

Date: 06/11/2023

**DIRECTORATE GENERAL OF LIGHTHOUSES & LIGHTSHIPS
EXPRESSION OF INTEREST**

**REQUEST FOR EXPRESSION OF INTEREST (EOI) FROM PROSPECTIVE
BIDDERS FOR INTEGRATION OF VESSEL TRAFFIC MANAGEMENT SYSTEM AT
ALL MAJOR PORTS ON TURN KEY BASIS.**

(This Notice is issued only to elicit Expression of Interest from the parties interested in the integration of Vessel Traffic Management System (VTMS) at all Major Ports and does not constitute any binding commitment from the Directorate General Of Lighthouses & Lightships to proceed with the project or invite any or all the parties in the subsequent bidding process)

For details log on <http://epublish.gov.in/epublish> or www.dgll.nic.in

SECTION I

Introduction:

1.1 Directorate General of Lighthouses and Lightships (DGLL)

In accordance with Marine Aids to Navigation Act, 2021 (Earlier Lighthouse Act 1927), The Directorate General of Lighthouses and Lightships (DGLL) is establishing and maintaining marine aids to navigation in general waters to provide safe and secure navigation in Indian waters. Marine aids to navigation maintained by DGLL are lighthouses (203), Lightship (01), Lighthouse tender vessels (03), Deep Sea Channel Marking Buoys (21) and Radio Aids to Navigation like Differential Global Navigation Satellite System (DGNSS-23), Radar Beacons (Racons-64) and National Automatic Identification System (NAIS) network consisting of 87 base stations. DGLL has also established and maintaining Vessel Traffic Service in the Gulf of Kutch, Gujarat. For the purpose of effective superintendence of Lighthouse and other Marine Aids to navigation, the Indian coast is divided into regional Directorates known as Lighthouse Districts with their headquarters at Jamnagar, Mumbai, Goa, Cochin, Chennai, Visakhapatnam, Kolkata, Port Blair and VTMS Directorate at Gandhidham (Gujarat).

1.2 Vessel Traffic Services

Vessel Traffic Services is a service implemented by a competent authority designed to improve the safety and efficiency of navigation, safety of life at sea and the protection of the marine environment. VTMS is governed by SOLAS Chapter V Regulation 12 together with the Guidelines for Vessel Traffic Services [IMO Resolution A.1158(32)] adopted by the International Maritime Organization on 15 December 2021. The VTMS traffic image is compiled and collected by means of advanced sensors such as radar, AIS, radio direction finder and VHF or other co-operative systems and services. A modern VTMS integrates all of the information in to a single operator working environment for ease of use and in order to allow for effective traffic organization and communication. All sensors are connected in single network.

1.3 Service Provided by VTMS

A VTMS shall provide following service to vessels in notified area.

(a) Information Service (INS)

A service to ensure that essential information becomes available in time for on-board decision-making.

(b) Traffic Organization Service (TOS):

A service to prevent the development of dangerous maritime traffic situations and to provide for the safe and efficient movement of vessel traffic within the VTMS Area.

(c) Navigational Assistance Service (NAS):

A service to assist onboard navigational decision-making and to monitor its effects.

1.4 **COMPONENTS VTMS**

Following are the various components of the VTMS:

- (a) Radar
- (b) Automatic Identification System (AIS)
- (c) Environmental Monitoring (Hy-Me Sensors)
- (d) Electro-Optical equipment
- (e) Radio Direction Finders
- (f) Radio Communications
- (g) Data Processing
- (h) Human / Machine Interface (HMI)
- (i) Decision Support
- (j) External Information Exchange
- (k) VTMS Operator console
- (l) VTMS Supervisor Console
- (m) Networking equipment and servers

SECTION II

2.1 DETAILS OF EXISTING VTMS IN INDIA

All major ports in India, have their own vessel traffic service which is part of the VTMS (Vessel Traffic Management System) of the port. For integrating VTMS installed at the major ports following information from each port was sought:

- Whether the existing VTMS has provision of IVEF (Inter VTMS Exchange Format) as per IALA.
- Details of equipment and OEM of Radar, AIS, server, VHF communication system, IT equipment, year of installation, make & model.
- Details of the present contractor during warranty/CAMC.
- Communication network being used for integration of sensors/equipment in the VTMS

Information received from the 12 major ports is enclosed as **Annexure-I**.

