

MORMUGAO PORT AUTHORITY  
MARINE DEPARTMENT, SO[M]-Section

**NOTICE INVITING BUDGETARY QUOTATIONS**

“Procurement of Polyethylene Navigational Channel buoy-set at Mormugao Port Authority”  
DC/SO(M)/24/2025/03

Name of Work	Procurement of Polyethylene Navigational Channel buoy-set at Mormugao Port Authority
Date of submission of budgetary quotation	On or before on 09.06.2025 at 11:00 Hrs.
Address for communication & submission of bid	<b>Deputy Conservator,</b> Marine department, 1 <sup>st</sup> floor, AO Bldg, Headland Sada, Mormugao Port Authority, Mormugao, Goa – 403804.
Contact Details	Phone : 0832-2594803/0832-2594816 E-mail: <a href="mailto:sunilkumar.balekundri@mptgoa.gov.in">sunilkumar.balekundri@mptgoa.gov.in</a>
Website	<a href="http://www.mptgoa.gov.in">www.mptgoa.gov.in</a>

Bidders are requested to submit their Budgetary Quotations as per enclosed format at **ANNEXURE – A, B & C** to enable us to arrive an estimated cost for tendering.

Budgetary Quotation should be addressed to the “Deputy Conservator”, Marine department, 1st floor, AO Building, Headland Sada, Mormugao Port Authority, Mormugao, Goa – 403804

## SCOPE-OF-WORK

### 1.0 GENERAL

Mormugao Port Authority invites Budgetary Quotation for the work of “**Procurement of Polyethylene Navigational Channel buoy-set at Mormugao Port Authority**”. Includes Design, Manufacture, Supply, Installation, Testing and Commissioning of 08 nos. polyethylene channel buoys with day mark wings, Solar navigation light (range-5 Nautical miles) along with mooring accessories including sinker.

**2.0** Specifications for “Procurement of Polyethylene Navigational Channel buoy-set at Mormugao Port Authority”

### 2.1 Channel Buoy

**A. Size:** The buoy shall have float diameter of minimum 3.00 meters.

**B. Quantity:** 08 nos. (Colour: Red-05 nos., Green-03 nos.)

**C. Construction:**

- The buoys are to be rotationally moulded from strong durable 100% UV – stabilized virgin polyethylene with anti-slip deck and in **Four (04) quadrant** hull section and filled with close cell polyurethane foam.
- Thickness: The float section of the buoy shall have a wall thickness of minimum 18-20 mm and should withstand extreme weather conditions (at least 140-150kmph wind).
- Freeboard Not less than 500mm.
- The complete buoy should be self-coloured as per port and starboard IALA lateral marks and never requires painting during its complete life span and to be made from environmental friendly 100% UV stabilized virgin polyethylene.
- The ballast to be incorporated of suitable weight corresponding to Metrological data furnished below.
- Mooring Eye 02nos./01no. having replaceable mooring pin of material stainless steel 316.
- No of lifting points – 04/02 nos. in opposite direction and having capacity to lift entire buoy assembly.
- Reserve buoyancy- adequate to keep buoy in upright position under extreme sea condition.
- All the material should be of SS 316, including fasteners etc.

**D. Super Structure:**

- The entire super structure/tower assembly shall be of rectangular shape/conical shape made up of pipes of 316-grade stainless steel (SS 316 grade) with ladder or Super structure/tower assembly of the buoy shall be constructed using rotationally-moulded using 100% UV Stabilised, virgin polyethylene with IALA day marks. At the lower end superstructure to be bolted in a circular manner on the float section at lower end.
- Thickness – should withstand extreme weather conditions (at least 140-150 kmph wind)
- 01 no. man guard to be provided on the top of superstructure for the safety of the person carrying out repairs/routine maintenance on the lighting equipment, along with convenient tether points, ladder and grab rail, all this material should be of SS 316 grade.
- Superstructure to be strong enough to carry day mark, lighting equipment with accessories etc. and to sustain impact of wind, water waves/splashing.

- The super structure should have provision for installation of solar powered marine lantern and should have IALA top mark and Radar reflector.
- All the material should be of SS 316, including fasteners etc.

#### **E. Mooring:**

- Chain length - (sufficient to meet sea conditions) 3 times the depth of the water. That is Bridle Chain of diameter 38mm (Min.) and 3.0m Long, Pendant Chain of diameter 38mm (Min.) and 39m Long (Total chain length should be 42 Mtrs. including bridal chain).
- Triangular Plate: 1 No of MS 42 mm thickness.
- Mooring chain grade: MS (U2), Stud link type. (Chain made as per IS4692 standard or IACS class)
- All the chains to be connected with forelock end shackles of 38mm nominal dia M.S.
- Swivel: 1 No of 38mm dia made as per standard IS4484 or IACS class with end lock.
- Sinker: RCC of 5 ton.

