Government eProcurement System

eProcurement System Government of India

Tender Details

Date : 22-Mar-2026 12:46 PM

Print

Basic Details

Organisation Chain	Directorate General of Lighthouses and Lightships||Directorate of Lighthouses and Lightships - Gandhidham - DGLL		
Tender Reference Number	EMDVTS-02002(01)/ 1/2020- maintenance		
Tender ID	2026_DGLL_903345_1	**Withdrawal Allowed**	Yes
Tender Type	Open Tender	**Form of contract**	Works
Tender Category	Services	**No. of Covers**	2
General Technical Evaluation Allowed	No	**ItemWise Technical Evaluation Allowed**	No
Payment Mode	Offline	**Is Multi Currency Allowed For BOQ**	No
Is Multi Currency Allowed For Fee	No	**Allow Two Stage Bidding**	No

Payment Instruments

Offline

S.No	Instrument Type
1	Demand Draft
2	FDR
3	Bank Guarantee

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Eligibility criteria documents as per clause 3.1
		.pdf	Technical evaluation document as per Section VII
2	Finance	.xls	BoQ

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	Nil	**Fee Payable At**	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details

EMD Amount in ₹	1,83,400	**EMD Exemption Allowed**	No
EMD Fee Type	fixed	**EMD Percentage**	NA
EMD Payable To	Deputy Director General	**EMD Payable At**	Gandhidham

Click to view modification history

Work /Item(s)

Title	Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027				
Work Description	Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027				
Pre Qualification Details	As per NIT				
Independent External Monitor/Remarks	NA				
Show Tender Value in Public Domain	Yes				
Tender Value in ₹	91,65,290	**Product Category**	AMC/ Maintenance Contracts	**Sub category**	NA
Contract Type	Tender	**Bid Validity(Days)**	180	**Period Of Work(Days)**	365
Location	MCC Kandla and VTS Stations in Gulf of Kutch	**Pincode**	370201	**Pre Bid Meeting Place**	Deep Bhavan Gandhidham
Pre Bid Meeting Address	Plot 17 Sector 8 Deep Bhavan Gandhidham Kutch Gujarat 370201	**Pre Bid Meeting Date**	25-Mar-2026 03:00 PM	**Bid Opening Place**	Deep Bhavan Gandhidham

Should Allow NDA Tender	No	**Allow Preferential Bidder**	No	

Critical Dates

Publish Date	23-Mar-2026 09:00 AM	**Bid Opening Date**	31-Mar-2026 02:00 PM
Document Download / Sale Start Date	23-Mar-2026 09:00 AM	**Document Download / Sale End Date**	30-Mar-2026 01:00 PM
Clarification Start Date	NA	**Clarification End Date**	NA
Bid Submission Start Date	23-Mar-2026 09:00 AM	**Bid Submission End Date**	30-Mar-2026 01:00 PM

Tender Documents

NIT Document

S.No	Document Name	Description	Document Size (in KB)
1	Tendernotice_1.pdf	Notice Inviting Tender / NIT	1881.35

Work Item Documents

S.No	Document Type	Document Name	Description	Document Size (in KB)
1	BOQ	BOQ_949497.xls	Bill of Quantity	363.00
2	Tender Documents	NIT.pdf	Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027	1865.84

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	janmejay.kumar@dgll.nic.in	Janmejay Kumar	JANMEJAY KUMAR
2.	ajushanu1@gmail.com	Ajeet Kumar	AJEET KUMAR
3.	sanjay.san70@rediffmail.com	SANJAY KUMAR CHAUHAN	SANJAY KUMAR CHAUHAN
4.	jairambaria@yahoo.com	Jahiram Baria	JAHIRAM MAHARUBHAI BARIA

GeMARPTS Details

Reason for non availability of GeMARPTS ID	Urgent nature of Procurement
Remarks	GemGPARTs ID uploaded
Document Name	GEMGARPTS.pdf
Document Size (in KB)	51.41

Tender Properties

Auto Tendering Process allowed	No	**Show Technical bid status**	Yes
Show Finance bid status	Yes	**Stage to disclose Bid Details in Public Domain**	Technical Bid Opening
BoQ Comparative Chart model	Normal	**BoQ Compartive chart decimal places**	2
BoQ Comparative Chart Rank Type	L	**Form Based BoQ**	No

TIA Undertaking

S.No	Undertaking to Order	Tender complying with Order	Reason for non compliance of Order
1	PPP-MII Order 2017	Agree	
2	MSEs Order 2012	Agree	

Tender Inviting Authority

Name	Dy Director General
Address	Plot 17 Sector 8 Deep Bhavan Gandhidham Kutch Gujarat 370201

Tender Creator Details

Created By	Janmejay Kumar

Designation	Assistant Executive Engineer
Created Date	21-Mar-2026 07:11 PM

BID DOCUMENT

NAME OF WORK:

PROVIDING COMPREHENSIVE ANNUAL MAINTENANCE FOR VTS GULF OF KACHCHH FOR 01 YEAR FROM 16.04.2026 TO 15.04.2027

प्लॉट ***17,***सेक्टर ***8,*** दीपभवन, गांधीधाम **/ Plot 17,Sector- 8, Deepbhavan, Gandhidham**

गुजरात **/ Gujarat - 370 201**

फोन/Phone : 02836-299104/004/001 | ई-मेल /Email : dydgvts@gmail.com/dte-vts@nic.in

अनुक्रमणिका**-INDEX**

Section–I

भारत सरकार पत्तन,पोत परिवहन और जलमार्ग मंत्रालय दीपस्तंभ और दीपपोत निदेशालय "दीपभवन "प्लाट नो -:17, सेक्टर - 8" वी .टी .एस .निदेशालय ,गांधीधाम, (गुजरात)-370201		Govt. of India Ministry of Ports, Shipping and Waterways Directorate of Lighthouses & Lightships Deep Bhavan" Plot No. 17 Sectors - 8 V.T.S. Directorate, Gandhidham, (Gujarat)–370201
Email-dydgvts@gmail.com/dte-vts@nic.in		Tele: 02836-299104

File No. EMDVTS-02002(01)/1/2020- maintenance **Dated: 21/03/2026**

अल्पकालिक निविदा सूचना / SHORT BID NOTICE

On behalf of the President of India, the Dy. Director General, Directorate of Lighthouses & Lightships, VTS Gandhidham, "Deep Bhavan" Plot-17, Sector-8, Gandhidham-370201 (Gujarat), invites online Bids under two bid system (Two cover system, Part 1- Technical bid, Part-2-Commercial bid), from eligible bidders, for **Providing Comprehensive Annual Maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027**. The details are given below:

S. No	Subject	Description
1.	**Name of work**	**Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027**
2.	**Location**	**MCC Kandla & VTS Stations in Gulf of Kutch**
3.	**Estimated cost**	**₹ 91,65,290/- (Including GST and all taxes**
4.	**Earnest Money Deposit (EMD)**	**₹ 1,83,400/-**
5.	**Period of Download of Bid Document**	**21/03/2026 to 30/03/2026 (13:00Hrs.)**
6.	**Pre Bid Meeting**	**25/03/2026 (15:30Hrs.)**
7.	**EMD (in original) submission period**	**Till 30/03/2026 by 13.00 Hrs.**
8.	**Bid Submission Period**	**21/03/2026 to 30/03/2026 (13:00Hrs.)**
9.	**Date of Opening of Technical Bids**	**31/03/2026 at 14:00 Hrs.**

EMD to be submitted in the form of DD / FDR/ Bank Guarantee (in original) from any Nationalized / RBI approved Bank, in favour of "The Dy. Director General, Directorate of Lighthouses and Lightships Payable at Gandhidham. EMD should be submitted to the Tender Inviting Authority, on or before the bid submission period failing which the bid shall liable to be rejected. Dy. Director General shall not be responsible for any delay or loss, due to postal/Courier Services.

The details of work are available in the tender document which can be downloaded from website Central Public Procurement Portal (CPPP), http://eprocure.gov.in/eprocure/app and the bid is to be submitted online only on http://eprocure.gov.in/eprocure/app. Sale of physical tender document is not applicable. The short tender notice can be seen on departmental website www.dgll.nic.in.

Dy. Director General
For and on behalf of the President of India

Section–II

निविदाकार हेतु निर्देश / INSTRUCTIONS TO BIDDERS

Name of the work: Providing Comprehensive Annual Maintenance Contract (CAMC) services for VTS Gulf of Kachchh for 01 year from 16.04.2026 to 15.04.2027

This section of the bid document provides the information necessary for bidders to prepare online responsive bids, in accordance with the requirements. It also provides information on online bid submission, opening, evaluation and contract award. **It is necessary for the bidders to go through the instructions contained in this section before submission of bid.**

1. INSTRUCTIONS FOR ONLINE BID SUBMISSION:

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

2.1 REGISTRATION:

2.1.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal by using the “Online bidder enrolment” option available on the home page. Enrolment on the CPP Portal is free of charge.

2.1.2 During enrolment / registration, the bidders should provide the correct/true information including valid email-id & mobile no. All the correspondence shall be made directly with the contractors/bidders through email-id provided.

2.1.3 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

2.1.4 For e-tendering possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY / TCS /nCode / e-Mudra or any Certifying Authority recognized by CCA India on e-Token / Smartcard.

2.1.5 Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.

2.1.6 Only one valid DSC should be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.

2.1.7 Bidders can then log into the site through the secured login by entering their user ID / password and the password of the DSC / e-Token.

2.2 PREPARATION OF BIDS

2.2.1 For preparation of bid, Bidders shall search the tender from published tender list available on site and download the complete tender document and should take into account corrigendum, if any published, before submitting their bids. After selecting the tender document same shall be moved to the ‘My favourite’ folder of bidders account from where bidder can view all the details of the tender document.

2.2.2 Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidder shall note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

2.2.3 Any clarifications, if required, the same may be obtained online through the tender site, or through the contact details given in the tender document.

2.2.4 Bidder should get ready in advance the bid documents to be submitted as indicated in the tender document/schedule in .pdf / .xls / .rar /.zip / .dwf / .jpg formats. If there is more than one document, they can be clubbed together using zip format.

2.2.5 Bidder can update well in advance, the documents such as experience certificates, annual report, PAN, TIN, EPF, service tax, other details etc., under “My Space” option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

2.3 SUBMISSION OF BIDS

2.3.1 Bidder should log into the site well in advance for bid submission so that he/ she upload the bid in time i.e. on or before the bid submission time.

2.3.2 Bidder should prepare the EMD as per the instructions specified in the NIT/ tender document. The originals EMD should be submitted to the Office of Dy. Director General-VTS (DDG-VTS), on or before the last date & time of bid submission. Bidder should send the EMD through Indian postal/Courier Service. DDG-VTS shall not be responsible for any delay or loss, due to postal/Courier Services. The details of the Demand Draft/Bank Guarantee, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise the uploaded bid shall liable to be rejected.

2.3.3 While submitting the bids online, the bidder shall read the terms & conditions (of CPP portal) and accepts the same in order to proceed further to submit their bid.

2.3.4 Bidder shall select the payment option as offline to pay the EMD and enter details of the Demand Draft / FDR/ Bank Guarantee.

2.3.5 Bidder shall digitally sign and upload the required bid documents one by one as indicated in the tender document.

2.3.6 Bidders shall note that the very act of using DSC (Digital Signature Certificate) for downloading the tender document and uploading their offers is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.

2.3.7 Bidder shall note that each document to be uploaded for the tender should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/ rar and the same can be uploaded. For the file size of less than 1 MB, the transaction uploading time will be very fast.

2.3.8 Utmost care shall be taken for uploading Schedule of rates and any change/ modification of the price schedule shall render it unfit for bidding. Bidders shall download the Schedule of Rates i.e. Section VIII, in XLS format and save it without changing the name of the file. Bidder shall quote their rates in figures in the respective cells, thereafter save and upload the file in financial bid cover (Price bid) only. If the Schedule of Rate file is found to be modified by the bidder, the bid will be rejected. The bidders are cautioned that uploading of financial bid elsewhere i.e. other than in cover 2 will result in rejection of the tender.

2.3.9 Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held

responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.

2.3.10 After the bid submission (i.e. after clicking “Freeze Bid Submission” in the portal), the bidders shall take print out of system generated acknowledgement number, and keep it as a record of evidence for online submission of bid, which will also act as an entry pass to participate in the bid opening.

2.3.11 Bidder should follow the server time being displayed on bidder’s dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.

2.3.12 All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology.

2.3.13 The bidder should ensure/see that the bid documents submitted should be free from virus and if the documents could not be opened due to virus during tender opening, the bid is likely / liable to be rejected.

2.3.14 The time settings fixed in the server side and displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.

2.3.15 Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers’ public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

2.3.16 The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.

2.3.17 The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.

2.3.18 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2.3.19 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

2.4 SUBMISSION OF OFFER

The tender shall be submitted online in **two cover system** duly scanned and digitally signed by the authorized representative of the bidder as follows:

2.4.1 Online bids should be submitted containing copies of following document in Cover-1 for documentary proof, for fulfilling qualifying criteria failing which the offer shall be summarily rejected.

2.4.2 Scanned Copy of all eligibility criteria documents mentioned at clause 3.1 and technical evaluation documents mentioned at clause 7.1.

2.4.3 If the bid does not contain any of the above mentioned documents or contains incomplete or unsuitable technical details, then the offer shall be deemed liable to rejection/ disqualification.

2.4.4 The price bid in the enclosed "**Schedule of Work**" as per the excel format enclosed as BOQ (Bill of Quantity).

2.4.5 Price bid in excel format BOQ (Schedule of Work) provided along with this tender shall be used for quoting price/offer.

2.4.6 It may please be noted that this part shall not contain any terms conditions. Any condition given in the price bid will be a sufficient cause for rejection of bid.

2.4.7 The quoted rates shall be written in figures on enclosed Performa BOQ (Schedule of Work) which should be duly digitally signed by the bidders or his authorized person.