2.2 INTEGRATION OF VESSEL TRAFFIC MANAGEMENT SERVICE AT ALL MAJOR PORTS ON TURN KEY BASIS

DGLL is planning to Integrate the VTMS installed at all the Major Ports. In future integration of VTMS at the non-major ports and other coastal VTMS may also be considered. Integration of the VTMSs will facilitate viewing of maritime traffic picture at all the ports installed with VTMS, at a single point which will improve maritime domain awareness and help in effective traffic planning along coast of India.

Provision is to be made for necessary interface units (Hardware and software) with IT infrastructure at each of the 12 Major Ports and 01 VTMS at Port Blair port to be established, to ensure IVEF (Inter VTMS Exchange Format) compatibility. Provision will also be made for integration of coastal VTMS established in Gulf of Khambhat and other VTMSs in the country. Provision of uninterrupted connectivity of all the VTMSs shall be made from the VTMS at major ports to the DGLL's National Data Centre (NDC), Mumbai, through reliable communication means with provision of redundancy. VTMS feed from all the sites will be integrated at DGLL's NDC and integrated VTMS feed will be provided to NMDA Centre and to Mercantile Marine Domain Awareness Center (MM-DAC) of DG Shipping. For transfer of data from all the VTMSs the NAIS network established by DGLL will be used. The VTMS data from each of the major port is to be connected to nearest Physical Shore Station/RCC of the NAIS Network, details of nearest PSS station for each major port are enclosed as **Annex-I**. Provision is to be made for providing web based VTMS feed to various user agencies (at least 30 in number).

2.3 Interested prospective bidders of repute, having exposure on the subject work are hereby invited to submit their "Expression of Interest" (EOI) for "Integration of Vessel Traffic Management System (VTMS) at all Major Ports" On Turn Key Basis. The bidders may provide the technical solution as per IALA/IMO standards which shall be reliable and economic. The

bidders shall submit network diagram with technical details, mode of communication proposed with pro and cons etc. The bidders shall ensure availability spares including hardware and upgradation of software from the OEM for next 10 yrs.

The bidders interested in the project are required to submit their Expression of Interest in writing including budgetary offer as per the format and technical specification of each product proposed for installation. The rates shall be submitted for warranty period of 03 years and CAMC for 07 years in respect of all the items/system to be supplied and installed.

Submission of the Expression of Interest

Prospective bidders interested in the Project are required to submit their Expression of Interest in writing before 1600 hours on or before 30/11/2023 to Directorate General of Lighthouses & Lightships, A-13, Deep Bhavan, Sector-24, Noida – 201301. India. Tel:91-120-24112508 / Fax: 91-120- 2411345 Email: noida-dgll@nic.in

Pre-bid Meeting

Prospective bidder may send their queries to on or before 16/11/2023. The prebid meeting (Physically and Virtually) for the subject matter will be held on 17/11/2023 at 1500 hrs at Deep Bhavan A-13, Sector 24, Noida-201301. The link for the meeting will be shared to prospective bidders, accordingly.

Annexure - I

Sr. No.	Name of the Port	State	Suitable NAIS Site/RCC/CCC/NDC
1	Kolkata Port/Haldia	West Bengal	RCC Kolkata (Directorate office at Kolkata)
2	Paradip Port	Orissa	Paradip LH
3	Visakhapatnam Port	Andhra Pradesh	RCC Visakhapatnam at Dolphin Nose LH
4	Kamarajar Port	Tamil Nadu	RCC Chennai (Directorate office at Chennai)
5	Chennai Port	Tamil Nadu	RCC Chennai (Directorate office at Chennai)
6	Tuticorin Port	Tamil Nadu	Pandiyanthiyu LH
7	Cochin Port	Kerala	Vypin LH
8	New Mangalore Port	Karnataka	Suratkal LH
9	Mormugao Port	Goa	Aguada LH
10	Mumbai Port	Maharashtra	NDC Mumbai (Directorate office at Mumbai)
11	Jawaharlal Nehru Port	Maharashtra	NDC Mumbai (Directorate office at Mumbai)
12	Kandla Port	Gujarat	RCC Jamnagar (Directorate office at Jamnagar)
13	Port Blair Port (VTMS to be established)	Andaman and Nicobar Islands	RCC Port Blair (Directorate office at Port Blair)

Section – III

LETTER OF TRANSMITTAL
(to be typed in Firm's Letterhead)

From: M/s _____

To

The Director General of Lighthouses & Lightships,
A-13, Deep Bhavan, Sector-24,
Noida – 201301. India.
Tel: 91-120-24112508 / Fax: 91-120- 2411345
INDIA, Email: noida-dgll@nic.in

Sub: Submission of Expression of Interest (EOI) for “Integration of Vessel Traffic Management System (VTMS) at all Major Ports on turnkey basis.

Sir,

Having examined the details given in EOI Notice and EOI document for the above project, I/ we hereby submit our Expression of Interest and the relevant information.

1. I/We hereby certify that all the statements made and information supplied in the enclosed form and accompanying statements are true and correct.
2. I/We have furnished all information and details necessary for EOI and have no further pertinent information to supply.
3. I/We also authorize DGPLL or his authorized representatives to approach individuals, employers and firms to verify our competence and general reputation.
4. I/We submit the following certificates in support of our suitability, technical know-how and capability for having successfully installed and commissioned VTMS system along with prescribed format.
5. We understand that DGPLL will be at liberty to finalize the integration of VTMS at all major ports project parameters.

Signature(s) of Applicant(s)

Enclosures

Seal of applicant
Date of submission.

Appendix – 1

Name of firms /Applicants

(Organizational Structure)

1.	Name & Address of the applicant with Telephone No./Fax No	
2.	a) Year of Establishment b) Date & Year of commencement	
3.	Legal status of the applicant (attach copies of original document defining the legal status)	
	a) A proprietary firm	
	b) A firm in partnership	
	c) A limited company or Corporation / Joint venture /Consortia	
	d) State owned	
4.	Any other information considered necessary but not included above	

Authorized Signatory

Appendix – 2

Details of Vessel Traffic System Developed, supplied, operated and maintained in the Last Seven Years

Name and location of the Port where VTMS equipments was supplied, installed/operated or maintained.	
Brief Description of the works carried out	
Total Value of the work	
Annual Turnover of the firm in last three years (in US \$)/(in Indian Rupees)	

Signature

Note: Please enclose separate sheet for each Project

BUDGETORY OFFER

Sl. No.	Description	Qty	Unit price	Indian Component	GST	Any other charge with details	Foreign origin component	Custom duty (Rate and amount)	other charges	Amount (Indian)	Amount (Foreign)
1.											
2.											
3.											
4.											
.										
.										
.										
.	Communication link 1										
.	Communication link 2										
.	CAMC charges for 7 years for site with provision of IVEF										
n.	CAMC charges for 7 years for site without provision of IVEF										

Note 1: The currency to be indicated clearly

Note 2: Other charges including transportation to site, storage at site, including GST, octroi, excise duties, etc. The currency should be Indian Rupees.

Note 3: The currency to be mentioned here (it should be same as that for Note 2)

Note 4: Operation and Maintenance charges should be mentioned in Indian Rupees only.

Note 5: Income Tax and Works Contract Tax as applicable will be deducted at source.

Note 6: Additional items required may be indicated by adding new rows in the BoQ, as per solution provided by the vendor.