**F. Expected life:** The life expectancy of the polyethylene buoy shall be more than 20 years.

#### **G. Guarantee Period:**

- Polyethylene Buoys to be guaranteed for a period of 5 years against any manufacturing defect from date of installation and acceptance of the port.
- Moorings to be guaranteed for 02 year from date of installation and acceptance by the port.

#### **H. Certifications**

- The manufacturer must be a current IALA Industrial Member of at least 10 years continuous membership.
- The manufacturer must supply an independently certified Compliance Certificate complying with IALA Guidelines NO: 1006, on Polyethylene Buoys.

**I. THIRD PARTY INSPECTION:** The contractor shall appoint within the quoted price, Indian Register of Shipping (IRS)/IACS-member as the third party inspection agency including approval of design drawing, approval of manufacturing drawings, inspection of raw materials, fabrication, testing for the buoys and mooring chains, shackles and swivels and certification.

#### **3. Lighting Equipment:**

- Visibility Range: 5 Nautical Miles.
- Lantern shall have up to 256 IALA recommended flash characteristics and shall meet IALA recommendation E-200-1 signal colours.
- The lantern shall have the ability to be remotely programmed and maintained utilising Bluetooth technology with Geo-location.
- Manual switches: i) On/Off ii) Flash characteristics settings.
- Battery: Maintenance free and should be more than 7500 mAh.
- Weight not more than 2.5 kgs. and should have Ingress Protection Code/rating IP68.
- Certification: The manufacturer of the lantern should demonstrate their IALA membership certificate.
- The entire light unit shall have a three (3) years warranty period.
- Solar panel Integral with lantern and should have sufficient Bird Deterrent located on top of lantern.

**4. Delivery:** The supplied navigational Channel-buoy set along with assembled mooring accessories (Bridal-chain, Triangular-plate, Swivel-block, Mooring-chain, Sinkers, D-shackles (welding at ends), etc.) to be deployed at navigational Channel of Mormugao Port Authority. During installation of the subject work the contractor shall use their own lifting tools & tackles, dumb barge/pontoon, floating crane assisted by a tug or a launch at their own the cost. Also, the contractor shall deploy experienced personnel for carrying out these operations.

**5. METEOROLOGICAL DATA OF MORMUGAO PORT:**

- i) Current – Current outside sheltered water is about 1 knot current strength 30-40M/sec.
- ii) Tide Variation -The main tide variation is 1.6 mtrs. aspiring tide and 0.7 mtr. as neap tide.
- iii) Depth of navigation channel is 14.4-14.7 mtrs. and inner channel is 14.1-14.4 mtrs.
- iv) Wind Speed---100 to 120 Kmph (Cyclonic weather).
- v) Wave information – 6.00 mtrs. (Cyclonic Weather).

**6. Mobile Crane on shore works only will be provided by MPA.**

**Note:** Bidders are advised to visit the site and study the nature and quantum of work involved, and fully acquaint himself with all the various activities directly and indirectly associated in smoothly executing the contract work.

## TERMS AND CONDITIONS

### **7.0 GENERAL TERMS AND CONDITIONS:**

#### **7.1) Minimum Eligibility Criteria-MEC:**

- \* The contractor should have necessary equipment's-tools and experience in lifting of equipment's.
- \* The contractor should be experienced and have executed similar works in the last 7 years ending last day of month previous to the one in which quotations are invited.

'Similar work' means "Manufacture, Supply, Installation, Testing and Commissioning of Buoys along with Complete Mooring accessories including solar Lantern" in any Port /State or Central Govt. or Public Sector Undertaking's and reputed organizations."

#### **8) Validity:**

The Bid validity shall be 120 days from the due date of submission of the quotation.

#### **9) Price:**

The rates offered shall be exclusive of GST. If any new tax imposed by the State/Central Govt., same shall be reimbursed by producing documentary proof.

#### **10) Completion Period:**

The entire work shall be completed within **60 days** from the receipt of LOA/Purchase order.

#### **11) Payment Terms:**

- i) 100% payment shall be made within **30 days** after satisfactory completion and upon successful commissioning of the work on furnishing undisputed invoice complete in all respects. ii) The contractor shall furnish their bank account details for the payment through ECS. A copy of the PAN card, GST Registration no., wage register, attendance register, EPF& ESI, Bank account number, MICR number, Name of the Branch along with Bills shall be furnished for arranging payment made through E.C.S. by the MPA.