2.5 **SUBMISSIONS AND OPENING: -**

2.5.1 The bid should be submitted online at website http://eprocure.gov.in/eprocure/app only, by the due date and time as per section-I. The Server Date & Time as appearing on the website http://eprocure.gov.in/eprocure/app shall only be considered for the cut- off date and time for submission of bids. Offers sent through post, telegram, fax, telex, e-mail, and courier or by any other mode will not be considered. In case of date of opening is declared, as holiday tender will be opened on next working day at same time.

2.5.2 Only those bidders shall be considered qualified by the Director, who submits requisite EMD and documents accept all the terms & conditions of the Tender document unconditionally and meet the qualifying requirement stipulated in the Tender document. The decision of the Director shall be final and binding in this regard.

2.5.3 The bidder shall bear all cost associated with the preparation and submission of its bid and the Dy.Director General will in no case be responsible or liable for these cost, regardless of the conduct or outcome of the tendering process.

2.5.4 The prospective bidder requiring any clarification of the tender document may obtain the same online/ offline from Tender Inviting Authority, The Deputy Director General, Directorate of Lighthouses & Lightships, Deep Bhavan, Gandhidham in person or otherwise in writing so as to reach the said office on or before pre bid meeting date and time as per section I.

Dy. Director General
For and on behalf of the President of India

Section-III

विस्तृत निविदा सूचना / DETAILED BID NOTICE

3.1. ELIGIBILITY CRITERIA:

The essential eligibility criteria for participation for the tender is as follows:

3.1.1 The bidder should have valid GST Registration.

3.1.2 The bidder must be Original Software Developer (OSD) of VTS software or having Joint Venture partnership with OSD or having Consortium Agreement or having MOA /AOA with OSD.In any of this case the Bidder having GST Registration shall act as Lead Partner.

3.1.3 The bidder or its joint partner shall have authorization from Terma AS, Denmark stating that they shall provide repair and spares support to bidder in India. Terma is original equipment manufacturer of the existing RADARs used in VTS-GoK. If not, the bidder shall have to submit service support agreement from Terma, AS Denmark.

3.1.4 The bidder shall have experience of successfully completed similar works during the last seven (07) years, reckoned up to the last day of the month preceding the month in which the bid is published. The bidder must have executed similar works within this period, and such experience shall meet any one of the following criteria:

(a) Three similar completed works, each costing not less than the amount equal to 40% of the estimated cost.

or

(b) Two similar completed works, each costing not less than the amount equal to 50% of the estimated cost.

or

(c) One similar completed work costing not less than the amount equal to 80% of the estimated cost.

Similar work means-

Supply, installation, integration, testing, commissioning and comprehensive maintenance of minimum three Radars and minimum 01 AIS based VTS System including VTS infrastructure.

In order to fulfill above criteria, the agency has to submit Work order/contract agreement and respective Completion Certificate/CRAC on GEM issued by the Work Awarding authorities.

3.1.5 The bidder should have an annual average turnover not less than Rs. 30, 00,000/- (Rupees Thirty Lakh Only) for the last three financial years ending 31.03.2025. Accordingly, the Bidder shall submit Certificate from CA for average turnover for 2022-23, 2023-24, 2024-25.

3.1.6 The Bidder shall submit an affidavit on non-judicial stamp paper, duly notarized in respect of information regarding any litigation & blacklisting in current or during last 3 years ending 28.02.2026 (**Annexure-I**).

3.1.7 The Bidder shall submit Bank Guarantee/DD/ FDR towards Earnest Money Deposit.

3.1.8 Copies of Income Tax Return for the last three years ending 31.03.2025.

3.1.9 The bidder shall submit Tender Acceptance letter as per **Annexure II**.

3.1.10 Undertaking- The Agency has to submit an undertaking as per **Annexure III and Annexure-IV**.

3.1.11 Solvency: Bidder should submit the solvency certificate indicating an amount equal to or not less than 40% of the estimated value of this tender. Copy of Fresh Solvency Certificate issued by any scheduled Bank is required to be uploaded and submitted. The date of solvency certificate issued by bank should not be earlier than 3 months from the date of submission of bid.

3.1.12 The bidder shall submit 'Eligibility Compliance sheet' as per enclosed proforma (**Annexure-V**).

The bid shall not be evaluated if any of the above-mentioned documents are not submitted.

3.2 Cost of Bidding

The bidder shall bear all costs associated with the preparation and delivery of the bid and the employer will, in no case, be responsible or liable for those costs.

3.3 Assurance

The bidder shall be required to give satisfactory assurance of his ability and intention to deliver the goods and services, pursuant to the Contract, within the time set forth therein.

3.4 Bid documents

3.4.1 The bidder is expected to examine the bid document including all instructions, forms, terms and specifications. Failure to furnish any information required in bid document or submission of bid not substantially responsive to the bid document in every respect shall result in rejection of the Bid.

3.5 Clarification on bid document (Pre-bid Meeting)

Prospective Bidder requiring any further information or clarification on the Bid document may notify the employer during Pre-bid meeting mentioned in the Notice Inviting Tender. **A pre-bid meeting with prospective bidders will be held on date and time as per Section I at Deep Bhavan, Gandhidham** to clarify the issues & to answer questions on any matter that may be received at that stage. Bidders are advised to attend the pre- bid meeting on their own cost. However, non-attendance of the pre-bid meeting shall not be a cause for disqualification of the bidder. Any substantive clarification or modification arising out of the pre- bid meeting would be finalized only by addendum/ corrigendum to bid documents. No further queries shall be entertained after settling clarifications / issues received during the above pre-bid meeting.

3.6 Amendment of bid document

3.6.1 At any time prior to the deadline for submission of Bids, the Employer may for any reason, whether at his own initiative or in response to a clarification requested by a prospective Bidder, modify the bid documents by amendment.

3.6.2 The amendment/corrigendum shall be part of the bid document and will be uploaded in the CPPP (Central Public Procurement Portal) *http://eprocure.gov.in/eprocure/app*.

3.8 Language of the bid

All documents related to bid should preferably be in English language. The language for communications shall be English. Any printed literature furnished by the bidder may be written in another language provided that this literature is accompanied by an English Translation. In such case, for purpose of interpretation of the Bid, the English translation shall prevail.

3.9 Preparation of Bid

The bid prepared by the bidder shall be having two parts viz. **Part-I (Technical bid)** and **Part-II (Commercial bid)**.

3.9.1 The technical bid shall comprise the Scanned Copy of all eligibility criteria documents mentioned at clause 3.1 and technical evaluation documents mentioned at clause 7.1.

3.9.2 The Commercial bid shall contain Bill of quantities duly filled in accordance with instructions to bidder.

3.10 Bid Price

3.10.1 The bidder shall complete the appropriate price in INR for schedule of works as in BOQ stating item wise, unit price and the total amount.

3.10.2 Price quoted by the bidder shall remain firm and valid until completion of Contract performance.

3.11 **Bid Currencies**

The Contract provides for payment of the Contract Price in Indian Rupee only.

3.12 Documents establishing conformity of the Bidder's proposal to the bid documents.

3.12.1 The documentary evidence of conformity of the goods and services to the bid documents may be in the form of literature, drawings, and data and shall include detailed description on the proposal's essential technical and performance characteristics. Apart from above it shall also include the following. –

3.12.1.1 Documents such as user/operation manual, technical manuals.

3.12.1.2 Any additional features and functions.

3.13 Filling up of Bid

3.13.1 All the rates and amount shall be quoted in whole denomination of the **Indian Rupee**. Rate quoted in any other currency shall be rejected.

3.13.2 The rate of each item shall be quoted in figures. The amount in figures shall be written in such any that interpolation is not possible.

3.13.3 The bidders are advised to physically visit all the sites of VTS-GoK and assess the requirement before filling of the bid.

3.13.4 No amount shall be paid to the Contractor for the item for which no rate or amount is quoted by the Bidder, but the contractor shall be bound to do that job/work free of cost (on zero amount). Moreover, for comparison purpose, highest rate quoted by other bidders shall be loaded for the subject component/item.

3.13.5 The bidder shall be deemed to have satisfied himself before Bidding as to the correctness and sufficiency of his bid for the works and of the rates & amount quoted in the schedules of works, which rates & amounts, shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion of the work as aforesaid in accordance with good practices and recognized principles.

3.13.6 In case of any bid where unit rate of any item appears unrealistic, such bid shall be considered unbalanced and non-responsive. The employer may ask for providing satisfactory explanation for such unrealistic quoted rate. If bidder is unable to provide satisfactory reply with supporting analysis of rates, the bid shall be rejected.

3.13.7 Each bidder shall submit only one bid for this work. A bidder who submits more than one bid for this work will attract disqualification and rejection of all of his bids.

3.13.8 The bidder shall not be under a declaration of in-eligibility for corrupt & fraudulent practices in any Govt. Department or organization in India or abroad.

3.14 Clarification on Bids

To assist in the examination, evaluation and comparison of bids, Dy. Director General may, at his discretion, ask the bidder for any clarification on his bid. All responses to such requests for clarification shall be in writing. No change in the prices or substance of the bid shall be sought, offered or permitted.

3.15 Preliminary Examination

The employer will examine the bids to determine whether they are complete, any computational errors have been made, required details have been furnished, the documents have been properly signed or the Bids are generally in order.

3.16 **Evaluation of Bids:**

3.16.1 The technical evaluation shall be carried out as per eligibility criteria documents mentioned at clause 3.1 and technical evaluation documents mentioned at clause 7.1.

3.16.2 The bid of technically qualified bidder shall be considered for Financial Evaluation. Financial Evaluation shall be carried out as per BoQ.

3.17 The present VTS software is C-scope VTS software, which need to maintained alongwith all updates. In case bidder wish to change the present VTS software, same shall be done without any extra cost. The replaced software shall have same or better capability than the existing VTS software. Present VTS software is IVEF complaint, have the capability of standard VTMS software features alongwith the additional features for efficient VTS operation, same need to be incorporated. In case any bidder intends to replace the present VTS C-scope software, then the proposed software should be matured one i.e. should have been used for more than 3 years in any VTS centre anywhere in the world and a satisfactory report from the customer/user shall be submitted Also the bidder has to demonstrate for all the features of proposed VTS Software after opening of the technical bid within 02 days at a suitable feasible place as agreed by both the parties (the bidder and this Directorate),failing to demonstrate the features, the bid shall not be considered for further evaluation.

3.18 Conditional offers are liable for rejection.

3.19 Dy. Director General reserves the right to cancel the tender without assigning any reason thereof.

3.20 Tenders from those bidders who have not submitted their offer as per NIT will not be considered.

3.21 Award of work and signing the agreement

3.21.1 The employer shall notify the L1 bidder by Letter of intent (LOI) for submission of performance guarantee (mentioned in Section IV).

3.21.2 On receipt of LOI, the bidder shall submit the Performance Guarantee within the stipulated timeframe and visit this office with non-judicial stamp paper of Rs. 300/- for execution of contract agreement.

3.21.3 The EMD of the successful Bidder shall be returned without any interest within 30 days after the award of contract and submission of Performance Bank Guarantee. The earnest money deposit of the unsuccessful bidders shall also be refunded within 30 days, without any interest, after award of the contract. In case the date fixed for opening of Technical bids falls to be a holiday the bids will be opened on the successive working day.

3.21.4 Any addition/alteration made in the bid document by the bidder will render the bid non-responsive and such bid will be summarily rejected.

Dy. Director General
For and on behalf of the President of India

Section-IV

GENERAL CONDITIONS OF CONTRACT

4.1 General:

4.1.1 The DDG-VTS shall mean the Dy.Director General of VTS Directorate, Gandhidham having its office at Deep Bhavan, Plot No. 17, Sector 8, Gandhidham and shall include his legal representatives and successors and permitted assigns.

4.1.2 Accepting authority shall be DDG-VTS or his authorized representative.

4.1.3 The contract shall mean the notice inviting bid, the bid and acceptance thereof and the formal agreement if any, executed between the DDG-VTS and the contractor together with the documents referred to therein including these conditions with appendices and any special conditions, the specifications, designs, drawings, schedule of quantities/items with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form contract and shall be complementary to one another.

4.1.4 The contractor shall mean the individual or firm or company whether incorporated or not, undertaking the works/jobs and shall include legal representatives of such individual or persons composing such firm.

4.1.5 The contract sum shall mean the sum for which the bid is accepted.

4.1.6 The site shall mean the premises of the various VTS station mentioned in this document.

4.1.7 The works / jobs shall mean the works/jobs to be executed in accordance with the contract and shall include all extra or altered or substituted works or temporary and urgent works as required for performance of the contract.

4.1.8 The contractor shall satisfy himself with regard to the nature of work to be done, its scope, the conditions of contract, specifications, etc. included in the bid document.

4.1.9 The contractor shall abide by prevalent rules & regulations for security and safety. Any material brought inside the premises of the office which is required to be taken out from the premises shall have necessary prior written permission from the DDG-VTS, or his authorized representative.

4.1.10 The contractor, being the Principal Employer for the workmen engaged by him shall take maximum care against any accident and shall ensure proper safety measures. For any accident, miss-happening due to lack of safety measures, the contractor shall be responsible. The contractor in his own interest shall insure the workman so deployed. DDG-VTS will not be responsible for any such claims whatsoever.

4.1.11 No interest shall be payable to the contractor against the earnest money / security deposit / performance bank guarantee or any money recovered from the contractor.

4.1.12 **Performance Guarantee**: Within 10 days of receipt of work order, the successful bidder shall furnish the contract Performance Guarantee cum security deposit in favour of Deputy Director General, Directorate of Lighthouses and Lightships, Gandhidham @ 10% of the value of the contract, valid for a period of 15 months in the form of FDR/ Bank Guarantee from any commercial bank.

4.1.13 All the future correspondences in this connection shall be addressed to:

The Dy.Director General,
Directorate of Lighthouses & Lightships,
Deep Bhavan , Plot No-17,Sector-8,Gandhidham, Pin: 370201,
Phone No. 02836-299104

4.1.14 During the course of the bid the DDG-VTS may modify certain aspects of the bid, by amendment/ corrigendum. The modification may be based on DDG-VTS's own initiative or on clarifications issued. The DDG-VTS at his discretion may extend the last date for submission of bids in order to give reasonable time to bidders to take the amendments into account.

4.1.15 The DDG-VTS may terminate this contract at any time for unsatisfactory response by the contractor and only proportionate amount shall be paid.

4.2 Rescinding of contract:

If at any stage during the work, the Contractor(s) ceases work or refuses to fulfil his part of the contract, the DDG-VTS shall have power to rescind the contract, of which rescission notice in writing to Contractor(s) under the hand of the DDG-VTS shall be conclusive evidence of Contractor(s)'s default and the whole of the Performance Bank Guarantee paid by Contractor(s) shall stand forfeited and be absolutely at the disposal of the Government. The DDG-VTS, shall moreover, have the power to adopt any measure for the completion of the work in any manner he may choose. In the event of such a course being adopted any expenses which may be incurred in excess of the sum which would have been paid to the Contractor(s), if the whole work had been executed by Contractor(s) (for the amount in such cases, the certificate in writing of the DDG-VTS shall be final and conclusive) shall be realized from Contractor(s) from any money which may be due to him under this or any other contract or otherwise. In the case when the contract has been rescinded under the aforesaid provision, the Contractor(s) shall have no claim for compensation for any loss sustained by him for reasons of having purchased any material or having entered into any engagement or made any advance on account of the execution of the work. But on the other hand, the DDG-VTS shall be entitled to take possession of any or part of any material which has been brought by the Contractor(s) to the site of work and in which event the Contractor(s) shall be entitled to such payment therefore as may be considered reasonable by the DDG-VTS.

4.3 Subletting:

The subletting of the contract is not permitted.

4.4 Insolvency and breach of contract:

The DDG-VTS may at any time by notice in writing summarily determine the contract without compensation to Contractor(s) in any of the following events, that is to say: -

If Contractor(s) being an individual or if a firm any partner in Contractor(s) shall at any time be adjudged insolvent or shall have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or for Composition under any Insolvency Act for the same being in force or make any conveyance or assignment of his effects or enter into any arrangement with this creditors or suspend payment or if the firm be dissolved under the Partnership Act; or

If the Contractor(s) being a company shall pass a resolution or the court shall make an order for the liquidation of its affairs or a Receiver or Manager on behalf of the debenture holders shall be appointed or circumstances shall have arisen which entitled the court or debenture-holders to appoint a Receiver or Manager; or

If the Contractor(s) commits any breach of this Contract not being specifically herein provided for provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the President of India and provided also that Contractor(s) shall be liable to pay the President of India for any extra expenditure they are hereby put up.

4.5 **Discrepancies and adjustment of errors**.

If there are varying or conflicting provision made in any one documents forming part of the contract, the accepting authority shall be the deciding authority with regard to the intention of documents.

4.6 **Paying authority:**
The paying Authority shall be the Dy.Director General-VTS, Directorate of Lighthouses & Lightships, Gandhidham.

4.7 **Force Majeure Clause:**

4.7.1 In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by it under this Agreement, the relative obligation of the party affected by such force majeure shall after notice under this clause be suspended for the period during which such cause lasts. The term force majeure as used herein shall mean acts of God, War (declared or undeclared) Riots or Civil commotion, Fires, Floods, Earthquake, Tsunami etc and acts of Regulations of the Government of India or any of its authorized agencies.

4.7.2 Lightening damage shall not be considered as force majeure, contractor has to take all safety measure to ensure the safety of equipments against lightening.

4.7.3 Upon the occurrence of any force majeure cause and upon its termination, the party alleging that it has been rendered unable as aforesaid shall notify the other party in writing, within seventy two (72) hours of the alleged beginning and ending thereof giving full particulars and satisfactory explanation in support of its claims.

4.7.4 Time for performance of the relative obligation suspended by the 'Force Majeure' shall then stand extended by the period for which such causes lasts.

4.8 Termination:

4.8.1 In the event of the Contractor going into liquidation or winding up his business or making arrangement with his creditors, this agreement shall stand ipso facto terminated from the date of occurrence of such event. This termination shall be without prejudice to any other rights to remedies, available to the DDG-VTS under this agreement.

4.8.2 In the event of any breach of terms and conditions of this Agreement or un-satisfactory performance of the contractor, the DDG-VTS shall have the right to terminate the Agreement forthwith by giving 30 days notice. The decision of the DDG-VTS under this clause shall be final.

4.9 Arbitration:

All disputes arising out of this contract shall be referred to the Dy. Director General, Directorate of Lighthouse & Lightships, Gandhidham. The decision by the Dy. Director General for such arbitration shall be final. No award shall be questioned or invalidated on the ground that any of the arbitrators is not qualified.

4.10 Interest on money due to the contractor:

The contractor shall not be entitled to interest damages for loss of interest upon any amounts lodged as deposits with DDG-VTS or upon payments in arrears or upon any balance, which may, on the final settlement on his accounts, be due to him.

4.11 Penalty clause:

4.11.1 Throughout the stipulated period of contract the services shall be provided with all due diligence. Penalty @ 0.02 % of the total contract value per day shall be levied from the bill of the contractor for non-compliance of time line of restoration mentioned in section V, however the total penalty shall not exceed 10 %. Two subsequent non-compliance of repair of faults may lead to cancellation of contract.

4.11.2 All the case of delay shall be decided by the Dy. Director General of Lighthouses & Lightships or his authorized representative.

4.12 Permit/ statuary licenses / clearances / approval:

The responsibility of obtaining necessary Permit/ statuary licenses / clearances /approval from designated authority (State Government/ its agencies) will be of the contractor. However necessary administrative assistance will be provided by the DDG-VTS.

Dy. Director General - VTS
For and on behalf of the President of India

Section-V
Special Conditions of the Contract

5.1 Special Conditions

The tender value mentioned is for Providing Comprehensive Annual Maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027. The rates quoted by the bidder shall be valid for the entire contract period of one year. This contract is for one year, however it may be extended for a period of one year or more or a part of the year on pro-rata basis under the same terms and conditions, at the same rates, subject to satisfactory performance of the agency as determined by this Directorate.

5.2 PAYMENT FOR WORKS

5.2.1 Payment shall be released on quarterly basis. The agency has to submit invoice in Indian Rupees only in triplicate along with job sheet of each site duly certified by station in charge.

5.2.2 Necessary Deduction, if any, on account of non-availability as per penalty clause shall be made from the quarterly bill.

5.2.3 TDS on GST and IT shall be deducted as per prevailing Govt Rule.

5.2.4 The bill for final quarter shall be released only after compliance of all the items of the scope of service.

5.3 **Methodology of Fault Logging, rectification and Attendance of Faults**:

5.3.1 On occurrence of fault of any equipment, the intimation shall be given by concerned station by email/telephone. On receipt of complain, the bidder has to generate a complain number and provide the same by return mail/phone/SMS within 12 hours.

5.3.2 The engineer of the agency shall attend and rectify the fault in the minimum possible time.

5.3.3 The repair/restoration may require replacement of spares which may be available or may have to be imported from other places/countries which will take considerable time. Based on the various situations, the maximum time permitted for restoration of the system shall be maintained as follows:

(a) If fault can be repaired locally - 72 hours

(b) In case of Spare/item are required and to be arranged within India – *07 days*

(c) In case of Spare/item are required and to be arranged from outside India – 60 days. (**The agency has to submit proof for imported item**).

5.3.4 The amount for which the Bid is approved shall be inclusive of all expenses for the proper and entire completion of the work and shall be inclusive of GST and all taxes, OCTROI, all royalties, patent rights, other incidental charges etc. The amount offered shall be final and no claim whatsoever on any account shall be entertained.

5.3.5 The prices quoted by the Bidder and accepted by the Employer shall hold good till the completion of the works and no additional claims will be admissible on account of any price variation or fluctuation in the market rates.

5.3.6 Any notified change in the GST (both increase and decrease) from the base date shall be to the Employer's account. For such claims of variations, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidder's account.

5.3.7 It will be the responsibility of the successful Bidder to obtain import license/ custom clearance at his cost, wherever required, on behalf of the Employer. The Employer shall only provide assistance and undertaking wherever required as per the law of the land.

5.4 PACKING AND TRANSPORTATION REQUIREMENTS

5.4.1 The responsibility shall lie with the Contractor to ensure that equipment/spare parts/components/materials brought to sites are strictly in conformity to specifications.

5.4.2 The Contractor shall include and provide for securely protecting and packing the equipment and machinery so as to avoid damage or deterioration under rough handling and exposure to extreme temperatures, salt, water, precipitation during transit or storage.

5.4.3 The contractor shall take entire responsibility for the packing to ensure that equipment and machinery are brought and installed at site free from any damage.

5.5 SECURITY ARRANGEMENTS

The security for storage of materials under controlled condition shall be contractor's responsibility and the Employer shall not be responsible for any loss of the material.

5.6 ACCIDENTS

The contractor shall within twenty four (24) hours of the occurrence of any accident involving serious injury or death of his employee at or about the site or in connection with the execution of the services, report such accidents to the Employer or his representative. The contractor shall also report such accidents to the concerned notified authorities.

5.7 EMPLOYMENT OF FOREIGNERS

5.7.1 If any foreigner is employed by the contractor to work on the sites under this contract, the later shall ensure that such a foreigner possesses the necessary special permission issued by the Civil Authorities in writing and also comply with the instructions issued therefore, from time to time. In the event of any lapse in this regard on the part of such foreigner, the Contractor shall be personally held responsible for the lapse and the Employer shall not be liable in any event.

5.7.2 For the purpose of necessary clearance for foreign personnel brought in by the contractor, in connection with this contract, he shall furnish the following specific information and also comply with instructions issued from time to time.

5.10.2.1 The number of foreign personnel required.
5.10.2.2 The period for which each such personnel is required
5.10.2.3 The nature of work that would be required to be done by them, and
5.10.2.4 The qualifications and experience of the personnel proposed to be engaged.

If there is any lapse in this regard, the Contractor shall be personally responsible for the lapse and the Employer shall not be held accountable.

5.8 RIGHT OF THE EMPLOYER

5.8.1 The Bid documents issued to the intending Bidders, Bid terms arrived at during process of clarifications together with the letter of acceptance thereof, shall constitute a binding contract between the successful Bidder and the Employer and shall form the foundation of the rights and obligation on both the parties. If there are varying or conflicting provisions made in any document forming part of the contract, the Employer shall be the deciding authority with regard to the intention/interpretation of the document and his decision shall be binding without any reservations.

5.8.2 The right to carry out the work either in conformity with or in a manner entirely different from the terms of this Bid document that may be most suitable before or subsequent to the receipt of Bids due to exigencies of work, is reserved with the Employer.

5.8.3 Any error in description, quantity or rate in schedule of works, or any omissions there from shall not vitiate the contract or release the contractors from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

5.8.4 The Employer shall not be precluded or stopped from taking any measurements, and framing of estimates or detaining any certificates made either before or after the completion and acceptance of the work and payment, from showing the true amount and character of the works performed and materials furnished by the contractor and from showing that any such measurements, estimates or certificates untrue or incorrectly made and that Employer shall not be precluded or stopped from recovering from the contractor such damages as it may be sustained by reasons of his failure to comply with the terms and conditions of the contract.

5.8.5 Neither the acceptance by the Employer nor any payment for acceptance of the whole or any part of the work nor any extension of time nor any possession taken by the Employer shall operate as a waiver of any portion of the contract or any power herein reserved or of any risk of damage. A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

5.13 CONTRACTOR'S OBLIGATION

The execution of any items of service/work where any incidental service/work is actually required but not specifically stated in the Bid, it is to be understood that the amount quoted by the contractor shall cover such charges also and nothing extra on account of such incidental charges, if any, shall be paid.

5.15 KNOWLEDGE OF THE LAWS OF THE LAND

The Contractor shall keep himself fully informed of all acts and laws of the Union of India and State (i.e. Gujarat), all local bye laws, ordinances, rules, regulations and all orders and decree of bodies or, tribunals having any jurisdiction or authority which in any way affect the conduct of the works. Contractor shall at all times, observe and comply with all such laws, ordinances, rules, regulations, orders and decrees, and shall give all notices and pay out of his own money any fees or charges to which he may be liable. He shall protect and indemnify the Employer against any claim or liability arising out of violations of any such law, ordinances, legislations, order or decree.

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Dy. Director General - VTS
For and on behalf of the President of India

Section–VI

SCOPE OF SERVICES/ WORK

The scope of services/ work includes Comprehensive maintenance of all the VTS equipment, including regular updates of ENC and all software associated with VTS services.

6.1 Comprehensive maintenance of VTS C-Scope servers (with capabilities including Central Operating Processor, Database Server, Central Storage Processor, Storage Area Network Server, and Video Distributor) and associated equipment installed at MCC Kandla shall include day-to-day preventive maintenance, corrective maintenance, and generation of all operational reports.

6.1.1 Daily data backup shall be performed on a portable hard disk in the presence of an official of this Directorate. The backup media shall be submitted to this office upon full utilization of its storage capacity.

6.1.2 All relevant server passwords shall be handed over to the Officer-in-Charge of the station. The bidder shall maintain a valid service agreement with the existing VTS software supplier for all necessary support and licensing requirements.

6.1.3 The bidder shall provide one week of training, if felt necessary, at MCC Kandla for 10 officials nominated by this Directorate, covering the features of VTS core equipment (hardware and software). The bidder shall provide only the faculty and all other logistical arrangements shall be made by this Directorate. All expenditure for faculty shall be in the scope of bidder. This Training is to Completed within 1st Quarter after award of Contract. Failing which subsequent Invoices shall not be released.

6.1.4 The bidder shall provide all usernames and passwords to the designated officers of this Directorate.

6.2 VHF servers comprehensive maintenance includes maintenance of all hardware, software, power supply including all associated equipments.

6.3 Web server system providing VTS feed to 20 no. users includes the hardware, software, power supply including all associated equipments. The bidder has to provide familiarization training as and when required to the representative/nominated official of authorized web users.

6.4 The CAMC agency shall be capable of integrating the primary and standby leased line internet connections with the web server. The leased line/internet connections shall be provided by this office. The agency shall be responsible for ensuring the continuous operationality and proper functioning of the web server as well as the leased line/internet connections.

6.5 Comprehensive Annual Maintenance Contract (CAMC) for VTS Operator Consoles shall include complete maintenance of all hardware, software, display monitors, power supply systems, and all associated and peripheral equipment forming part of the operator console setup. The scope of maintenance shall cover preventive maintenance, routine servicing, fault diagnosis, troubleshooting, repair/replacement of defective components, software updates/upgrades, and ensuring seamless integration with the overall VTS system. The bidder shall ensure uninterrupted functionality, optimum performance, and operational readiness of all operator consoles at all times. All consumables, spare parts, accessories, connectors, and cabling required for maintaining the system in fully operational condition shall be included under the CAMC. In case of failure of any component, the same shall be repaired or replaced within the stipulated time to minimize downtime. The agency shall also be

responsible for maintaining system configurations, restoring systems in case of failures, and ensuring compatibility with existing and upgraded VTS infrastructure. Periodic health checks and submission of maintenance and performance reports to this Directorate shall form part of the scope.

6.6 Comprehensive Annual Maintenance Contract (CAMC) for VoIP VHF Consoles shall include complete maintenance of all hardware and software components, along with all associated and peripheral equipment forming part of the system. The scope shall cover preventive maintenance, routine inspection, fault diagnosis, troubleshooting, repair and/or replacement of defective parts, software updates/upgrades, and ensuring seamless integration with the VTS communication network. The bidder shall ensure continuous, reliable, and interference-free operation of the VoIP VHF consoles at all times. All necessary spares, consumables, accessories, interfacing units, cabling, connectors, microphones, speakers, and power supply components required to maintain the system in fully operational condition shall be included under the CAMC. Any failed component shall be repaired or replaced within the specified timeframe to minimize downtime. The agency shall also be responsible for configuration management, restoration of services in case of system failures, and ensuring compatibility with existing and upgraded communication infrastructure. Periodic performance checks and submission of maintenance and operational reports to this Directorate shall be part of the scope.

6.7 Comprehensive Annual Maintenance Contract (CAMC) for VoIP VHF radio systems shall include complete maintenance of all associated equipment, including but not limited to VHF antennas, indoor units, power supply systems, and any other ancillary or supporting VHF equipment, whether specifically listed or not. The scope shall cover preventive maintenance, routine inspection, testing, fault diagnosis, troubleshooting, repair and/or replacement of defective components, and ensuring seamless operation of the entire VHF communication system. The bidder shall ensure reliable, uninterrupted, and distortion-free communication at all times. All consumables, spare parts, accessories, cabling, connectors, mounting hardware, and interfacing components required for maintaining the system in fully operational condition shall be included under the CAMC. Any malfunctioning or failed component shall be repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for maintaining system alignment, antenna performance, signal quality, and overall system integrity. Periodic performance verification, preventive checks, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.8 Comprehensive Annual Maintenance Contract (CAMC) for **X-band** radar systems shall include complete maintenance of all associated equipment, including but not limited to antenna gearbox, radar antenna and its associated assemblies, transceiver units, encoders, magnetron, waveguide switch, C-sets, RSD, monitors, power supply systems, and any other ancillary or supporting radar equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, calibration, testing, fault diagnosis, troubleshooting, repair and/or replacement of defective components, and ensuring continuous, accurate, and reliable radar performance. The bidder shall ensure optimal system functionality and minimum downtime at all times. All consumables, spare parts, accessories, cabling, connectors, and interfacing components required to maintain the radar system in fully operational condition shall be included under the CAMC. Repair and/or replacement of all radar components, whether explicitly listed or not, shall be the responsibility of the CAMC agency. **Replacement of the magnetron shall be carried out by the agency. This replacement will be under scope of the contract, However such replacement shall be carried out as per the directives of this office. The magnetron shall be supplied by this office however its installation, testing, alignment, and commissioning shall be the responsibility of the agency**. The agency shall also be responsible for maintaining system alignment, signal quality, and overall radar performance parameters. Periodic performance verification, preventive maintenance schedules, and submission of detailed maintenance and operational reports to this Directorate shall

form part of the scope.

6.9 Comprehensive Annual Maintenance Contract (CAMC) for **S-band** radar systems shall include complete maintenance of all associated equipment, including but not limited to antenna gearbox, radar antenna and its associated assemblies, transceiver units, encoders, magnetron, waveguide switch, C-sets, RSD, monitors, power supply systems, and any other ancillary or supporting radar equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, calibration, testing, fault diagnosis, troubleshooting, repair and/or replacement of defective components, and ensuring continuous, accurate, and reliable radar performance. The bidder shall ensure optimal system functionality and minimum downtime at all times. All consumables, spare parts, accessories, cabling, connectors, and interfacing components required to maintain the radar system in fully operational condition shall be included under the CAMC. Repair and/or replacement of all radar components, whether explicitly listed or not, shall be the responsibility of the CAMC agency. **Replacement of the magnetron shall be carried out by the agency. This replacement will be under scope of the contract, However such replacement shall be carried out as per the directives of this office. The magnetron shall be supplied by this office however its installation, testing, alignment, and commissioning shall be the responsibility of the agency**. The agency shall also be responsible for maintaining system alignment, signal quality, and overall radar performance parameters. Periodic performance verification, preventive maintenance schedules, and submission of detailed maintenance and operational reports to this Directorate shall form part of the sscope.

6.10 Comprehensive Annual Maintenance Contract (CAMC) for dual duplex microwave links between all VTS stations shall include complete maintenance of all associated equipment, including but not limited to radome, outdoor units, indoor units, power supply systems, and any other ancillary or supporting microwave communication equipment required for ensuring reliable connectivity between VTS stations, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, alignment, calibration, testing, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure uninterrupted and high-quality communication links. The bidder shall ensure continuous availability, signal integrity, and optimal performance of the microwave links at all times. All consumables, spare parts, accessories, mounting hardware, cabling, connectors, and interfacing components required to maintain the system in fully operational condition shall be included under the CAMC. Any failed or degraded component affecting link performance shall be promptly repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for maintaining proper alignment, link stability, bandwidth performance, and overall system reliability. Periodic performance verification, preventive maintenance schedules, and submission of detailed maintenance and operational reports to this Directorate shall form part of the scope.

6.11 Comprehensive Annual Maintenance Contract (CAMC) for point-to-point short-range license-free microwave links shall include complete maintenance of all associated equipment required to ensure reliable connectivity between stations. The scope shall cover all components of the system, including but not limited to outdoor units, indoor units, antennas, mounting structures, power supply systems, cabling, connectors, and any other ancillary or supporting equipment, whether specifically mentioned or not. The maintenance shall include preventive maintenance, routine inspection, alignment, calibration, testing, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure uninterrupted and efficient communication links. The bidder shall ensure continuous availability, signal stability, and optimal performance of the links at all times. All consumables, spare parts, accessories, and interfacing components necessary to maintain the system in fully operational condition shall be included under the CAMC. Any failure or degradation affecting connectivity shall be promptly rectified within the stipulated timeframe to minimize downtime. The agency shall also be responsible for maintaining proper alignment, signal quality, and overall system reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.12 Comprehensive Annual Maintenance Contract (CAMC) for AIS Base Stations shall include

complete maintenance of all associated equipment, including but not limited to antennas, control units, display/interface units, power supply systems, and any other ancillary or supporting AIS equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, testing, calibration, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure continuous and accurate transmission and reception of AIS data. The bidder shall ensure uninterrupted operation, data integrity, and optimal system performance at all times. All consumables, spare parts, accessories, cabling, connectors, and interfacing components required to maintain the system in fully operational condition shall be included under the CAMC. Any malfunctioning or failed component shall be repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for maintaining system configuration, signal quality, synchronization, and overall system reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.13 Comprehensive Annual Maintenance Contract (CAMC) for meteorological (meteo) sensor systems shall include complete maintenance of all associated equipment, including but not limited to outdoor units, indoor units, sensors, data acquisition systems, power supply systems, and any other ancillary or supporting equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, cleaning, calibration, testing, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure accurate and reliable measurement of meteorological parameters. All consumables, spare parts, accessories, mounting hardware, cabling, connectors, and interfacing components required to maintain the system in fully operational condition shall be included under the CAMC. Any malfunctioning or degraded component affecting data accuracy or system performance shall be promptly repaired or replaced within the stipulated timeframe. The agency shall also be responsible for maintaining sensor accuracy, system configuration, data integrity, and overall system reliability. Periodic calibration checks, preventive maintenance schedules, and submission of maintenance and performance reports to this Directorate shall form part of the scope.

6.14 Comprehensive Annual Maintenance Contract (CAMC) for DG (Diesel Generator) sets of various capacities shall include complete maintenance of all associated equipment, including but not limited to DG sets, batteries, AMF (Automatic Mains Failure) panels, control panels, fuel systems, lubrication systems, cooling systems, exhaust systems, and any other ancillary or supporting equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, servicing, testing, load testing, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure reliable and uninterrupted power supply. All consumables, spare parts, lubricants, filters, coolant, accessories, cabling, and interfacing components required to maintain the DG sets in fully operational condition shall be included under the CAMC. Any malfunctioning or failed component shall be promptly repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for ensuring proper functioning of starting systems, battery health, AMF operations, and overall system efficiency. Periodic performance checks, preventive maintenance schedules, fuel system checks, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.15 Comprehensive Annual Maintenance Contract (CAMC) for Radio Direction Finder (RDF) systems shall include complete maintenance of all associated equipment, including but not limited to antenna units, indoor units, receivers, signal processing units, display/interface units, power supply systems, and any other ancillary or supporting RDF equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, calibration, alignment, testing, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure accurate bearing

determination and reliable system performance. All consumables, spare parts, accessories, cabling, connectors, mounting hardware, and interfacing components required to maintain the system in fully operational condition shall be included under the CAMC. Any malfunctioning or degraded component shall be promptly repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for maintaining system accuracy, signal quality, calibration standards, and overall system reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.16 Comprehensive Annual Maintenance Contract (CAMC) for Air Conditioners (1.5 Ton and 2 Ton capacities) shall include complete maintenance of all associated equipment, including but not limited to indoor units, outdoor units, compressors, condensers, evaporators, refrigerant systems (including gas charging/recharging), electrical wiring, power supply systems, MCBs, control units, and any other ancillary or supporting air conditioning equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine servicing, cleaning of filters and coils, checking of refrigerant levels, inspection of electrical components, fault diagnosis, troubleshooting, and repair and/or replacement of defective parts to ensure efficient and uninterrupted cooling performance. All consumables, spare parts, refrigerants, lubricants, accessories, and components required to maintain the air conditioning systems in fully operational condition shall be included under the CAMC. Any malfunctioning or failed component shall be promptly repaired or replaced within the stipulated timeframe to minimize downtime. The agency shall also be responsible for ensuring energy-efficient operation, proper temperature control, and overall system reliability. Periodic performance checks, preventive maintenance schedules, and submission of maintenance and service reports to this Directorate shall form part of the scope.

6.17 Comprehensive Annual Maintenance Contract (CAMC) for 15 KVA UPS systems shall include complete maintenance of the UPS unit, battery banks, surge protection systems, and all associated and ancillary equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, testing, load testing, battery health monitoring, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure reliable and uninterrupted power backup. The agency shall ensure a minimum backup duration of 2 hours or more under specified load conditions. Maintenance shall include checking and upkeep of batteries, battery terminals, electrolyte levels (where applicable), charging systems, inverters, rectifiers, and control circuitry. All consumables, spare parts, batteries, connectors, cabling, and accessories required to maintain the system in fully operational condition shall be included under the CAMC. Any malfunctioning or degraded component affecting backup performance shall be promptly repaired or replaced within the stipulated timeframe. The agency shall also be responsible for maintaining system efficiency, voltage regulation, surge protection effectiveness, and overall reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.18 Comprehensive Annual Maintenance Contract (CAMC) for 6 KVA UPS systems shall include complete maintenance of the UPS unit, battery banks, surge protection systems, and all associated and ancillary equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, testing, load testing, battery health monitoring, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure reliable and uninterrupted power backup. The agency shall ensure a minimum backup duration of 2 hours or more under specified load conditions. Maintenance shall include checking and upkeep of batteries, battery terminals, electrolyte levels (where applicable), charging systems, inverters, rectifiers, and control circuitry. All consumables, spare parts, batteries, connectors, cabling, and accessories required to maintain the system in fully operational condition shall be included under the CAMC. Any

malfunctioning or degraded component affecting backup performance shall be promptly repaired or replaced within the stipulated timeframe. The agency shall also be responsible for maintaining system efficiency, voltage regulation, surge protection effectiveness, and overall reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.19 Comprehensive Annual Maintenance Contract (CAMC) for 3 KVA UPS systems shall include complete maintenance of the UPS unit, battery banks, surge protection systems, and all associated and ancillary equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, testing, load testing, battery health monitoring, fault diagnosis, troubleshooting, and repair and/or replacement of defective components to ensure reliable and uninterrupted power backup. The agency shall ensure a minimum backup duration of 2 hours or more under specified load conditions. Maintenance shall include checking and upkeep of batteries, battery terminals, electrolyte levels (where applicable), charging systems, inverters, rectifiers, and control circuitry. All consumables, spare parts, batteries, connectors, cabling, and accessories required to maintain the system in fully operational condition shall be included under the CAMC. Any malfunctioning or degraded component affecting backup performance shall be promptly repaired or replaced within the stipulated timeframe. The agency shall also be responsible for maintaining system efficiency, voltage regulation, surge protection effectiveness, and overall reliability. Periodic performance verification, preventive maintenance schedules, and submission of maintenance and operational reports to this Directorate shall form part of the scope.

6.20 Comprehensive Annual Maintenance Contract (CAMC) for lightning conductors shall include complete maintenance of all components, including the top mast rod, down conductors, earthing strips, and connections extending to the ground, along with any ancillary components necessary for proper functioning, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, testing of continuity and resistance, fault diagnosis, cleaning of connections, tightening of joints, and repair or replacement of defective parts to ensure effective lightning protection at all times.The agency shall also be responsible for maintaining proper grounding, structural integrity of the mast, and compliance with safety and operational standards. Periodic performance checks, preventive maintenance schedules, and submission of maintenance and inspection reports to this Directorate shall form part of the scope.

6.21 ENC chart updation for MCC Kandla and all Port monitoring and other associated monitoring stations as and when required (Weekly/quarterly/six monthly/yearly). The scope shall include the timely acquisition, verification, installation, and testing of updated ENC data to ensure accurate and up-to-date navigational information. The agency shall ensure that all charts are fully compatible with the existing VTS and monitoring systems, and any discrepancies or errors identified during the updation process are promptly reported and rectified. Periodic verification of chart integrity, backup of previous ENC data, and submission of updation records and reports to this Directorate shall form part of the scope.

6.22 CAMC shall include painting of outdoor units of Radars, Microwave systems, AIS, RDF, VHF, Meteo sensors, and other associated outdoor equipment. Painting shall be carried out whenever and where ever required as directed by this Directorate in case of deterioration, corrosion, or damage to any structure is observed by the Directorate. The scope shall include surface preparation, application of suitable primer and weather-resistant paint, and finishing to ensure long-term protection against environmental factors such as sunlight, rain, salt, and corrosion. The agency shall ensure that the painted surfaces do not compromise the functionality or alignment of the equipment. Records of painting and protective maintenance activities shall be maintained and submitted periodically to this Directorate as part of the maintenance reporting.

6.23 All the comprehensive maintenance has to be done onsite without interruption of VTS services and job sheet for each preventive/ corrective comprehensive maintenance shall be submitted. In case any unit is required to be taken from station to agency's workshop for repair/ comprehensive maintenance, approval from this office shall be taken. The removal/swapping of any equipment from any Station under CAMC is not permitted without the prior written permission from DDG-VTS.

6.24 Bidders are advised to stock essential critical spares at MCC Kandla in co-ordination with Engineer-in-Charge.

6.25 The contractor/ agency shall employ a sufficient number of engineers with expertise, qualifications, and formal training on the equipment covered under this contract, to provide technical support services at MCC Kandla (for the Kutch region) and at a suitable location (for the Saurashtra region). At least one engineer shall be present at MCC Kandla during all office working hours to coordinate with this Directorate for timely identification and rectification of faults. Additionally, the engineers shall be available to provide 24×7 support services for urgent issues. The bidder must submit a list of all engineers when asked by this office and qualified personnel, along with their detailed bio-data.

6.26 The system shall be considered working normal if its operational status is not affected. Time is deemed to be essence of the contract on the part of the contractor.

6.27 Maintaining a record of operational status, running period, defect record, comprehensive maintenance routines undertaken etc, at MCC Kandla.

6.28 Submitting day wise report on the operational and defect status of all equipment under CAMC. For this purpose a register shall be opened in prescribed format as per the guidelines of this office, which shall be filled daily and submitted to the MCC Kandla station staff . The register shall be shown to the inspecting officer from this Directorate during the visit to these station.

6.29 Quarterly preventive comprehensive maintenance job sheet of each station duly certified by station incharge shall be submitted alongwith the quarterly bill.

6.30 **Brief of VTS GoK**: The VTS GOK established in year 2012 and brief overview of VTS GOK is depicted below:

There are 22 VTS Stations under VTS-GoK. These includes 09 VTS Radar sensor stations, 03 microwave repeater stations, 01 Master Control Centre, 06 port monitoring stations (PMS) 03 stations for VTS data feed to Indian Navy and Indian Coast Guard. The list of stations is tabulated below as follows: -

S.N.	Name of the Stations	Type of Station

01	Koteshwar	VTS Sensor Stations.
02	Jakhau	
03	Chhachi	
04	Mandvi	
05	Kandla	
06	Navinal	
07	Balachadi	
08	Chudeshwar	
09	Okha	
10	Harudi	VTS Repeater Station
11	Vanku	
12	Bhadreshwar	
13	Kandla MCC	Master Control Centre
14	Navalakhi	Port Monitoring Stations
15	Rozi Bunder	
16	Sikka	
17	Vadinar	
18	Kandla	
19	Okha	
20	Jakhau	ICG Monitoring terminal
21	Okha	
22	Okha	Indian Navy Monitoring terminal

VTS GOK Radar System: There are 09 X-band Radars and 02 S-band radars. Each radar is having 02 Tx/Rx, out of which one is kept standby and other keep working. Out of total 11 radars (09 X-band, 02-S-band), at Mandvi one of standby Tx/Rx is non-operational, however the station is operational with 2nd Tx/Rx. The details of radars and their operational status are mentioned below:

Sl no.	Station	Make	Model	Single Radar/ Dual Radar RTX	Transmitted Power	**Antenna Length**	**Antenna Polarization** (horizontal, circular or vertical).	Year of installation	**Present Operational Status**
1	Okha	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
		Terma	Scanter 2001, S band	Dual TX/Rx	30Kw	18ft	Horizontal and Circular	2011	Operational
2	Chudeshwar	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational

3	Balachadi	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
4	Kandla	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
5	Navinal	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
6	Mandvi	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational with one Tx/Rx
7	Chachhi	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
8	Jakhau	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational
		Terma	Scanter 2001, S band	Dual TX/Rx	30Kw	18ft	Horizontal and Circular	2011	Operational
9	Koteshwar	Terma	Scanter 2001 , X band	Dual TX/Rx	25Kw	18ft	Horizontal and Circular	2011	Operational

Radio Direction Finder: There are 02 RDF in GoK. The operational status as follows:

Sl No.	Station	Make	Model	Year of installation	Present Operational Status
1.	Okha	Servo, Servo corporation of America	DF2110M	2011	Operational
2.	Jakhau	Servo, Servo corporation of America	DF2110M	2011	Operational

Automatic Identification System (AIS) :

There are 06 nos. AIS installed in GoK at various stations. The operational status of AIS is as follows:

Sl No.	Station	Make	Model	Year of installation	Present Operational Status
1	Jakhau	Kongsberg	BS500	2011	Operational
2	Navinal	Kongsberg	BS600	2025 (replaced by CAMC	Operational

Sl No.	Station	Make	Model	Year of installation	Present Operational Status
				agency view defect)	
3	Kandla	Kongsberg	BS410	2011	Operational
4	Okha	Kongsberg	BS600	2023 (Replaced after Biparjoy)	Operational
5	Sikka	Kongsberg	BS610	2023 (Replaced after Biparjoy)	Operational
6	Chhachhi	Kongsberg	BS610	2019	Operational

Meteo Sensors : There are 06 meteo sensors installed in GoK. The operational status of meteo sensors is as follows:

Sl No	Station	Structure on which installed	Details of meteo Sensors and data logger	Year of installation	Present Operational Status
1	Okha PMS	Two storeyed Building	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational
2	Vadinar PMS	Two storeyed building	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational
3	Sikka PMS	60-meter RCC Tower	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational
4	Rozi PMS	30 meter RCC Tower	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational

5	Navlakhi PMS	30 Meter RCC Tower	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational
6	MCC Kandla	On top of MCC building	Vaisala weather station (VAISALA) WXT-500 for Meteo sensor for Wind velocity, wind direction, Temperature, Humidity, Pressure and Rain data	2019	Operational

Marine Band VHF Radio: There are 27 nos. VoIP VHF are installed in various stations of GoK. The operational status of VHFs is as follows:

Sl No.	Station	Make	Model	Power Output	Technology	Year of installation	Number of base station	Present Operational Status
1	Jakhau	Jotron	TA7650, RA-7203	25 W	VoIP	2020	03	Operational
2	Chhachi	Jotron	TA7650, RA-7203	25 W	VoIP	2020	03	Operational
3	Navinal	Jotron	TA7650, RA-7203	25 W	VoIP	2020	03	Operational
4	Kandla	Jotron	TR-7750C	25 W	VoIP	2020	03	Operational
5	Okha	Jotron	TA7650, RA-7203	25 W	VoIP	2020	03	Operational
6	Balachadi	Jotron	TA7650, RA-7203	25 W	VoIP	2020	03	Operational
7	Vadinar PMS	Jotron	TR-7750C	25 W	VoIP	2020	01	Operational
8	Sikka PMS	Jotron	TR-7750C	25 W	VoIP	2020	03	Operational
9	Rozi PMS	Jotron	TR-7750C	25 W	VoIP	2020	01	Operational
10	Navlakhi PMS	Jotron	TR-7750C	25 W	VoIP	2020	01	Operational
11	Mandvi	Jotron	TA7750, RA-7203	25 W	VoIP	2020	03	Operational

VHF Work Station Consoles (Jotron VHF Console): Total 11 nos. Consoles stations are placed in the master control centre at kandla and Port Monitoring stations. All the consoles are operational. The details are given below:

Sl. No	Station	Make	Model	Quantity	Installed on (Month/ Year)	Operational Status
1	MCC Kandla	Jotron	JRRC 106	05	2020	Operational
2	PMS Okha	Jotron	JRRC 106	01	2020	Operational
3	PMS Vadinar	Jotron	JRRC 106	01	2020	Operational
4	PMS Sikka	Jotron	JRRC 106	01	2020	Operational
5	PMS Rozi	Jotron	JRRC 106	01	2020	Operational
6	PMS Navlakhi	Jotron	JRRC 106	01	2020	Operational
7	PMS Kandla	Jotron	JRRC 106	01	2020	Operational

Work Station Consoles (01 CPU, 28" Monitors for VTS Operators/ Supervisors): The consoles are placed in the master control centre at kandla , Port Monitoring stations , locations of Indian Coast Guard and Indian Navy. The details are given below:

Sl. No	Station	Make	Model	Number of workstation	Equipped with VHF station for Voice communication (yes/No)	Installed on Month/ Year	Operational Status	Remarks
1	Master Control Centre (MCC) Kandla	HP	Z4 G4	05	Yes	2020	Operational	03 monitors & 01 CPU for each operator / supervisor (Total 05 CPU, 15 Monitors)

2	PMS Okha	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
3	PMS Vadinar	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
4	PMS Sikka	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
5	PMS Rozi	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
6	PMS Navlakhi	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
7	PMS Kandla	HP	Z4 G4	01	Yes	2020	Operational	03 monitors & 01 CPU
8	Indian Coast Guard ,Jakhau	HP	Z4 G4	01	No	2020	Operational	02 monitors & 01 CPU
9	Indian Coast Guard , Okha	HP	Z4 G4	01	No	2020	Operational	02 monitors and 01 CPU
10	Indian Navy, Okha	HP	Z4 G4	01	No	2020	Operational	02 monitors and 01 CPU
11	MCC Kandla	HP	Z4 G4	02	No	2020	Operational	03 monitors and 02 CPU
12	MCC Kandla	HP	Z4 G4	01	No	2020	Operational	01 CPU

Microwave Links : All the microwave links are operational. All VTS Stations and Port Monitoring Stations are linked to the Master Control Centre at Kandla via microwave link. The details of microwave links are as follows:

Type of Microwave links	Qty	Place and model	Between the Stations (02 links between the stations)	Date of Installation
Duplex microwave link between two stations - 30 Links Make: Ericsson	15x2 Links (one link is main and another link is stand by)	Bhadreshwar: Mini Link 6691 Navinal: Mini Link 6693, Mandvi: Mini Link 6363, Okha: Mini Link 6691, Chhachhi: Mini Link 6691, Vanku: Mini Link 6691, Jakhau: Mini Link 6691, Harudi: Mini Link 6691, Kotshwar: Mini Link 6691, Kandla : Mini Link 6691, Navlakhi: Mini Link 6691, Balachadi: Mini Link 6691, Rozi: Mini Link 6691, Chudeshwar: Mini Link 6691, Vadinar: Mini Link 6691, Sikka: Mini Link 6693,	01. Bhadreshwar to Navinal. 02. Bhadreshwar to Kandla. 03.Mandvi to Chhachhi. 04.Mandvi to Navinal. 05.Mandvi to Okha. 06.Navinal to Sikka. 07.Chachhi to Vanku. 08. Vanku to Jakhau. 09. Jakhau to Harudi. 10. Harudi to Koteshwar 11. Kandla to Navlakhi 12. Balachadi to Rozi 13. Rozi to Sikka 14. Chudeshwar to Vadinar 15. Vadinar to Sikka {Out of total 30 links 08 microwave links of Chhachhi, Vanku, Jakhau Harudi and Koteshwar were replaced after cyclone Biparjoy in 2023. The details are mentioned separately}	Indoor unit and outdoor feed unit installed in 2020. Outdoor dome unit installed in 2011

After cyclone Biparjoy 08 nos. microwave links were replaced, the details are mentioned below**:**

S.No	Installed Location Name	Installed Date	ItemsName	Model No.	Serial No.	Qty	Remark
1	Chhachhi VTS Station	26/08/2023	AirFiberMW Link	AF-5U	74ACB96F111F	01	Chhachhi VTS Station towards Vanku
			PowerOver Ethernet(POE)		2127-000085	01	

			Surge Protective Device(SPD)	ETH-SP-G2	23054110022	01	Repeater Station
			Surge Protective Device(SPD)	ETH-SP-G2	23054110030	01	
			LANCable	CAT-6	-	29Mtr	
2	Vanku Repeater Station	02/09/2023	AirFiberMW Link	AF-5U	74ACB96F10DF	01	Vanku Repeater Station towards ChhachhiVTSStation
			PowerOver Ethernet(POE)	-	2127-000083	601	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110091	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110195	01	
			LANCable	CAT-6	-	60 Mtr	
3	Vanku Repeater Station	02/09/2023	AirFiberMW Link	AF-5U	74ACB96F10C9	01	Vanku Repeater Station towards JakhauVTSStation
			PowerOver Ethernet(POE)	-	2127-000083	201	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110106	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110092	01	
			LANCable	CAT-6	-	52 Mtr	
4	Jakhau VTS Station	03/09/2023	AirFiberMW Link	AF-5U	74ACB96F114B	01	Jakhau VTS Station toward Vanku
			PowerOver Ethernet(POE)	-	2127-000085	501	

			Surge Protective Device(SPD)	ETH-SP-G2	23054110014	01	Repeater Station
			Surge Protective Device(SPD)	ETH-SP-G2	23054109847	01	
			LANCable	CAT-6	-	35Mtr	
5	Jakhau VTS Station	04/09/2023	AirFiberMW Link	AF-5U	74ACB96F1128	01	Jakhau VTS Station toward Harudi Repeater Station
			PowerOver Ethernet(POE)	-	2127-0000664	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110021	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110023	01	
			LANCable	CAT-6	-	83 Mtr	
6	Harudi Repeater Station	06/09/2023	AirFiberMW Link	AF-5U	74ACB96F1116	01	Harudi Repeater Station towards Jakhau VTS Station
			Power Over Ethernet(POE)	-	2127-0000851	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110083	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110997	01	
			LANCable	CAT-6	-	73 Mtr	
7	Harudi Repeater Station	06/09/2023	AirFiberMW Link	AF-5U	74ACB96F111A	01	Harudi Repeater Station towards
			PowerOver Ethernet(POE)	-	2127-0000834	01	

			Surge Protective Device(SPD)	ETH-SP-G2	23054110082	01	Koteshwar VTS Station
			Surge Protective Device(SPD)	ETH-SP-G2	23054110423	01	
			LANCable	CAT-6	-	91 Mtr	
8	Koteshwar VTSStation	07/09/2023	AirFiberMW Link	AF-5U	74ACB96F1151	01	Koteshwar VTS Station towards Harudi Repeater Stationtowards
			PowerOver Ethernet(POE)	-	2127-0000837	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110028	01	
			Surge Protective Device(SPD)	ETH-SP-G2	23054110070	01	
			LANCable	CAT-6	-	36Mtr	

Server Room Equipment Details –All the VTS servers are operational. The servers are placed at MCC Kandla and the server room is earmarked. The main equipments in the server room are outlined below.

S. No.	Equipment name	Make	Model	Date of Installation
1	C-Scop-Server-01	HPE	HPE ProLiant DL380 Gen10 Server	20-12-2019
2	C-Scop-Server-02	HPE	HPE ProLiant DL380 Gen10 Server	20-12-2019
3	VHF Server -01	HPE	HPE ProLiant DL20Gen10	20-12-2019
4	VHF Server -02	HPE	HPE ProLiant DL20Gen10	20-12-2019
5	Web Server	HPE	ILO	20-12-2019

6	CISCO Switch	CISCO	Catalyst 2960 Series	20-12-2019
7	Rack Manager	HPE	HPE LCD 8500	20-12-2019
8	KVM Switch	ATEN	CS1308	20-12-2019

VTS Software: VTS GoK is using C-scope VTS software, Kongsberg make. The software is operational. There are many other subsystem soft wares for each sub system and integrated.

SL No	Software	Name of the Software Provider
1	C-SCOPE Extractor/ Tracker	Kongsberg
2	VTS Control SW	Kongsberg
3	AIS software	Kongsberg
4	CSLR (C-SCOP Logger and Replay)	Kongsberg
5	PMIS (CSMI)	Kongsberg

Air Conditioner equipment: Air conditioners are installed at all VTS stations as per the details mentioned below:

Sr No	Name of the Station	Capacity of AC	Quantity	Year of installation and Make
01	MCC Kandla server and UPS Room	1.5 ton	05	2012/2020/2025, Blue star/Videocon/ LG/ Voltas etc.
02	MCC kandla VTS Equipment Room	1.5 Ton	03	
03	MCC Kandla ops Room	2 Ton	03	
04	Okha VTS station	1.5 Ton	03	
05	Chudeshwar VTS station	1.5 Ton	03	
06	Balachadi VTS station	1.5 Ton	03	
07	Bhadreshwar Repeater Station	1.5 Ton	03	
08	Navinal VTS station	1.5 Ton	03	
09	Mandvi VTS station	1.5 Ton	03	
10	Chhachhi VTS station	1.5 Ton	03	
11	Vanku Repeater station	1.5 Ton	03	
12	Jakhau VTS station	1.5 Ton	03	
13	Harudi repeater Station	1.5 Ton	03	
14	Koteshwar VTS Station	1.5 Ton	03	

DG set: All the VTS radar stations and Repeater stations are provided with 02 each Diesel generators of various capacities. All the DG sets are operational. The details are mentioned below:

Sr No	Name of the Station	Capacity of DG Set	Quantity	Year of installation and make
01	MCC Kandla	160 KVA	02	2012 , Kirlosker
02	Okha VTS station	50 KVA	02	
03	Chudeshwar VTS station	40 KVA	02	
04	Balachadi VTS station	50 KVA	02	
05	Bhadreshwar Repeater Station	30KVA	02	
06	Koteshwar VTS Station	40 KVA	02	
07	Mandvi VTS station	40 KVA	02	
08	Chhachhi VTS station	40 KVA	02	
09	Vanku Repeater station	15 KVA	02	
10	Jakhau VTS station	50 KVA	02	
11	Harudi repeater Station	15 KVA	02	
12	Navinal VTS Station	125 KVA	01	2014, Sudhir
		62.5 KVA	01	2017, Kirloskar

6.32 The availability of VTS system including data and communication system must be maintained > 99%.

6.33 Software Technical Specifications:

The present VTS software is C-scope VTS software, which need to maintained alongwith all updates. In case bidder wish to change the present VTS software, same shall be done without any extra cost. The replaced software shall have same or better capability than the existing VTS software. Present VTS software is IVEF complaint, have the capability of standard VTMS software features alongwith the additional features for efficient VTS operation, same need to be incorporated. **In case any bidder intends to replace the present VTS C-scope software, then the proposed software should be matured one i.e. should have been used for more than 3 years in any VTS centre anywhere in the world and a satisfactory report from the customer/user shall be submitted Also the bidder has to demonstrate for all the features of proposed VTS Software after opening of the technical bid within 02 days at a suitable feasible place as agreed by both the parties (the bidder and this Directorate),failing to demonstrate the features, the bid shall not be considered for further evaluation.** Following features should be provided along with standard VTS software:

6.33.1 Chart View: Any number of Chart Views should be able to display at once, at any range, and at any chart position. Chart views should be highly configurable and should be able to save to show or hide any of the features such as the View Control Area, Notifications Area, Ribbon Buttons, Status bar etc.

6.33.2 It must have 3D Perspective View of the real-time VTS Traffic Image. 3D Perspective View must be displayable at any range and at any chart position. The Operators must be able to control the 3D Perspective View's pitch, latitude, longitude, yaw, and field of view with keyboard and/or mouse functions.

6.33.3 The access of VTS software with password to be given to the representative of Employer and the serviceability of each equipment to be checked by the employer through either Software or physically at site. The decision of employer on serviceability shall be final.

6.33.4 Auto follow: Any Chart View or 3D View should be able to be commanded to auto follow a track. When auto follow is engaged for a specific track, that track should remain in the centre of the view until auto follow is disengaged or the track is lost.

6.33.5 OpenGL graphics: Chart Views and 3D Views should be visualised in operating console using OpenGL, the industrial standard and most widely used and supported 2D and 3D graphics application programming interface (API). As the OpenGL benefits operating console with stable, high quality, and high performance graphics for rendering and visualising charts, video, tracks, and 3D models.

6.33.6 Operator Client shall have a generic search feature that will search for any vessel name, call sign, MMSI, geo locations (place names, chart objects etc).

6.33.7 Chart Feature View Classes: Electronic navigation charts should contain a large amount of data. In order to limit the amount of information the operator must process, and in order to present an uncluttered traffic situation, the system administrator should able to select chart features and information and organize these into View Classes. Any number of View Classes should be able to created, showing varying combinations of chart data. Operators should be able to easily apply another View Class to a Chart View.

6.33.8 Operator Client shall be OGC compliant and be able to request web maps from WMS and WMTS servers.

6.33.9 Operator Client shall be able to display: Raster Maps and Images, Vector Maps and Overlays, Performance optimized for location and scale, ESRI, S52/S57/S63.

6.33.10 Operator Client shall be able to export draw objects to ESRI Shape files and KML.

6.33.11 Radar Video: The radar video presented in the Operator Client should be digitised radar information that has been further processed to the Web Map Service (WMS) format by the Radar Video Server. The process should allow for distribution of the radar video over a large area with minimal bandwidth. In addition, the WMS format should allow operators to make adjustments to clutter settings and opacity without affecting other clients. Minimum 100 simultaneous radar video sources should be able to be displayed in a single Chart view. Radar returns should be visualised as clusters of filled, coloured polygons or fragments. The fill colour depends on both the intensity and the age of the digital video fragment. The radar image is redrawn once every scan. The video intensity should be indicated using a set of colours combined with decreasing opacity to visualise intensity levels. The afterglow should be realised using another set of colours and opacity levels, thus providing the possibility for a very smooth and at the same time dynamic presentation. When an echo has more than one radar video source, Operating Console should always display the radar with the highest quality signal at a higher opacity level than the weaker echo, which should results in a cleaner, more easily understood radar video presentation.

6.33.12 Metrological and hydrological readings shall be superimposed on top of chart in the Operator Client with the option to open a permanent view that displays sensor readings in gauges or text.

6.33.13 Responsibility Areas: Each Operating Console should be able to configure to cover a specific responsibility area – a unique geographical area in which a single operator is responsible for total traffic surveillance. The assignment of responsibility areas should ensure that one operator is given exclusive responsibility for the area. Only tracks inside an operator's responsibility area give visual and/or audio alerts, and operators should be able to give assignments and acknowledge warnings only for tracks within their specific responsibility area.

6.33.14 It shall be possible for the operator to retain historical positions for selected tracks for at least 30 days without switching to replay mode. Each historical trajectory shall have a unique colour in order to separate the individual historical trajectories. This is important for route management. It will also be helpful to decide TSS & TOS.

6.33.15 It should be possible for an operator to link any drawn objects or vessels with a Standard Operating Procedure (SOP). Either as a path to a local document or an URL to a remote location. This feature gives automatic information to operator whether the vessel is following SOP or not.

6.33.16 Track symbol: The track symbol should be able to differentiate depending on the track data source. AIS and/or info-linked tracks should be able to shown with a unique symbol, while tracks from other sources should be able to visualised with another.

6.33.17 System load: the number of tracks in the system. View load: the number of tracks in a single view. Criteria: includes identity, call sign, MMSI, vessel type, size, speed, acquire type, static, voyage, AIS and management information system data. A Track Portrayal Group should be able to display track labels with name, call sign, and speed at arrange scale of 0-5 nm but show only the name at 5-15 nm range scale for moving tracks and show no labels above 15 nm, with reduced symbol size. Alternatively, operating console should be configurable to hide labels and reduce symbol size when tracks in a Chart View exceed a specified number, with the exception of vessels carrying hazardous cargo or high-speed craft, which are presented with a red label.

6.33.17.1 Track Portrayal –Events: Track hover: Track presentation should be able to change when the mouse hovers over the track. Colour changes and additional information such as history, heading vector, rate of turn vector displayed are possible configurations. Track select: The presentation of a track that is selected should also be configurable. Additional label data should be able to displayed, a box, circle, or triangle should be able to appear around the symbol, and colours should be able to change as well.

6.33.17.2 Track Portrayal – User Portrayals: With User Portrayals, operators should be able to make exceptions to the applied Data Portrayal for individual tracks or tracks that reside in a defined geographical area. This allows the operator to view more data about a specific track, such as more data in the label or head and rate of turn vectors, as well as make the track more prominent, with a red label and vector, for example. These user portrayals should be able to switch on/off with one mouse click.

6.33.17.3 It shall be possible for an operator to create and save customised dynamic track lists. Track list shall be based on any track properties (static and dynamic. E.g: Name, speed, dimensions).

6.33.17.4 It shall also be possible to use geo filter for the track list so that only vessel inside are listed.

6.33.17.5 The system shall be able to support creation of route mesh. The route mesh will indicate possible routes to destinations and their waypoints.

6.33.17.6 It shall be possible to assign vessels to destination and the system shall calculate ETA's for the route.

6.33.17.7 It shall be possible to visualise vessels assigned routes with unique colours.

6.33.17.8 Route mesh shall support "Congestion Monitoring" for specific route waypoints or destinations.

6.33.17.9 System should also support receiving common route exchange format, IEC 61174

6.33.17.10 Reports and Statistics: Operating console should be able to set up with links to reports and statistics generated by vessel movement and information received. When configured, reports should be easily generated and should be able to exported to a number of formats, including MS Word and PDF. Any data collected by operating console should be able to presented in a report. Typical reports include: Crossing (Reporting line). Violations (speed, course, etc). Congestion incidents inside a specified area (number of vessels inside area).

6.33.17.11 Analysis: Specialist concerned with traffic analysis and planning should be able to generate static and dynamic heat maps form a traffic analysis tool. This tool should support filtering of vessel types and other static and dynamic vessel particulars.

6.33.17.12 Web Client: System shall offer a lean version of the operator console through a Web Server. The Web client shall display integrated system tracks (AIS and Radar) and radar video. Web client shall support display of S57 charts and other raster and vector charts both on-line (internet) or off-line (on premises).

6.33.17.13 System shall contain an "on-premises" WMTS module for distribution of own offline vector and raster imagery assets.

6.33.17.14 System shall contain a simulator module. The simulator module shall be fully integrated and utilise "live" operator clients. This feature is very essential for (OJT) on job training. The simulator instructor shall create scenarios by defining vessels and their routes, as well as other assets, such as buoys, SAR assets, etc. The scenarios can be stored, recalled and edited, allowing the instructor to build a library of simulations. A VTS system will run in the simulator environment and provide all the services of a live VTS system, including track integration, track alerts, recording and replay, route management, and others. The simulator shall be able to take a recording from live system and convert it to a simulation scenario.

6.33.17.15 Radar Tracking Masks: Within operating console a selection of masks should be able to define to facilitate the efficient handling of radar video and tracks. The masks should determine how radar echo returns within a geographical area. The processing modes of the different masks and areas should be land mask where digital video is suppressed. No track detection or tracking. Exception: Overlapping shadow area. Littoral mask digital video should

generate No track detection or tracking. Auto-acquire mask digital video should generate track detection and tracking.

6.33.17.16 Track Warnings: The software should continuously check tracks against a wide range of pre-defined warning criteria. If a track violates one of the warning criteria, a track warning should be reported. All track warnings should distributed to all operating console, unless Responsibility Areas is configured and applied, in which case warnings are given only for tracks inside an operator's responsibility area. For tracks outside a workstation's responsibility area, a warning should not be given, but the warning indication should be available in the Track Data dialog.

6.33.17.17 Collision warnings shall be dynamically escalating and shall graphically display vessels involved in the close quarter situation and be colour coded to represent the TCPA escalation.

6.33.17.18 The Track Warning server shall have a rule builder in order to create warning criteria's. The rule-builder shall support criteria's based on:

- Track Static properties
- Track Kinematics
- Geographical areas (Approaching, Entering, Inside, Leaving)

6.33.17.18.1 The Track Warning server shall detect anomalies with respect to potential collision or close quarter situation based on historical and current traffic patterns.

6.33.17.18.2 The Track Warning server shall also include vessel intended route (either received or route mesh assignment) as part of the collision prediction calculation.

6.33.17.18.3 The Track Warning server shall have means to configure additional transmission of critical warnings as Email and/or DSC message.

6.33.17.18.4 Track Assignments must be there in the system for individual tracks so that operators can gain information and assist in decision support. Track assignments should be associated with one or more track warnings.

6.33.17.18.5 It shall be possible to categorize track warnings in at least 10 different configurable categories, each with a unique alert sound and colour coding.

6.33.17.18.6 The operator shall be able to tag and track as a "Vessel of Interest" (VoI). VoI shall be configurable.

6.33.17.18.7 The Track Warning server shall support automatic assignments if certain track or area related properties are fulfilled.

6.33.17.18.8 The Conflict Warning List may display all the potential conflicts for a single selected track. The conflict list must calculate conflicts dynamically, updating as new conflicts emerge and existing conflicts cease.

6.33.17.18.9 Track details dialog is the primary source of track data for the operator.

6.33.17.18.10 Track Details front page shall be configurable in terms of what information to be displayed.

6.33.17.18.11 It shall be possible to tag a track with a note that can either be shared amongst all Clients or only locally.

6.33.17.18.12 It shall be possible to give a track an alternative (local) name in addition to received AIS name. It shall be possible to display both AIS and local name on a tracks label. The system must be capable of providing multiple system warning to alert operators of errors and inconsistencies in the physical computers, connections, network, sensors, and other equipment in the system. Errors and potential errors detected in the system should be presented in a hierarchical list in the system warning dialog.

6.33.17.18.13 The Audit feature should show which operator has acknowledge the warning and what action has been taken when warning was received.

6.33.17.18.14 The operator should be able to declare as many AtoNs are necessary which should be able to visualize by the ships on their AIS ENC chart, which are in VTS area.

6.33.17.18.15 The software should be ready to integrate with any other VTMS software through IVEF protocol to become a part of future NCVTS. No extra cost shall be paid for such integration.

6.33.17.18.16 The software shall track the moving target of interest and provide the guideline to another intercepting vessel, the shortest path, speed, direction etc. and predict the place and time of interception during S&R operation. This feature is very useful when VTS GoK is taking part in Sagar Kavach exercise conducted by ICG and real-time emergency situation.

6.33.17.18.17 The real-time webcasting with all features and specifications of VTMS software, including radar video should be receivable on Laptop/ iPad or iPhone for the facility of remote monitoring by Pilots, Managers and key decision makers.

6.34 **Statistical Data, Reports and MIS software features and specifications:**

6.34.1 Real-time track data from the VTMS shall be utilised to generate inside/outside area events and to log vessel position, speed and course as part of events, e.g. vessel incidents and contraventions, in the MIS.

6.34.2 Data elements from the MIS shall be available in the VTMS for use in track portrayals, in track alert criteria and in general track data display.

6.34.3 From the MIS, the user may select a voyage/vessel and request to see its current vessel position in a chart view in the VTMS.

6.34.4 From the VTMS, the user may select a vessel and request to see the MIS details for this vessel. The MIS details are typically related to its planned or current voyage.

6.34.5 From the VTMS, the user may select a vessel and request to create a ship report (e.g. according to a mandatory ship reporting system) or to create a new incident management session in the MIS.

6.34.6 The MIS shall support the manual creation of a voyage for a vessel. The voyage data shall include a departure location and destination location, with ETD and/or ETA.

6.34.7 It shall be possible to add or amend data elements on a voyage, including cargo elements, actual draught, crew and number of passengers.

6.34.8 The MIS shall support the action of granting clearance for a voyage, with an optional route selection.

6.34.9 The MIS shall support the grouping of voyages into planned, clearance required and cleared voyages. A planned voyage shall automatically be moved from the planned group to the clearance required group when the vessel approaches the VTS area or starts moving from a port or other departure location.

6.34.10 The MIS shall provide an overview of planned and ongoing voyages in a geographical area, both through a grouped list view and through a timeline view.

6.34.11 The MIS shall support efficient registration of a ship report for a vessel that enters a geographical area where a mandatory (or voluntary) ship reporting system (SRS) is applicable A ship report shall be associated with a voyage.

6.34.12 It shall be possible to see previous ship reports through a filtered search.

6.34.13 The MIS shall support the registration of a Situation, which can be a type of incident, contravention or other types of events.

6.34.14 In the case of an incident, the MIS shall support the user through a pre-defined checklist. There shall be a dedicated checklist for each type of incident (drifting, grounding, collision, etc.).

6.34.15 It shall be possible to associate objects to a registered situation, such as images, traffic replays, emails and remarks.

6.34.16 It shall be possible to see previous situations through a filtered search.

6.34.17 Any change made by a user through an MIS client, such as creation of a new voyage, a new situation or amending the actual draught, shall be reflected on all MIS clients without a need for manual refresh actions.

6.34.18 The MIS shall support the generation of various types of reports, including daily traffic report, situation report and duty watch report, cargo wise report, port wise report, ship wise report, agent wise report, charterer wise report, ship flag wise report, ship owner wise report, etc.

6.34.19 The MIS shall support sending reports by email based on pre-configured email address lists.

6.34.20 The MIS shall display ETA and ETD of ships entering and departing from GoK, showing time, name of ship, type of ship, name of cargo, name of port, berth number etc. The display should be placed in control room at Kandla.

6.35 The bidder has to ensure the data security and adhere to all the guidelines of the cybersecurity. The bidder shall offer a complete digital platform protected by the highest level of cybersecurity and a strict application certification process for all third-party services and applications.

6.36 **Training on VTS operation and software:** The bidder shall provide one week of training if felt necessary at MCC Kandla for ten (10) officials nominated by this Directorate. The training shall cover the features of the VTS core equipment, including both hardware and software components.

6.36.1 The bidder shall arrange a qualified trainer and bear all expenses related to the trainer's travel, food, and accommodation.

6.36.2 Logistical arrangements for the trainees shall be made by this Directorate.

6.36.3 The training shall be completed within the first quarter from the date of award of the contract. In case of failure to comply, subsequent invoices shall not be processed for payment.

Dy. Director General
For and on behalf of the President of India

Section–VII

EVALUATION CRITERIA OF BIDS

7.1 Technical Evaluation:

The bids shall be evaluated both technically and financially by a duly constituted Committee. It is mandatory for all bidders to submit complete documents pertaining to the eligibility criteria and technical evaluation requirements. Only those bidders who submit all eligibility criteria documents and secure a minimum of 60% marks in the technical evaluation shall be considered technically qualified. The technical evaluation criteria is mentioned below:

Sr. No.	List of Documents	Evaluation Criteria	Name of Agency			
			1	2	3	4
			Marks	Marks	Marks	Marks
A	Financial capability-**15 Marks**					
(i)	Average annual turnover - **10 Marks**	60% marks for minimum eligibility criteria				
		100% marks for twice the minimum eligibility criteria or more				
		in between (i) & (ii) - on pro -rata basis				
(ii)	Solvency Certificate – **5Marks**					
B	Experience in similar class of works – **65 Marks**					
		60% marks for minimum eligibility criteria				
		100% marks for twice the minimum eligibility criteria or more				
		in between (i) & (ii) - on pro -rata basis				
C	Performance of works (Quality) - **20 Marks**					
(i)	Outstanding	**20 Marks**				
(ii)	Very Good	15 Marks				
(iii)	Satisfactory	10 Marks				
(IV)	Fair /or no remark	5 Marks				
(v)	Poor	0 Mark				
		Total Marks				

- *Minimum marks required to be qualified for the bid: 60 Marks*

- In case of any ambiguity/deficiency of documents, the decision of Deputy Director General shall

be final and biding on the bidder.

- If the present performance of the bidder in a current contract for any major work is unsatisfactory as certified by the any authority of the relevant work, the offer of the bidder will be summarily rejected without assigning any reasons thereof.
- If a bid is not substantially responsive, not meeting eligibility criteria Clause 1 of the ATC, it will be rejected by the Deputy Director General-VTS
- The Deputy Director General-VTS will determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the tender document. For the purposes of determination, a substantially responsive bid is one that conforms to all the terms, conditions & specifications of the tender document without any deviations, objections, conditionality or reservation.

7.2 Financial Evaluation :

The Financial bids of only those bidders shall be opened who qualify technically. Once technically qualified, the bidders shall be informed about opening of the financial bids on CPP portal. Based on Financial bid Price, L1 bidder will be decided.

- In the event that two (02) bidders quote the same rate, the bidder securing higher marks in the technical evaluation shall be declared L1.

- In case the technical evaluation scores are also equal, the bidder having a higher turnover shall be declared L1.

- The rates shall be quoted in Indian Currency only and if quoted in other currency, the offer will be rejected.

- Conditional offers shall not be accepted and if found the bid shall be outrightly rejected.

- The Deputy Director General-VTS does not bind himself to accept the lowest or any bid. He is free to reject any or all of the bids received without assigning any reason. He also reserves right for himself of accepting the whole or any part of the bid and bidder shall be bound to perform the same at the rate quoted. All bids in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected. Also, conditional bids will be summarily rejected. Canvassing in any form is strictly prohibited and the bids submitted by the contractor who resort to any form of canvassing shall be summarily rejected.

- Any effort by a bidder to influence the Deputy Director General-VTS in the process of examination, clarification, evaluation, and in decisions concerning award of contract, may result in rejection of the bidder's tender.

Dy. Director General
For and on behalf of the President of India

SECTION –VIII

BILL OF QUANTITY

Tender Inviting Authority: Deputy Director General, VTS Directorate, Directorate of Lighthouses and Lightships, Gandhidham

Name of Work: Providing Comprehensive Annual Comprehensive maintenance (CAMC) service to VTS GoK for 01 year from 16.04.2026 to 15.04.2027

Bidder's Name:

PRICE SCHEDULE

Sl. No.	Item Description	Unit	Qty	Rate including GST and all taxes (₹)	Total Amount including GST and all taxes (₹)
1.	VTS C-scope servers (having the capability of Central Operating Processor, Data Base Server, Central Storage Processor, Storage Area Network server, video distributor) and associated equipment at MCC Kandla	Each	02		
2.	VHF servers at MCC Kandla	Each	02		
3.	Web server system providing VTS feed to 20 no. users at MCC Kandla	Each	01		

4.	VTS Operator consoles at MCC Kandla (05 in operation room, 02 in server room and 01 in conference room), PMS Kandla, Navlakhi, Rozi, Sikka, Vadinar, Okha , Monitoring stations at ICG Jakhau, Okha, Indian Navy Okha (01 each) including monitors, softwares and all associated VTS equipments.	Each	17		
5.	VoIP VHF consoles at MCC Kandla (05) and 01 each in 06 PMS at Kandla, Navlakhi, Rozi, Sikka, Vadinar and Okha	Each	11		
6.	VoIP VHF radios including all associated equipments installed at VTS and PMS stations	Each	27		
7.	X-band radars including all associated equipment at Koteshwar, Jakhau, Chhachhi, Mandvi, Navinal, Kandla, Balachadi, Chudeshwar and Okha	Each	09		
8.	S-band radars at Okha and Jakhau including all associated equipments	Each	02		
9.	Dual duplex microwave links between all VTS stations	Each	30		
10.	Point to point short range license free microwave links for PMS Kandla and Okha, ICG monitoring station Okha and Jakhau, Indian Navy monitoring station Okha	Each	05		

11.	AIS base Station along with antenna, control unit, display interface unit and associated equipment at Kandla,Navinal, Chhachhi, Jakhau, Sikka and Okha.	Each	06		
12.	Meteo sensor at MCC Kandla, Navlakhi, Rozi, Sikka, Vadinar and Okha	Each	06		
13.	DG sets of various capacities (02 nos. 160 KVA at MCC Kandla, 125 KVA and 62.5 KVA at Navinal, 02 nos. 40KVA each at station Mandvi, Chhachhi, Koteshwar, Chudeshwar, 02 nos. each 50 KVA gensets at Balachadi, Jakhau and Okha, 02 nos. 30 KVA Gensets Bhadreshwar, 02 nos. each 15 KVA gensets at Vanku and Harudi) alongwith AMF panel at all stations	Each	24		
14.	Radio Direction finders with associated equipment at Okha and Jakhau	Each	02		
15.	1.5/ 2 Ton Air Conditioners in the VTS MCC Operation room, server room, all VTS radar stations tower equipment room and VTS Repeater station equipment rooms	Each	44		
16.	15 KVA UPS with batteries at all radar stations (01 each at each radar stations 02 at MCC Server room)	Each	11		
17.	6 KVA UPS with batteries at, Navlakhi, Rozi, Sikka, Okha PMS, ICG Monitoring station Jakhau	Each	05		

18.	3 KVA UPS with batteries at VTS Repeater stations Harudi, Vanku and Bhadreshwar, Vadinar, Kandla PMS, ICG Monitoring station Okha, Indian Navy Okha	Each	07		
19.	Lightening conductors at all VTS radar station and repeater stations	Each	12		
20.	ENC chart updation for MCC Kandla and all Port monitoring and other associated monitoring stations weekly/ monthly/quarterly basis as per updates.	Job	1		

Dy. Director General
For and on behalf of the President of India

Annexure-I

Proforma for Not-Black listing
Non-Blacklisting declaration
(*On non Judicial stamp paper***)**

Date:

To

_____
_____
_____
_____ _____

Sub: Declaration for Non-Blacklisting

Tender Reference No:

Name of Tender / Work: -

_____
_____

Dear Sir,
We hereby declare that we are not blacklisted by any Central/ State Government/ agency of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities.

Yours faithfully,

(Signature of the Bidder with Official Seal)

Annexure-II

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:____/____/_____

To

_____
_____
_____
_____

Sub: Acceptance of Terms & Conditions of Tender.
Tender Reference No:_____
Name of Tender/Work:-_____
_____
_____
_____

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the website(s) namely: _____as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. In case any provisions of this tender are found violated , then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.
6. As per the Bill of Quantities (BOQ), the work includes Repair and Maintenance of VTS Equipment installed at at 50/60mtr tower therefore It is expressly stated and agreed that under no circumstances shall the Deputy Director General, or any officer/official of the Directorate, be held liable or accountable for any accident, injury, loss of life, or damage to property arising out of, or in connection with, the execution of the said work. The entire risk, responsibility, and liability in this regard shall rest solely with the Contractor, who shall fully indemnify and hold harmless the Directorate and its officials against any claims, damages, costs, or compensation whatsoever

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Annexure-III

UNDERTAKING

(To be given on Company Letter Head)

Date:____/____/_____

To

_____
_____
_____
_____

Tender Reference No:_____

Name of Tender/Work:- Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027

We…… (Name of the Bidder) have thoroughly analysed/ properly assessed the work requirement and are completely aware of the site condition/all VTS Equipment/ VTS software and hardware requirement/ as mentioned in Tender Document. The quote offered is inclusive of all components completion of work in full in due consideration to site conditions. We will not claim any additional amount/cost apart from Tendered Amount/Contract Amount, under whatsoever condition, during or after CAMC period related to this work.

Yours Faithfully,

Date: (Signature of the Bidder, with Official Seal)
Place:

Annexure-IV

UNDERTAKING FOR CONFIDENTIALITY

(To be given on Company Letter Head)

Date:____/____/_____

To

_____
_____
_____
_____

Tender Reference No:_____

Name of Tender/Work:- Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027

We----------(name of the bidder) have thoroughly analyzed/ and are aware of the sensitivity of the information of VTS GOK, We further undertake and declare that we shall be responsible for data safety of VTS database. We shall take all necessary steps to safeguard the privacy and confidentiality in all respect and no person acting on our behalf or ourselves divulge or disclose or use or disseminate VTS data including giving access of VTS GOK system to any third party including Foreign Joint Venture partner/OEM (if any) without the written consent of Dy DG VTS.

Yours Faithfully,

Date: (Signature of the Bidder, with Official Seal)
Place:

Annexure-V

ELIGIBILITY COMPLIANCE SHEET

(To be submitted along with Technical Bid)

Date:____/____/_____

To

_____
_____
_____
_____

Tender Reference No:_____

Name of Tender/Work:- Providing Comprehensive Annual maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027.

S.No.	Attribute	Information to be filled by Bidder
1.	GST Registration no.	
2.	Whether the bidder is original software developer of existing VTS software of VTS GoK (Yes/ No)	
3.	If the answer to S.No.2 is 'No', then whether the joint venture partnership with original software developer is available (Yes/ No)	
4.	Whether authorization from Terma AS, Denmark stating that they shall provide repair and spares support to bidder in India is submitted (Yes/ No)	
5.	Whether work completion certificates submitted (Yes/ No)	
6.	Whether Affidavit on non-judicial stamp paper duly notarized in respect of information regarding any litigation & blacklisting as per Annexure-I is submitted (Yes/ No)	
7.	Whether EMD submitted (Yes/ No), if NO, the reason to be mentioned	
8.	Whether copies of IT return submitted (Yes/ No)	
9.	Whether undertaking as per Annexure-III and Annexure-IV submitted.	
10.	Whether solvency certificate have been submitted	

Note: The information shall be filled and submitted along with technical bid. The documents mentioned in this annexure are mandatory documents in the absence of which the bids shall not be considered for evaluation.

Yours Faithfully,

Date: (Signature of the Bidder, with Official Seal)
Place:

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S.No.	Tender Clause	Bidder's Query	DGLL reply
1.	Estimated cost: ₹ 91,65,290/- (Including GST and all taxes)	This estimate is very low and therefore we humbly request you to increase the estimate maximum possible.	The cost put to the tender prevails
2.	Clause 3.17: The present VTS software is C-scope VTS software, which need to maintained alongwith all updates. In case bidder wish to change the present VTS software, same shall be done without any extra cost. The replaced software shall have same or better capability than the existing VTS software. Present VTS software is IVEF complaint, have the capability of standard VTMS software features alongwith the additional features for efficient VTS operation, same need to be incorporated. In case any bidder intends to replace the present VTS C-scope software, then the proposed software should be matured one i.e. should have been used for more than 3 years in any VTS centre anywhere in the world and a satisfactory report from the customer/user shall be submitted Also the bidder has to demonstrate for all the features of proposed VTS Software after opening of the technical bid within 02 days at a suitable feasible place as agreed by both the parties (the bidder and this Directorate),failing to demonstrate the features, the bid shall not be considered for further evaluation.	Kindly clarify that to replace the present VTS software, what will be permitted downtime by DGLL as replacing the VTS software shall incur significant downtime.	As per the tender conditions, in the event the bidder proposes to replace the existing VTS software, the bidder shall mandatorily provide a comprehensive demonstration of all features and functionalities of the proposed VTS software after the opening of the technical bid. The proposed software shall be evaluated for functional compliance, compatibility, and performance with the existing system. The permissible downtime for implementation, migration, and commissioning of the new software shall be determined only after successful demonstration and evaluation of the proposed features.
3.	Clause 4.12: Permit/ statuary licenses / clearances / approval: The responsibility of obtaining necessary Permit/ statuary licenses / clearances /approval from designated authority (State Government/ its agencies) will be of the contractor. However necessary administrative	Kindly clarify which type of Permit/ statuary licenses / clearances /approval to be obtained by the contractor	Clause is self Explanatory

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	assistance will be provided by the DDG-VTS.		
4.	Clause 5.33: The repair/restoration may require replacement of spares which may be available or may have to be imported from other places/countries which will take considerable time. Based on the various situations, the maximum time permitted for restoration of the system shall be maintained as follows: (a) If fault can be repaired locally - 72 hours (b) In case of Spare/item are required and to be arranged within India – 07 days (c) In case of Spare/item are required and to be arranged from outside India – 60 days. (The agency has to submit proof for imported item).	We request to increase the troubleshooting and restoration timelines for equipment repair as follows: (a) If fault can be repaired locally - 168 hours (b) In case of Spare/item are required and to be arranged within India – 21 days (c) In case of Spare/item are required and to be arranged from outside India – 90 days. Please allow approximately two (2) months for rectification of Radar antenna and its turning unit which including dismantling, repairing, lowering from tower and re-installation.	(a) If fault can be repaired locally - 96 hours, subject to the condition that the engineer has to move for the site immediately within 12 hours of reporting of fault. (b) In case of Spare/item are required and to be arranged within India – 21 days (c) In case of Spare/item are required and to be arranged from outside India – 90 days (The agency has to submit proof for imported item). Time to repair radar antenna will be considered case to case basis as per the approval of Dy. DG VTS.
5.	Clause 6.4: The CAMC agency shall be capable of integrating the primary and standby leased line internet connections with the web server. The leased line/internet connections shall be provided by this office. The agency shall be responsible for ensuring the continuous operationality and proper functioning of the web server as well as the leased line/internet connections.	We wish to bring to your attention that integration is not possible with existing hardware. Therefore, we request DGLL to provide us new Next Generation Firewall which can handle 2 WAN links on a Active/ Active or Active/ Standby bases.	The Comprehensive Annual Maintenance Contract (CAMC) agency shall be fully responsible for the maintenance, performance, and operational integrity of the entire SVTS system. Accordingly, the contracting agency/bidder shall mandatorily furnish complete technical specifications, including make, model, and detailed configuration, ensuring full compatibility and seamless integration with the existing hardware and software of the SVTS system. The Department shall arrange provisioning strictly based on the specifications submitted by the bidder; The bidder shall ensure Installation,

Pre-bid Replies for the tender of 'Providing Comprehensive Annual Maintenance for VTS Gulf of Kachchh for 01 year from 16.04.202 to 15.04.2027

			integration, testing, and commissioning of the supplied hardware shall be completed within 10 (ten) days from the date of supply or within the stipulated contract period, whichever is earlier.
6	Clause 6.8 : Comprehensive Annual Maintenance Contract (CAMC) for X-band radar systems shall include complete maintenance of all associated equipment, including but not limited to antenna gearbox, radar antenna and its associated assemblies, transceiver units, encoders, magnetron, waveguide switch, C-sets, RSD, monitors, power supply systems, and any other ancillary or supporting radar equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, calibration, testing, fault diagnosis, troubleshooting, repair and/or replacement of defective components, and ensuring continuous, accurate, and reliable radar performance. The bidder shall ensure optimal system functionality and minimum downtime at all times. All consumables, spare parts, accessories, cabling, connectors, and interfacing components required to maintain the radar system in fully operational condition shall be included under the CAMC. Repair and/or replacement of all radar components, whether explicitly listed or not, shall be the responsibility of the CAMC agency. Replacement of the magnetron shall be carried out by the agency. This replacement will be	The SCANTER 2001 X band radar have been in operation for over 15 years, and as you are aware, Terma has discontinued spare support for these models. Given this situation, if a radar becomes non-operational due to unavailability of critical spare, we will be unable to carry out repair. However, considering that DGLL GoK has radar redundancy with two radars at each site, we are confident on maintaining at least one operational radar per site. For the same reason, we request that you do not insist on replacing spares which we utilize for maintenance from your stock. And keep at least one radar operational out of two.	All VTS GoK X-band radars must be operational at all times. The agency is responsible for arranging its own spares to rectify any defects. In extreme critical circumstances and In order to keep all X-band radar stations in operational condition the agency may utilize any four redundant X-band transceivers as spare, during the contract period, with prior permission from this office.

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	under scope of the contract, However such replacement shall be carried out as per the directives of this office. The magnetron shall be supplied by this office however its installation, testing, alignment, and commissioning shall be the responsibility of the agency. The agency shall also be responsible for maintaining system alignment, signal quality, and overall radar performance parameters. Periodic performance verification, preventive maintenance schedules, and submission of detailed maintenance and operational reports to this Directorate shall form part of the scope.		
7	Clause 6.8: Comprehensive Annual Maintenance Contract (CAMC) for S-band radar systems shall include complete maintenance of all associated equipment, including but not limited to antenna gearbox, radar antenna and its associated assemblies, transceiver units, encoders, magnetron, waveguide switch, C-sets, RSD, monitors, power supply systems, and any other ancillary or supporting radar equipment, whether specifically mentioned or not. The scope shall cover preventive maintenance, routine inspection, calibration, testing, fault diagnosis, troubleshooting, repair and/or replacement of defective components, and ensuring continuous, accurate, and reliable radar performance. The bidder shall ensure optimal system functionality and minimum downtime at all times. All consumables, spare parts, accessories, cabling, connectors, and interfacing components required to maintain	The SCANTER 2001 S band radar have been in operation for over 15 years, and as you are aware, Terma has discontinued spare support for these models. Given this situation, if a radar becomes non-operational due to unavailability of critical spare, we will be unable to carry out repair. However, considering that DGLL GoK has radar redundancy with two radars at each site, we are confident on maintaining at least one operational radar per site. For the same reason, we request that you do not insist on replacing spares which we utilize for maintenance from your stock. And keep at least one radar operational out of two.	All VTS GoK S-band radars must be operational at all times. The agency is responsible for arranging its own spares to rectify any defects. In extreme critical circumstances and in order to keep all S-band radar stations in operational condition the agency may utilize any one redundant transceiver as spare, during the contract period, with prior permission from this office.

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	the radar system in fully operational condition shall be included under the CAMC. Repair and/or replacement of all radar components, whether explicitly listed or not, shall be the responsibility of the CAMC agency. Replacement of the magnetron shall be carried out by the agency. This replacement will be under scope of the contract, However such replacement shall be carried out as per the directives of this office. The magnetron shall be supplied by this office however its installation, testing, alignment, and commissioning shall be the responsibility of the agency. The agency shall also be responsible for maintaining system alignment, signal quality, and overall radar performance parameters. Periodic performance verification, preventive maintenance schedules, and submission of detailed maintenance and operational reports to this Directorate shall form part of the scope.		

The Other Terms And condition of the bid Shall remain unchanged

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Deputy Director General

भारत सरकार पत्तन,पोत परिवहन और जलमार्ग मंत्रालय दीपस्तंभ और दीपपोत निदेशालय "दीपभवन "प्लाट नो -:17, सेक्टर - 8" वी .टी .एस .निदेशालय ,गांधीधाम, (गुजरात)-370201		Govt. of India Ministry of Ports, Shipping and Waterways Directorate of Lighthouses & Lightships Deep Bhavan" Plot No. 17 Sectors - 8 V.T.S. Directorate, Gandhidham, (Gujarat)–370201
Email-dydgvts@gmail.com/dte-vts@nic.in		Tele: 02836-299104

संचिका: EMDVTS-02002(01)/1/2020- maintenance **Date: 31.03.2026**

Corrigendum-2

Refer to the tender ID: 2026_DGLL_903345_1 for Providing Comprehensive Annual Maintenance Contract (CAMC) services for VTS Gulf of Kutch for 01 year from 16.04.2026 to 15.04.2027.

The bid submission date has been extended till 06 Apr 2026, 1000 hrs.

All other terms and conditions of the bid remain unchanged.

-Sd-

For Dy. Director General