NOTICE INVITING EXPRESSION OF INTEREST

Name of Work	**NAME OF WORK: "DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SHORE TO SHIP POWER SUPPLY FOR CRUISE VESSELS AT MPA.**"
Date of submission of budgetary quotation	On or Before **18.05.2026 at 15:00 Hrs.**
Address for communication:	Executive Engineer (E-HR), 2nd floor, Electrical Harbour section, Mormugao Port Authority, Admin. Building, Headland sada Vasco-da-Gama Goa – 403804
Contact Details	Phone : (0832) 2594205, 2594253 Email: sandeep.gupta@mptgoa.gov.in
Website	**www.mptgoa.gov.in**

EXECUTIVE ENGINEER (E-HR)
MORMUGAO PORT AUTHORITY

MORMUGAO PORT AUTHORITY
MECHANICAL ENGINEERING DEPARTMENT

EXPRESSION OF INTEREST [EOI] FOR DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SHORE TO SHIP POWER SUPPLY FOR CRUISE VESSELS AT MPA.

Mormugao Port Authority intends to invite Expression of Interest from firms who have executed and successfully completed the works of Design, Supply, Installation and Commissioning of Shore to Ship Power supply for Port's or other major entities. The Expression of Interest (EOI) documents can be down loaded from the Mormugao Port Authority website **www.mptgoa.gov.in.** Copy of EOI documents is also available in **Executive Engineer (E-HR)**'s Office during all working days.

The complete EOI (Expression of Interest) shall be submitted with supporting documents on or before **18.05.2026.**

EXECUTIVE ENGINEER
MORMUGAO PORT AUTHORITY

EXPRESSION OF INTEREST [EOI] FOR DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SHORE TO SHIP POWER SUPPLY FOR CRUISE VESSELS AT MPA

1.0 GENERAL

MPA intends to undertake Design, Supply, Installation, Testing and Commissioning of Shore to Ship Power Supply FOR Cruise vessel berthing at MPA. To facilitate preparation of detailed tender documents, reputed and experienced firms are invited to submit their Expression of Interest(EOI).

Scope of EOI Submission:

Interested firms shall provide the following:

a. Technical Scheme
    i. Concept design or system architecture
    ii. Process flow/ technical methodology
    iii. Key equipment or system components.
b. Technical specifications
    i. Detailed specifications of proposed equipment/materials.
    ii. Applicable standards and performance parameters.
c. Preliminary Bill of Quantities(BoQ)
    i. Major equipment list
    ii. Estimated quantities
    iii. Indicative technical configuration
d. Company Credentials
    i. Company profile
    ii. Relevant project experience
    iii. Key technical staff details

2.0 INTRODUCTION

Mormugao Port Authority cruise terminal facilitates berthing of International and Domestic Cruise vessels. At present the breakwater/cruise berth does not have Shore to Ship Power Supply (SSPS) system for Cruise Vessels and as such, MPA intends to install SSPS system of capacity 10MVA with supply power at 6.6 kV and 11 kV voltage levels at both 50 Hz and 60 Hz frequencies, on a turnkey basis.

a) The scope includes Design, Supply Installation, Testing and Commissioning of 33 KV new containerized substation at Harbour which will be powered from 33 KV Bogda substation using 33 kV underground cables which is located at a distance of approximate 4KM. An outdoor container housing 6.6kV, Static Frequency Converter (SFC), HT/LT panels, transformers and associated equipment shall be installed at berth for providing a regulated power supply at 6.6kV & 11kV with selectable 50 Hz/60Hz frequency upto 10MVA capacity.
b) A single 10MVA COPE point with stainless steel panel shall be provided at the breakwater berth, accommodating both 6.6 kV and 11 kV supply, with interlocking to ensure that only one voltage level is available at a time for safe operation. The entire system shall be designed, supplied, installed, tested and commissioned in accordance with relevant IEC standards, complete in all respects on turnkey basis. Indicative system architecture is provided at **Annexure–1**.

3.0 SCOPE OF WORK:

The EOI aims to:

a. Identify suitable technical solution & appropriate electrical scheme to ensure stable and reliable power supply at COPE point for the cruise vessels while at berth.
b. Ensure the electrical system is capable of handling high inrush currents during starting of large vessels without any significant voltage dips.
c. Develop a robust cable routing and protection arrangement suitable for areas prone to water accumulation during monsoon, ensuring long-term reliability of the electrical system.

The bidder will be responsible for the following:

1. **Design**:

- Assessment of electrical infrastructure and load requirement for Cruise Vessels of 10MVA, 6.6kV and 11kV, 3 phase stabilized voltage at 50/60Hz.
- The 33kV power supply to the proposed Shore to Ship Power Supply (SSPS) system can be tapped form the GED substation located approximately 4 kilo meters away from Cruise Terminal Berth. The design should be able to correct and provide stabilized voltage level at 6.6kV & 11kV, 50Hz/60Hz to COPE points at berth during starting and running conditions.
- Preparation of detailed engineering scheme including Single Line Diagrams (SLD), system layout, cable routing, protection schemes and earthing design.
- All the equipment's should cater to harsh atmospheric conditions, such as heavy rains, slashing sea waves, gusty winds upto 120 kmph, high salinity etc.
- The proposed cables shall be laid in the existing concrete trench. The design should include laying of cables with suitable cable trays and also to protect the cables/trays even when the trench is filled with rain/sea water.
- Design should be proven for reliability with desired features & the same to be approved by MPA before proceeding further regarding the project.
- All the equipment's need to be designed on the available space at berth without causing any hindrance to berthing of ships and modifications to the berth structure.
- Design earthing system for Ship to Shore Power Supply (SSPS). It may be noted that the SSPS consists of HT/LT transformers, SFC, HT/LT panels, etc. It is envisaged to be installed at the berth which is 350 mtrs away from the land. The earthing system should be designed as per relevant IS standards.

2. **Supply**:

- Supply of all equipment's along with 01nos COPE point consisting of 6.6/11kV voltage levels outlets, Containerized stations, HT/LT cables, transformers, panels, SFC's, protection system, firefighting system, Auxiliary systems, earthing, etc., as

necessary for the electrical scheme to achieve the desired results. COPE point should be rated for minimum 10MVA capacity.

3. **Installation**:

- Installation and erection of all electrical equipment's including panels, cables, suitable external enclosures & associated equipment's to achieve the desired results. External & exposed devices should have suitable IP protection.
- Laying of cables through trenches, ducts or suitable protective systems considering coastal environmental conditions.

4. **Testing and Commissioning**:

- Carrying out all pre-commissioning tests of transformers, panels, cables and protection systems as per relevant standards and statutory requirements.
- Commissioning of the complete system and demonstration of satisfactory performance under operational conditions including vessel starting loads.

5. **Documentation**:

- Submission of drawings, test reports, commissioning reports, operation and maintenance manuals, and as-built documentation.

6. **Warranty & Maintenance**:

- Providing a minimum **1-year warranty** on all equipment and installation works.
- Comprehensive Maintenance contract (CMC) for 5 years post-warranty of one year.

NOTE: Entire work is to be carried out on Turn-key basis.

4.0 BUDGETARY OFFER

The firms shall submit their budgetary offer along with all technical details and detailed scope of work. The budgetary offer shall contain detailed electrical scheme, scope of work & item-wise breakup for the entire system.

5.0 PERIOD OF VALIDITY

The budgetary offers of the EOI firms shall remain valid for a period of **SIX MONTHS** from the date of opening of the EOI.

6.0. EOI DOCUMENT

The firms are expected to examine the terms and conditions and broad scope of work in the EOI documents. Firms may visit the site to get acquainted with the site conditions before preparing the detailed scope of work and the budgetary offer.

7.0. GENERAL TERMS AND CONDITIONS:

1) On award of work, the time period for completion of the work is 365 days. The work shall be contracted out through open tender under two cover system.
2) The price quoted by the firm shall be kept fixed for the entire contract period. 70% payment of the total contract price shall be released after supply of all material at site. Balance 20% of the amount shall be released after successful commissioning & 10% after handing over.

8.0 EOI SUBMISSION

i) The EOI shall be submitted on or before **18.05.2026 at 15:00hrs** containing the budgetary offer along with technical details with terms and conditions either by hand or post or by e-mail.

ii) The EOI shall be addressed to the following address:

Executive Engineer (E-HR),
2nd floor, Electrical Harbour section,
Mormugao Port Authority,
Admin. Building,
Headland sada
Vasco-de-Gama
Goa – 403804
Email : sandeep.gupta@mptgoa.gov.in

BILL OF QUANTITIES (Indicative)

Name of the Work: **DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SHORE TO SHIP POWER SUPPLY FOR CRUISE VESSELS AT MPA**