#### **12) Injury/Damage to persons and property:**

- i) The contractor shall take all precautions while carrying out the contract work against any possible damage to the Port property.
- ii) The contractor shall indemnify the Port against any claim that may arise for any damage to or loss to the Port property or injury caused to Port personnel or to any labour engaged by the contractor, during the execution of the contract. The Port will not be responsible for any failure on the part of the contractor or his agent to take necessary measures or precautions in this regard. In this regard contractor will be wholly responsible, if any injury/death of his person on duty, and contractor shall take necessary insurance policy to cover the staff while at work to meet any such eventualities.

### 13) Other terms and conditions

- i) All tools and tackles and logistics involved in the work shall be arranged by the contractor at their own cost. The transportation cost, if any, shall be borne by the contractor.
- ii) The scope of work and bill of quantities at “**ANNEXURE-C**” to be read in conjunction to ensure the actual supply and works involved.
- iii) Necessary Entry passes shall be provided free of cost and are to be obtained by the Contractor with prior coordination/ approval of the Port Officials on Duty.
- iv) The MPA will not be responsible for any loss or damage to the materials/ Staff engaged / tools/plants engaged by the contractor/bidder during the work at site or transportation.
- v) The Contractor shall take utmost care during the execution of the work, if any damage caused to the Port property, the cost of the damage shall be recovered from the Contractor’s running A/c bill or may be recovered by the Board as deemed fit.
- vi) The power supply shall be provided by the Port free of cost for execution of the work; however, the Contractor shall take power supply from the nearest source by making suitable electrical arrangements such as extension boards, cable, switchgear etc. at their own cost and risk.
- vii) Any work not mentioned herein above but necessary for overall completion of the work shall be deemed to be included in the scope of work without any additional financial implications to the Port, whatsoever.
- viii) Under any circumstances, if the work is abandoned by the contractor for whatever reasons, the same shall be executed for successful commissioning ‘thro’ the external agency to be engaged by the Port at the risk and cost of the contractor. The expenditure incurred by the Port in this regards shall be recovered from the monies due to the contractor / security deposit or as deemed fit by the Board.
- ix) The works shall be carried out with due regard to safety, environment and statutory regulations prevailing at that time.
- x) All the workmen shall be covered under a suitable insurance policy. Accidents, if any, fatal or otherwise at site shall be the sole responsibility of the contractor. The Port should not be held liable for compensation in whatsoever manner under any circumstances.
- xi) No labour below the age of 18 years shall be employed. The Contractor shall pay to every employee engaged by him on the work at a rate not less than the minimum rate of wages fixed by the Goa State / Central Govt. from time to time under the Minimum Wages Act 1948 and he shall comply with the provision of the said Act and all the prevailing the Rules as applicable on date.
- xii) The MPA will not be responsible for any loss or damage of the men/materials/tools/plants engaged by the contractor during the work at site or transportation.
- xiii) While attending off-shore/afloat-works, the contractor & all his personnel shall compulsorily wear all certified safety gears, life-jackets, anti-skid footwear, goggles, gloves etc. at his cost.
- xiv) Contractor shall be fully responsible for safety/security of job/ items at his worksite. Loss due to any damage towards this or bad workmanship shall be suitably recovered as decided by Deputy Conservator/MPA
- xv) MPA reserves the right to change, alter, modify, add, subtract, increase, decrease etc. the quantities.

**14 BUDGETARY QUOTATION (Bill-of-quantities)**

Sr. No	Description	HSN/ SAC No	Qty [AU]	Unit [Rs] price	GST %	Total Amount in figures Incl of GST (Rs.)	Total Amount in words (Rs.) Incl of GST
<b>Procurement of Polyethylene Navigational Channel buoy-set, Includes Design, Manufacture, Supply, Testing and installation of polyethylene channel buoys with Solar navigation light (range-5 Nautical miles) along with mooring accessories including sinker at Mormugao Port Authority as detailed at Schedule– ‘A’ and ‘B’.</b>							
1	Polyethylene Navigational Channel buoys set <b>Red</b>		05				
2	Polyethylene Navigational Channel buoys set <b>Green</b>		03				
						Total	

(Rupees \_\_\_\_\_)

Inclusive of GST

\_\_\_\_\_  
Signature and Seal of the Bidder

Name of Firm/Contractor:

Address:

Place:

Date: