( $\pm 5\%$ ).

Reducer power: 0.25kw.

Water pump: 0.025kw.

Evaporating temp: -22 Deg C.

Outer diameter of feeding pipe: cu13.

Outer diameter of air-returning pipe: cu28.

Piping distance from condenser to evaporator: 10 RMT.

Stand for mounting flake ice machine: MS fabricated, epoxy coated, Roof supported.

MOC of flake Ice machine- SS (SUS30), Aluminum and PE components only.

Evaporator MOC- Non corrosive Alloy

Expansion valve: Danfoss/Alco/equivalent

Ice Generating mode- Ice blades scrapes the inner wall of the evaporator, where the evaporator should be stationary

Water return system- Should provide large water trough at the bottom of the evaporator, which should be connected to the water tank, to avoid water leakage and ice lumping

Electrical- HP/LP switch, solenoid valve (Danfoss/equivalent), single phase preventor, cut in cut out relays, MCB, etc- make: L&T/Schneider/ Seimens/equivalent

Electrical panel- Inbuilt with Condensor

## **2. Insulated cabinet**

Dimension:  $2 \times 2 \times 2.2\text{m}$  (ht).

Panels: Prefabricated sandwich panels with cam locks and silicone sealant on all joints. Wall, ceiling and floor are joint with step and insitu PU foaming to avoid any leakage.

Insulation: 60mm thick PCGI laminated PUF panels ( $40 \pm 2\text{kg/m}^3$ ) with doors  
Floor Insulation: 60mm PUF slab with both sides polythene sheet (200 microns thickness), with an overlap of 100mm. (Concreting and Kota stone laying under contractors scope.)

Panel Make: CFC free PUF panels manufactured by a UNFCC certified firm.

Door: Thermally sealed flush type swing doors of size 750mm x 1900mm (ht). Doors should be fitted with flush type door lock, door defeat, all door accessories should be with non corrosive SS/alloy, kick plate with SS chequer plate should be provided to a height of four feet.

Door make: CFC free PUF panels manufactured by a UNFCC certified firm.

Man trap alarm: A hooter should be provided, in case of man trap inside the room.

## **3. Refrigeration unit for insulated cabinet**

Refrigeration unit type: Air cooled split type

Compressor: hermetic, 3 ph.

Condensor coil: Aluminum fin and copper tube, Air cooled type.

Condensing temperature: 48-50 Deg C

Power supply: 3ph-400v-50 Hz ( $\pm 5\%$ ).

Ambient condition- 40 Deg C

Evaporating temp.:  $-3^\circ\text{C}$ .

Refrigerant: R-134a/404a

Connected load: 3.5 kw.

Temperature attainable:  $+2 \pm 1$  degree centigrade inside the insulated chamber.

Piping distance from condenser to evaporator: 10 RMT.

Electrical- HP/LP switch, solenoid valve (Danfoss/equivalent), single phase preventor, cut in cut out, relays, MCB, etc- make: L&T/Schneider/ Seimens/equivalent

Electrical panel- Inbuilt with Condensor

## **B. Tender Conditions**

1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC at payable at Trivandrum.
2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized/scheduled Banks for a period of one year from the date of issue of satisfactory completion report.
4. The flake ice machine shall be commissioned at the site as specified by KSCADC in the various districts.
5. There shall be three years replacement warranty for flake ice machine and all other components. The electrical and electronic components shall have warranty given by the manufacturer.
6. The flake ice machine shall be commissioned within three months on receipt of the supply order as well as handing over of the site.
7. The rates quoted must be inclusive of all taxes, duties, freight, labour charges etc.
8. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.
9. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
10. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
11. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
12. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.

13. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
14. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

Note:-

- a) The tender shall be put in a single sealed cover super scribing the wordings “Bid for supply and installation of Flake ice machines”.
- b) The following certificates shall be submitted along with the tender,
  - (i) The bidder shall submit Customer Satisfaction Report from at least one customer to prove his experience in supply and erection and commissioning of Flake ice machines.
  - (ii) OEM certificate from the manufacturer of the flake ice machine.

#### **(IV) SOLAR STREET LIGHTING – 3 Nos. (Approx.)**

Competitive bids are invited for the supply, installation, testing and commissioning of 3 numbers of units (Approx) of solar street light from the firms/companies having experience in the establishment of solar street light and possessing ISO certificate.

##### **A. Technical specifications for one unit**

- 1. Street light:-** Supply Installation testing and commissioning of 50 No. of 5 Meter rubber coated GI tubular pole with foundation and LED 120 angle-20W, 230V AC, with reflector. Body IP 65 Aluminium cast metal frame street light system. 2 years warranty.
- 2. Cable lying: -** Cutting cable trench of 2000m having the size 50x40cm below the ground and supply and laying of Armoured Cable- 2KW, 2 pair cable inside for 2000m length and supply and making cable end termination and providing protective covering using bricks on the existing laid cable refilling the trench etc as reqd.
- 3. Solar panels:-**Manufactured by an MNRE certified company with SPA rating 1A or 2A and 25 year replacement warranty. Solar Polycrystalline panels with 20 numbers of 250wp and 24 dc, efficiency above 15%. Structure should make of 1.5 inch anglers and should be coated with MRF anti-corrosion paint or rubber compound.
- 4. Batteries:-** Twelve numbers of c10, 12V 150AH batteries C10 type with MNRE approved manufacturer with 5 years replacement warranty with structures coated with MRF anti-corrosion paint or rubber compound coating to enclose the battery.
- 5. Solar power conditioning unit:-** Supply Installation testing and commissioning of one number of inverter -2KW with sinewave output, 56V DC, 2000 Watts output. Timer settings for night operations. MNRE approved manufacturer with 2 years replacement warranty.
- 6. Installation of meter box:-** Single phase meter with box of ISI mark certified.
- 7. Installation of control board:-** Supply Installation testing and commissioning of one No.of Street light control board inside DB panel, board MCB control with 60A ISI marked.

**Note: -** All the components of the Solar street light system should resist marine environment conditions.

## **B. Tender Conditions**

1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC payable at Trivandrum.
2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized Bank for a period of five years from the date of issue of satisfactory completion report.
4. The solar street light shall be commissioned at the site as specified by KSCADC in the fishing villages of Kerala State.
5. There shall be 20 years replacement warranty for solar panels and five years replacement warranty for all other components of solar street light.
6. The solar street light shall be commissioned within two months on receipt of the supply order.
7. The rates quoted must be inclusive of all taxes, duties, freight, labour charges etc.
8. The price of solar panel and accessories shall be after 30% MNRE subsidy.
9. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.
10. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
11. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
12. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
13. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.
14. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
15. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

### **Note:-**

- a) The tender shall be put in a single sealed cover super scribing the wordings "Bid for supply and installation of Solar street lighting".
- b) The bidder shall submit Customer Satisfaction Report from at least one customer to prove his experience in establishment of Solar street lighting.