Sr. No.	Description of work	Unit	Qty.	Rate per Unit (Exclusive of GST)	Amount exclusive of GST	GST %
1.	Supply, Installation, Testing & Commissioning of 33kV VCB, including CT, PT, Protection relays, metering, indications etc. at Bogda substation as per GED standards.	No.	01			
2.	Supply, laying & termination of XLPE, 33kV, 3c x 240sq.mm (2 runs), round armoured Aluminum cable. Laying of 33 kV, 240 sq.mm, 3-core Aluminium cable underground at a depth of 1metre along the designated route from Bogda Substation to new 33kV Containerized Substation at Harbour/MPA, including excavation of cable trench (Hardrock) along roadside, provision of suitable bedding, laying of cables with required spacing, protective coverings, supply and installation of cable route markers at regular intervals and at all crossings/turning points, backfilling and compaction. The work shall include execution of all road crossings through suitable Hume pipes or GI pipes with proper encasing, ensuring compliance with relevant IS standards. Restoration of all disturbed surfaces, including roads, pavements and shoulders, shall be carried out to original condition after completion of cable laying.					
	a) Supply of cable	Mtrs	8000			
	b) Excavation of cable trench	Mtrs	4000			
	c) Laying of cable	Mtrs	8000			
	c) End termination	Nos.	04			

3.	Supply, Installation & Commissioning of new 33kV stainless steel **Containerized substation** of suitable size to accommodate 02no. 33kV RMU, GED main metering cubicle, Check metering cubicle, 33/11KV, 10MVA transformer, Auxiliary panels, exhaust system, fire alarm system, batteries and SITC of equipment's that are required as per IS standards to complete the work in all respect. Including civil works.	Nos.	01			
4.	Supply, installation, testing and commissioning of 33 kV RMU inside new 33kV containerized substation, metal enclosed, suitable for terminating 2 runs of 33 kV, 240 sq.mm, 3-core Aluminium XLPE cables, complete with required LBS/VCB configuration, protection, cable terminations with screened connectors, earthing and all accessories, conforming to IS Standards, including erection, testing and handing over complete.	Nos.	02			
5.	Supply, installation, testing and commissioning of 33 kV main metering cubicle and check metering cubicle inside new 33kV containerized substation, complete with required PTs and CTs, energy meters, wiring, sealing arrangement and all associated accessories, suitable for accurate energy measurement and interface with GED, conforming to relevant IS standards and guidelines of GED, including erection, testing, calibration and handing over complete in all respects.	Nos.	02			
6.	Supply, Installation, Testing & Commissioning of Step down transformer 33kV/11kV, 10MVA inside new 33kV containerized substation. Conforming to relevant IS standards, including foundation, erection and handing over complete in all respects.					

7.	Supply of XLPE, 11kV, 3c x 240sq.mm (3 runs), round armoured **Marine grade** Aluminum cable. 06nos along with Terminations at both ends.	Mtrs	1500			
8.	Supply and installation of end termination of 11kV 3c x 240sq.mm, round armoured Marine grade Aluminum cable.	nos	06			
9.	Laying of XLPE, 11kV, 3c x 240sq.mm, round armoured **Marine grade** Aluminum cable in cable tray & underground at a depth of 1metre and in the existing trench along the designated route from the new 33kV Containerized Substation to new 11kV Containerized Substation at berth. Excavation of cable trench (hardrock) along roadside, provision of suitable bedding, laying of cables with required spacing, protective coverings. Cables laid in the new FRP cable tray in the existing trench using suitable brackets, clamps and covers. Supply and installation of cable route markers at regular intervals and at all crossings/turning points, backfilling and compaction. The work shall include execution of all road crossings through suitable Hume pipes or GI pipes with proper encasing, ensuring compliance with relevant IS standards. Restoration of all disturbed surfaces, including roads, pavements and shoulders, shall be carried out to original condition after completion of cable laying.					
	a) Excavation of trench	Mtrs	150			
	b) Laying of cables	Mtrs	1500			

10.	Supply, Installation & Commissioning of new 11kV stainless steel **Containerized station** of suitable size to accommodate HT & LT transformers, SFC, VCB's, LT distribution panels, fire alarm system, exhaust system, batteries including foundation, erection, civil works and SITC of equipment's that are required as per IS standards to complete the work in all respect.	Nos.	01			
11.	Supply, Installation, Testing & Commissioning of 11kV VCB panel, including CT, PT, Protection relays, metering, indications etc inside new 11kV containerized station.	Nos.	06			
12.	Supply, Installation, Testing & Commissioning of Step down auxiliary transformer 11kV/433V, in the new 11kV containerized station for auxiliary supply requirements.	Nos.	01			
13.	Supply, Installation, Testing & Commissioning of LT panel in the new 11kV containerized station for auxiliary loads including metering, indications etc.	Nos	01			
14.	Supply, Installation, Testing & Commissioning of Static Frequency Convertor, 11kV 10MVA including Air Conditioners, accessories etc.	Nos.	01			
15.	Supply, Installation, Testing & Commissioning of Step down transformer 11kV/6.6kV, in the new 11kV containerized station.	Nos.	01			
16.	Supply, Installation, Testing & Commissioning of 6.6kV VCB panel, including CT, PT, Protection relays, metering, indications etc inside new 11kV containerized station.	Nos.	02			
17.	Supply, Installation, Testing & Commissioning of LT isolation transformer, 10MVA for 6.6kV & 11kV power supply.	Nos.	02			
18.	Supply, installation, testing and commissioning of COPE points with stainless steel panel, suitable to accommodate 11 kV & 6.6 kV shore	Nos.	01			

	power supply, complete with necessary switching, interlocking, protection, cable terminations, earthing and all associated accessories, designed for marine/port environment, conforming to relevant IEC standards, including civil works, erection, testing and handing over complete in all respects.					
19.	Supply, Laying, Termination & Commissioning of XLPE, 6.6kV, 3c x 240sq.mm (3 runs), round armoured Aluminum cable from new 11kV Containerized station to cope point at berth including laying the cables across the berth of width 22mtrs through GI pipe of suitable size with speed breaker PCC protection to withstand vehicular loads up to 10 tons. & existing trench, civil works.					
	a) Supply of cable	Mtrs	225			
	b) Laying of cables in GI pipe across the berth	Mtrs	66			
	c) Laying of cable in trench	Mtrs	159			
	d) End termination	Nos.	06			
20.	Supply, Laying, Termination & Commissioning of XLPE, 11kV, 3c x 185sq.mm (2 runs), round armoured Aluminum cable from new 11kV Containerized station to cope point at berth including laying the cables across the berth of width 22mtrs through GI pipe of suitable size with speed breaker PCC protection to withstand vehicular loads up to 10 tons. & existing trench, civil works.					
	a) Supply of cable	Mtrs	150			
	b) Laying of cables in GI pipe across the berth	Mtrs	44			
	c) Laying of cable in trench		106			
	d) End termination	Nos.	04			
21.	Supply, Installation, Testing & Commissioning of miscellaneous works including cable jointing, terminations for looping cables inside container, looping cables for HT/LT panels, transformers, SFC etc inside container, busbar, cable	LS	01			

	glands, lugs, brackets, clamps, all civil works.					
22.	SITC of earthing system for neutral/body of HT/LT panels, HT/LT transformers, SFC, Container etc.	Nos.	20			
23.	CMC charges for 5 years after Guarantee period of 1 year	Year	5			
TOTAL (Exclusive of GST)						

(In words Rupees _____ only)

Note:

1) **The quantities given in this schedule are for indicative purpose only. However the bidder is free to modify the BOQ as per site requirements and quote for the same.**
2) **The design should ensure to correct and provide stabilized voltage level selectable in the range of 6.6/11kV, 50/60Hz to the cope point while starting and running condition**
3) **The scope also includes liaison with GED/PWD and obtaining necessary permissions/approvals from concerned Government authorities for 33kV connection, routing and execution of the cable laying work, testing, commissioning and handing over complete in all respects.**
4) **Bidders are required to furnish major equipment list, estimated quantities, detailed specifications of proposed equipment/material, applicable standards and performance parameters and indicative technical configuration.**
5) **Typical Bill of Quantity (BOQ) with HT Power Panels and Container Static Frequency Converter Unit with step down Transformer, Isolation Transformer and LT Panels are given for reference purposes only.**
6) **All required civil and structural works, leveling, back filling, foundations, Containers, drains and trenches are in the scope of bidder.**
7) **However the bidders are free to design their own sequence of construction and furnish the details in the relevant format attached with the EOI. The MPA reserves their right to accept the methodology suggested by the Bidders and/or direct them to revert the methodology indicated above, if in the opinion of the MPA, the alternative methodology suggested by them shall not meet the intended purpose.**
8) **Firms may visit the site to get acquainted with the site conditions before preparing the detailed scope of work and the budgetary offer.**
9) **The rates quoted above shall be exclusive of GST.**

PROPOSED LAYOUT **Annexure-I**