

Tele: 23385536
Reply should be addressed to
Director (IT)

TATRAKSHAK MUKHYALAYA
Coast Guard Headquarters
National Stadium Complex
New Delhi – 110001

Quoting: CGHQ/IT/ASHA/2018-19

30 May 18

INVITATION OF ONLINE BIDS FOR OPEN TENDER ENQUIRY
NO.CGHO/IT/ASHA/2018-19 DESIGN, DEVELOPMENT, IMPLEMENTATION
AND SUPPORT FOR AUTOMATION OF SERVICE HEALTHCARE
ADMINISTRATION (PROJECT ASHA) - INDIAN COAST GUARD

Dear Sir/Madam

1. **"Online bids" (Under two bid system)** are invited by the **Directorate of IT, Coast Guard Headquarters** for supply of items listed in **Part II** of this RFP. **Manual bids shall not be accepted. Tenders from black listed/ banned firms shall not be accepted. Tender document** can be viewed and downloaded from **Indian Coast Guard web site www.indiancoastguard.gov.in (for reference only)** and **CPPP site <https://eprocure.gov.in/eprocure/app>** as per the schedule given in **CRITICAL DATE SHEET** mentioned below:-

CRITICAL DATE SHEET

SL.	DESCRIPTION	DATE & TIME
(a)	Published Date	30 May 2018 (1300 HRS)
(b)	Bid Document Download / Sale Start Date	30 May 2018 (1310 HRS)
(c)	Clarification Start Date	30 May 2018 (1410 hrs)
(d)	Clarification end date	06 Jun 2018 (1430 hrs)
(e)	Pre-bid meeting	06 Jun 2018 (1430 hrs)
(f)	Bid submission start date	06 Jun 2018 (1530 hrs)
(g)	Bid Document Download / Sale End Date	20 Jun 2018 (1200 hrs)
(h)	Bid Submission End Date	20 Jun 2018 (1300 hrs)
(j)	Technical Bid Opening Date	21 Jun 2018 (1430 hrs)
(k)	Opening of Commercial Bids	Will be intimated in due course after technical evaluation by TEC

2. The address and contact numbers seeking clarifications regarding this RFP are given below:-

The Director General
{for Director (IT)}
Coast Guard Headquarters
National Stadium Complex, New Delhi-110001
Tele: 011-23385536, Fax: 011-23388090
Email:vprotect@indiancoastguard.nic.in

3. This RFP is divided into five Parts as follows:

- a. Part I- Contains General Information and Instructions for the Bidders about the RFP such as the time, place of submission and opening of tenders, Validity period of tenders, etc.
- b. Part II - Contains essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical Specifications, Delivery Period, Mode of Delivery and Consignee details.
- c. Part III - Contains Standard Conditions of RFP, which will form part of the Contract with the successful Bidder.
- d. Part IV - Contains Special Conditions applicable to this RFP and which will also form part of the contract with the successful Bidder.
- e. Part V - Contains Evaluation Criteria and Format for Price Bids.

4. This RFP is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof at any stage. Buyer also reserves the right to withdraw the RFP, should it become necessary at any stage.

5. You are requested to comply with all the terms and condition mentioned in the RFP and certificate in this regard is to be endorsed on the quote submitted by your firm. Relaxation/deviation of terms/conditions if any, should be clearly brought out for consideration, however acceptance of same will solely be at discretion of Coast Guard. Part I, II, III, IV & V of the RFP are enclosed herewith. Abbreviations & Terminologies to be read as per **Appendix-'K'** and general instructions for online bid-submission as per **Appendix-'L'**.

6. Para marked with "Blank" will not be considered as part of RFP. Bid documents may be scanned with **100 dpi with black and white option, in PDF format** which helps in reducing size of the scanned document. **Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>.**

7. Tenderer/Contractor are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e-Procurement at **<https://eprocure.gov.in/eprocure/app>**'.

Yours sincerely,



(D) Dinakaran
Commandant
Joint Director (IT)
for Director General

Enclosures

- (a) **Enclosure-I** : Part I - General Information
- (b) **Enclosure-II** : Part II - Essential Details of Items/ Services Required
- (c) **Enclosure-III** : Part-III - Standard Conditions of RFP
- (d) **Enclosure-IV** : Part-IV - Special Conditions of RFP
- (e) **Appendix-'A'** : Functional Requirements
- (f) **Appendix-'B'** : Non-Functional Requirements
- (g) **Appendix-'C'** : Covering Letter to Bid Submission & Bid Check-off List
- (h) **Appendix-'D'** : Covering Letter to Technical Bid
- (j) **Appendix-'E'** : Technical Bid Compliance Sheet
- (k) **Appendix-'F'** : Covering Letter to Commercial Bid
- (l) **Appendix-'G'** : QCBS Method
- (m) **Appendix-'H'** : Commercial Bid Format
- (n) **Appendix- 'J'** : Proof-of-Concept Test
- (p) **Appendix- 'K'** : Proforma for Bidder profile
- (q) **Appendix- 'L'** : Check-off list for ICG SIMHA platform compatibility
- (s) **Appendix- 'M'** : Instructions for Online Bidders
- (r) **Appendix- 'N'** : Abbreviations & Terminologies

PART I – GENERAL INFORMATION

1. Last date and time for depositing the Bids: As per critical date sheet.

The online Bids (both technical and Commercial, in case two bids are called for) should be uploaded as per this RFP by the due date and time. The responsibility to ensure this lies with the Bidder.

2. Manner of depositing the Bids: Online Bids should be scanned and uploaded before due date and time. Late tenders will not be considered. No responsibility will be taken for technical delay or not uploading of bids or Bid documents. Bids sent by FAX or e-mail will not be considered. Samples and EMD to be deposited manually at address mentioned in para 2 ibid before opening of Technical bid.

3. Time and date for opening of Bids: As per critical date sheet.

(If due to any exigency, the due date for opening of the Bids is declared a closed holiday, the bids will be opened on the next working day at the same time or on any other day/time, as intimated by the buyer).

4. Address for submission of EMD: Directorate of IT, CGHQ

5. Place of opening of the Bids: CGHQ (Directorate of IT).

6. Two-Bid system:

(a) The case is being processed on two-bid system and, the technical bids shall be opened as per critical date sheet mentioned in this tender document. The evaluation of technical Bid based on requisite documents received online by the tenderers will be carried out by a board of officers. The details of firms found compliant after TEC evaluation will be uploaded on the Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>).

(b) The Commercial Bids of only those Bidders whose technical bids meet all the stipulated (Technical) requirements shall be opened. The date of opening will be intimated to the Bidders through Central Public Procurement Portal(<https://eprocure.gov.in/eprocure/app>).

7. Forwarding of Bids – Bids should be prepared, signed, scanned and uploaded by the Bidders on their original memo / letter pad. The copies of PAN No, TIN No, CST & VAT, bank details and other enclosures as per part II of RFP and are to be signed/self attested and scanned with 100 dpi in black and white option in PDF format.

8. Details of Pre-bid Meeting:-As per critical date sheet.

A pre-bid meeting will be held to answer any queries or clarify doubts on RFP and submission of proposals. The authorized representatives are requested to attend. Particulars of personnel (only Indian nationals) attending the pre bid meeting is to be communicated for necessary arrangements at least two days in advance.

9. Clarification regarding contents of the RFP: A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing by the clarifications as per critical date sheet at address at mentioned above.

10. Modification and Withdrawal of Bids: The Bidder may modify (resubmit) his bid online after submission, as per the provisions available on the portal. No bid shall be modified after the deadline for submission of bids.

(a) If bidder desires to withdraw before bid submission closing date/time, he may do so **online** in the portal. EMD (in case) submitted in physical form shall be returned offline. However, the cost of the tender will not be refunded to the firm.

(b) No bid may be withdrawn in the interval between the deadline for submission of bids and expiry of the period of the specified bid validity.

11. Clarification regarding contents of the Bids: During evaluation and comparison of bids, the Buyer may, at its discretion, ask the bidder for clarification of his bid. The request for clarification will be given in writing and no change in prices or substance of the bid will be sought, offered or permitted. No post-bid clarification on the initiative of the bidder will be entertained.

12. Rejection of Bids: Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected.

13. Unwillingness to quote: Bidders unwilling to quote should ensure that intimation to this effect reaches by fax/e-mail before the due date and time of opening of the Bid, failing which the defaulting Bidder may be delisted for the given range of items as mentioned in this RFP.

14. Validity of Bids: The Bids should remain valid for **90 days** from the date of opening of tenders from the last date of submission of the Bids.

15. Earnest Money Deposit: - Bidders are required to submit Earnest Money Deposit (EMD) for amount of Rs **19,51,106.00** (Rupees **Nineteen lakh fifty one thousand one hundred six** only) (Package-A : **Rs 11,01,506.00** and **Package-B : Rs 8,49,600.00**) in favour of "PCDA(N), Mumbai". The EMD may be submitted **"manually"** on or before opening of technical bid in the form of an Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the public sector banks or a private sector bank authorized to conduct government business as per Form DPM-16 (Available in MoD website and can be provided on request). EMD is to remain valid for a period of forty-five days beyond the final bid validity period. EMD of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of the contract. The Bid Security of the successful bidder would be returned, without any interest whatsoever, after the receipt of Performance Security from them as called for in the contract. EMD is not required to be submitted by those Bidders who are registered with the Central Purchase Organization (e.g. DGS&D), National Small Industries Corporation

(NSIC) or any Department of MoD or MoD itself. The EMD will be forfeited if the bidder withdraws or amends impairs or derogates from the tender in any respect within the validity period of their tender. Hard Copy of original instruments in respect cost of earnest money be delivered to the Director General, Coast Guard Headquarters, National Stadium, New Delhi- 110 001 on or before bid opening date/time as mentioned in critical date sheet

PART II – ESSENTIAL DETAILS OF ITEMS/SERVICES REQUIRED

1. Schedule of Requirements – List of items / services required is as follows:-

(a) Design, Development, Implementation and Support for Automation of Service Healthcare Administration (Project ASHA) with warranty of one year including onsite manpower. Warranty to commence from date of final GoLive on delivery of all functional modules. Cost of All Inclusive Annual Maintenance Contract (AIAMC) to be provided separately along with other breakdown cost in commercial bid. Supply, integration and deployment of Zero-touch ROBO dataracks including required software, hardware with 03 years on-site warranty support

(b) Warranty for 03 year for other hardware and software.

(c) **Preliminary Examination of Bids:** - The Buyer will examine the bids to determine whether they are complete, whether the documents have been properly signed, and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the tender, will be rejected by the Buyer and shall not be included for further consideration. Initial Bid scrutiny will be held and bids will be treated as non-responsive, if bids are:

- (i) Not submitted in format as specified in the tender document
- (ii) Received without the Letter of Authorization (Power of Attorney)
- (iii) Found with suppression of details
- (iv) With incomplete information, subjective, conditional offers, and partial offers submitted
- (v) Submitted without the documents requested
- (vi) Non-Compliant to any of the clauses mentioned in the tender
- (vii) With lesser validity period
- (viii) Without EMD

(d) **Prequalification Criteria:**

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
Package-A: Healthcare Software			
(i)	The bidder must be incorporated and registered in India under the Indian Companies Act 1956/ LLP Act 2008 / Partnership Act 1932 and should have been operating for the last five years as on the date of publishing of Tender/ RFP notice (including name change/impact of mergers or acquisitions).	Certificate of Incorporation / Copy of Registration Certificate (s)	

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
(ii)	The Bidding firm must be a positive networth making with annual turn over of minimum of 25 Crores company since the last three financial years: (2017 – 2018, 2016 – 2017 & 2015 – 2016)	Certificate from CA firm / P&L statement and Balance sheet approved by the auditor	
(iii)	<p>1. During last 5 years ending last day of month previous to the one in which applications are invited:-</p> <p>The Bidder must have successfully completed/ongoing three similar contracts of Healthcare Management System (HMS) supply and Implementation within India, each costing not less than the amount equal to Rs. 1 Cr towards Non-COTS development/ HMS COTS licensing</p> <p>(OR)</p> <p>The Bidder must have successfully completed/ongoing atleast one similar Central/State Govt contract of Healthcare Management System (HMS) supply and Implementation within India, completed & currently supporting minimum of 03 similar HMS contracts with Foreign Govts, each costing not less than the amount equal to Rs. 1 Cr & \$ 01 Million respectively towards Non-COTS development/ HMS COTS licensing.</p> <p>2. Reference clients should authenticate & recommend the Bidder through official email within 05 days/as required by ICG, of request email sent by ICG.</p>	<p>Completion certificate (GO-Live / Implementation) with date and</p> <p>1. Work order with order value detailing the scope.</p> <p>(OR)</p> <p>2. Agreement copy defining the scope & value.</p> <p>Also provide client reference detailing Name, Designation, Phone and Email ids.</p>	
(v)	The Bidder should not be blacklisted by Central/ State Government Ministry/ Department/ PSU/Government Company. Bidder also should not be under any legal action for indulging in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice with any Indian Central/ State Government Ministry/Department/ PSU/ Government Company.	Self-declaration from the bidder in company letter head, signed by authorized signatory as per Annexure-XI	

(vi)	The Bidder should have at least 100 technically qualified professionals in area of Healthcare domain (to include at least but not limited to Software architecture, implementation, integration, and service delivery) on its company payroll in India.	Self- certified letter signed by the Authorized signatory / CS.	
(vii)	The Bidder should have ISO 9001:2008/CMMi-3	Valid copy of certificate at the time of bidding.	
(viii)	<p>(i) The Bidder should essentially employ solution architects and QA staff from HMS OEM, for certification on correct implementation at each stage/ level as a part of the team.</p> <p>(ii) The HMS OEM while authorizing a vendor to quote for this project must give an undertaking that in case of any default in execution of this tender by the vendor, the OEM will take all necessary steps for successful execution of this tender.</p>	Undertaking by Bidder and HMS OEM, as applicable.	
(ix)	The Bidder to host and maintain web based detailed project plan in MS Project Server/equivalent including WBS, Resources assigned, Baselines, Critical Path, Stakeholders, Agile sprints, Project Milestones, Activity associated with SDLC till Go-Live and stabilization. The web based project plan should be maintained by on-site project manager/ Medical Consultant duly concurred by off-site project technical. A dedicated login for the Buyer should be provided from the date of signing of contract.	Undertaking by Bidder	
(x)	The Bidder should develop the project based on Agile methodology with clearly elaborated sprints. All customisation related code IPR shall be with ICG. The Bidder should host, maintain web based Application Lifecycle Management (ALM) software JIRA for Agile development Jira with Bit-bucket GIT source code control, Oracle Primavera Project/MS Project Server and provide dedicated access to ICG over internet from the date of signing of contract. The agile development plan, project plan should be concurred by on-site project manager cum on-site Medical consultant at every stage of project development.	Undertaking by Bidder.	

(xi)	Bidder profile attached with Technical Bid	Bidder profile attached as per Appendix-'K'	
(xii)	ICG SIMHA compliance check-off is complied and proforma included	Proforma as per Appendix-'L' attached	
(xiii)	POC demo project document requirements are complied and proforma included	Proforma as per Annexure-1 of Appendix-'J' attached	
Applicable only for HMS COTS Products			
(xiv)	The OEM of the proposed HMS COTS should have at least three (3) certified implementation partners' / system integrators associated with it for minimum last two (2) years and each should have done at least one (1) implementation of the proposed HMS COTS and currently providing support. HMS COTS product is matured for minimum of 10 years and have published roadmap of 03 years. Product to have dedicated support portal with datasheets, user manuals, API manuals, admin manuals, patches etc.	Certification/ Declaration by OEM with the names of the three (3) implementation partners' / system integrators	
(xv)	HMS OEM must be incorporated in India under the Companies Act 2013	Certificate of Incorporation	
(xvi)	Offered HMS product should have at least 10 Operational (as on bid submission date) HMS Application Customers in India/Abroad with at least 300 professional medical users in each project. Out of these, atleast 2 customers shall be in Central/State Govt/PSU	Self-certification/relevant completion documents signed by authorized signatory by board	
(xvii)	Offered HMS Application should be web enabled and based on Oracle database	Self-certification signed by authorized signatory by board	
(xviii)	Offered HMS Application should have localized version to support latest India specific legal requirements on TDS, GST & other taxation accounting, Payroll, GPF, Salary TDS (Form 16 & 24) certificates etc.	Self-certification/ relevant completion documents signed by authorized signatory by board	
(xix)	OEM should have product development and support centre in India	Self-certification and documentary proof	
(xx)	OEM should have SLA based support for various product related issues. The support should be 24x7x365.	Self-certification and documentary proof	

(xxi)	HMS OEM should have at least Three (3) Implementation Partners in India working in Public sector in last 3 years	Self-certification and documentary proof	
(xxii)	Average Annual Turnover of HMS OEM during the last three (3) financial years (FY 15-16, FY 16-17, FY 17-18) as per the balance sheets of INR 100 Cr. or more	Self-certification and documentary proof	

Package-B: Zero-Touch ROBO Datarack			
(i)	The bidder must be incorporated and registered in India under the Indian Companies Act 1956/ LLP Act 2008 / Partnership Act 1932 and should have been operating for the last five years as on the date of publishing of Tender/ RFP notice (including name change/impact of mergers or acquisitions).	Certificate of Incorporation / Copy of Registration Certificate (s)	
(ii)	The Bidding firm must be a positive networth making with annual turn over of minimum of 05 Crores company since the last three financial years: (2017 – 2018, 2016 – 2017 & 2015 – 2016)	Certificate from CA firm / P&L statement and Balance sheet approved by the auditor	
(iii)	The Bidder should not be blacklisted by Central/ State Government Ministry/ Department/ PSU/Government Company. Bidder also should not be under any legal action for indulging in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice with any Indian Central/ State Government Ministry/Department/ PSU/ Government Company.	Self-declaration from the bidder in company letter head, signed by authorized signatory as per Annexure-XI	
(v)	The Bidder should have ISO 9001:2008	Valid copy of certificate at the time of bidding.	
(vi)	Should have atleast 01 Central/ State Govt client with active deployment/support of self-contained dataracks with order worth of minimum of Rs.25 Lakhs	Self-certification and documentary proof. Details of contact official for reference to be provided.	
(vii)	Should have been issued with OEM MAF Certificate specific to Coast Guard project for ROBO data rack, HCI/HCA and SD-WAN Software	OEM MAF Certificates	
(viii)	POC demo project document requirements are complied and proforma included	Proforma as per Annexure-3 of	

		Appendix-'J' attached	
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2. **Technical Details:**

(a) Technical Specifications: - Package-A includes Design, configuration, customization, development, implementation and support for healthcare application using proven and matured COTS (Commercially-Off -The-Shelf) product/ Bespoke Software. Delivery of features shall be on 03 phases with 01st phase generally based on Out-of-the-Box BPM (Business Process Modelling) features of COTS/Bespoke product of about 03 modules and 02nd phase involves Coast Guard specific specification/ customization/ integration/ development of about 03 modules and final 3rd phase includes remaining modules. Package-B includes deployment zero-touch ROBO dataracks with Hyperconverged Infrastructure, Software Defined WAN etc.

- (i) Required healthcare modules for **Package-A** are as following.
 - (aa) Reception registration with facility for remote appointment (FR-01)
 - (ab) Creation & management of EMR/EHR as per international/ GOI standards. (FR-02)
 - (ac) Storage & retrieval of patient vitals (FR-03)
 - (ad) Patient detailed diagnosis, clinical notes, doctor prescription data (FR-04)
 - (ae) Dispensary & medical stores (FR-05)
 - (af) Laboratory and radiological information system (FR-06)
 - (ag) Medical board / medical exam (FR-07)
 - (ah) Station healthcare organisation (SHO) health education system (FR-08)
 - (aj) MI room administration (FR-09)
 - (ak) Maternal and child welfare center/ family welfare center (FR-10)
- (iii) Requirement for **Package-B**, Zero-touch ROBO Datarack and Hyperconverged Infrastructure with SD-WAN. Detailed technical specifications as per **Annexure-1 of Appendix-'B'**.
- (iv) Detailed functional requirements as per **Appendix-'A'**
- (v) Detailed Non-functional technical requirements as per **Appendix-'B'**

(vi) Digitisation of existing and recurring medical documents as per Commercial Bid format in **Appendix-'H'**.

(b) Penalty clause for Service Level Agreement (SLA) violation: -

(i) Vendor to make available online portal on 24x7 basis to raise service tickets by Buyer

(ii) Penalty clauses as per **Annexure-1 of Appendix-'A'**.

3. **Two-Bid System:** - The case is being processed on two-bid system and, only the Technical Bid would be opened online at the time and date mentioned in Critical Date Sheet. Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. **No price should be indicated in the Technical Bid.** Date of opening of the Commercial Bid will be intimated after Technical evaluation. Commercial Online bids of only those firms will be opened; whose Technical bids are found compliant/suitable after Technical evaluation is done by the Buyer. The following documents form part of online technical bid which should be scanned and uploaded in PDF format:-

(a) In respect of Two-bid system, Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. The Bidders are advised to upload technical compliance statement as per Technical Bid format in **Appendix-'E'** alongwith Check-list as per **Appendix - 'C'** as applicable.

(b) Signed and scanned copy of Demand draft/PO in favour of the PCDA(N), Mumbai for EMD amount or Copy of valid registration certificate regarding the firm's registration with DGS & D / NSIC /DefenceOrganisation (MOD) if held, for exemption of EMD. EMD to be submitted **manually** on or before bid submission end date.

(c) Self attested & scanned Copy of (i) bank details (ii) Tin No. Certificate (iii) CST Certificate (iv) VAT Certificate (v) PAN No and (vi) Certificate of acceptance of terms and conditions of RFP.

(d) Detailed breakdown of each item need to be provided as per **Annexure-1 of Appendix-'H'** format. Individual taxes need to be added as separate columns. **L1 shall be decided on overall cost of complete package consists of all bill of material and at base cost.**

(e) Bid should be uploading with covering letters as per **Appendix-'C', 'D' & 'F'** along with checklist in **Appendix-'C'**.

Note :

(i) **Signed & scanned copy of Technical Bids should be uploaded by Bidder under their original memo / letter pad.**

(ii) **Failure to submit any of above documents will render the bid**

invalid

(iii) **Buyers reserve the right to cancel any bid without assigning any reason.**

(iv) **EMD to be submitted manually on or before bid submission end date.**

4. **Delivery Period** –The job is to be completed within **12 months for Package-A & 06 months for Package-B** from the date of issue of job/ work order. Please note that contract can be cancelled unilaterally by the buyer in case the job is not completed within the contracted period. Extension of contracted period will be at the sole discretion of the buyer, with applicability of LD clause.

5. **INCOTERMS for Delivery and Transportation:** - CGHQ, New Delhi.

6. **Consignee details -** **The Director General
{for D(IT)}
National Stadium Complex, New Delhi**

PART III – STANDARD CONDITIONS OF RFP

The Bidder is required to give confirmation of their acceptance of the Standard Conditions of the Request for Proposal mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Seller in the Contract) as selected by the Buyer. Failure to do so may result in rejection of the Bid submitted by the Bidder.

1. **Law:** The Contract shall be considered and made in accordance with the laws of the Republic of India. The contract shall be governed by and interpreted in accordance with the laws of the Republic of India.

2. **Effective Date of the Contract:** The contract shall come into effect on the date of signatures of both the parties on the contract (Effective Date) and shall remain valid until the completion of the obligations of the parties under the contract. The deliveries and supplies and performance of the services shall commence from the effective date of the contract.

3. **Arbitration:** All disputes or differences arising out of or in connection with the contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the contract or relating to construction or performance, which cannot be settled amicably, may be resolved through arbitration. The standard clause of arbitration is as per Forms DPM-7, DPM-8 and DPM-9.

4. **Penalty for use of Undue influence:** The seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the buyer or otherwise in procuring the contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present contract or any other contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present contract or any other contract with the Government of India. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the seller) or the commission of any offers by the seller or anyone employed by him or acting on his behalf, as defined in chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the buyer to cancel the contract and all or any other contracts with the seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the seller. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer/employee of the buyer or to any other person in a position to influence any officer/employee of the buyer for showing any favour in relation to this or any other contract, shall render the seller to such liability/ penalty as the buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the buyer.

5. **Agents / Agency Commission:** -The Seller confirms and declares to the Buyer that the Seller is the original manufacturer of the stores/provider of the services referred to in this Contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the

contract to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable to refund that amount to the Buyer. The Seller will also be debarred from entering into any supply Contract with the Government of India for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such an event be liable to refund all payments made by the Buyer in terms of the Contract along with interest at the rate of 2% per annum above LIBOR rate. The Buyer will also have the right to recover any such amount from any contracts concluded earlier with the Government of India.

6. **Access to Books of Accounts:** - In case it is found to the satisfaction of the Buyer that the Seller has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the Seller, on a specific request of the Buyer, shall provide necessary information/ inspection of the relevant financial documents/information.

7. **Non-disclosure of Contract documents:** - Except with the written consent of the Buyer/ Seller, other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. **Liquidated Damages:** In the event of the seller's failure to submit the Bonds, Guarantees and Documents, supply the stores/goods and conduct trials, installation of equipment, training, etc. as specified in this contract, the buyer may, at his discretion, withhold any payment until the completion of the contract. The buyer may also deduct from the seller as agreed, liquidated damages to the sum of **0.5%** of the contract price of the delayed/undelivered stores/services mentioned above for every **week** of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than **10%** of the value of delayed stores.

9. **Termination of Contract:** The buyer shall have the right to terminate this contract in part or in full in any of the following cases: -

(a) The job is not completed for causes not attributable to Force Majeure for more than (one month) after the scheduled date of completion.

(b) The seller is declared bankrupt or becomes insolvent.

(c) The job is not completed due to causes of Force Majeure by more than (two months) provided Force Majeure clause is included in contract.

(d) The buyer has noticed that the seller has utilised the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.

(e) As per decision of the Arbitration Tribunal.

10. **Notices:** Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/airmail, addressed to the last known address of the party to whom it is sent.

11. **Transfer and Sub-letting:** NA

12. **Patents and other Industrial Property Rights:** NA

13. **Amendments:** No provision of present contract shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this contract and signed on behalf of both the parties and which expressly states to amend the present contract.

14. **Taxes and Duties:**

(a) **In respect of Foreign Bidders:** - N/A

(b) **In respect of Indigenous bidders**

(i) General

1. If bidder desires to ask for GST or any other taxes, the same must be specifically stated. In the absence of any such stipulation, it will be presumed that the prices include all such charges and no claim for the same will be entertained.

2. If reimbursement of any Duty/Tax is intended as extra over the quoted prices, the bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duty/tax will be entertained after the opening of tenders.

3. If a bidder chooses to quote a price inclusive of any duty/tax and does not confirm inclusive of such duty/tax so included is firm and final, he should clearly indicate the rate of such duty/tax and quantum of such duty/tax included in the price. Failure to do so may result in ignoring of such offers summarily.

4. If a bidder is exempted from payment of any duty/tax upto any value of supplies from them, he should clearly state that no such duty/tax will be charged by him up to the limit of exemption which he may have. If any concession is available in regard to rate/quantum of any Duty/tax, it should be brought out clearly. Stipulations like, the said duty/tax was presently not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a bidder that such duty/tax will not be charged by him even if the same becomes applicable later on. In respect of the Bidders, who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of such duty/tax which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders.

5. Any change in any duty/tax upward/downward as a result of any statutory variation in excise taking place within contract terms shall be allowed to the extent of actual quantum of such duty/tax paid by the supplier. Similarly, in case of downward revision in any duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the buyer by the seller. All such adjustments shall

include all reliefs, exemptions, rebates, concession etc. if any obtained by the seller.

(ii) Customs Duty: - As applicable

(iii) Excise Duty: -

1. Where the excise duty is payable on advalorem basis, the Bidder should submit along with the tender, the relevant form and the Manufacturer's price list showing the actual assessable value of the stores as approved by the Excise authorities.

2. Bidders should note that in case any refund of excise duty is granted to them by Excise authorities in respect of Stores supplied under the contract, they will pass on the credit to the Buyer immediately along with a certificate that the credit so passed on relates to the Excise Duty, originally paid for the stores supplied under the contract. In case of their failure to do so, within 10 days of the issue of the excise duty refund orders to them by the Excise Authorities the Buyer would be empowered to deduct a sum equivalent to the amount refunded by the Excise Authorities without any further reference to them from any of their outstanding bills against the contract or any other pending Government Contract and that no disputes on this account would be raised by them.

(iv) GST

If it is desired by the bidder to ask for GST to be paid as extra, the same must be specifically stated. In the absence of any such stipulation in the bid, it will be presumed that the prices quoted by the bidder are inclusive of sales tax and no liability of sales tax will be developed upon the buyer.

(v) Local Taxes/Charges : -

In case where the Municipality or other local body insists upon payment of these duties or taxes the same should be paid by the Seller to avoid delay in supplies and possible demurrage charges. The receipt obtained for such payment should be forwarded to the Buyer without delay together with a copy of the relevant act or bylaws/ notifications of the Municipality of the local body concerned to enable him to take up the question of refund with the concerned bodies if admissible under the said acts or rules.

15. **Pre-Integrity Pact Clause:** - N/A

PART IV – SPECIAL CONDITIONS OF RFP

The Bidder is required to give confirmation of their acceptance of Special Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Seller in the Contract) as selected by the Buyer. Failure to do so may result in rejection of Bid submitted by the Bidder.

1. **Performance Guarantee:**

(a) **Indigenous cases:** The bidder will be required to furnish a Performance Guarantee by way of Bank Guarantee through a public sector bank or a private sector bank authorized to conduct government business (ICICI Bank Ltd., Axis Bank Ltd or HDFC Bank Ltd.) for a sum equal to **10%** of the contract value within 30 days of receipt of the confirmed order. Performance Bank Guarantee should be valid up to 60 days beyond the date of warranty. The specimen of PBG is given in Form DPM-15 (Available in MoD website).

2. **Option Clause:** - The contract will have an Option Clause, wherein the Buyer can exercise an option to procure an additional 50% of the original contracted quantity in accordance with the same terms & conditions of the present contract. This will be applicable within the currency of contract. The Bidder is to confirm the acceptance of the same for inclusion in the contract. It will be entirely the discretion of the Buyer to exercise this option or not.

3. **Repeat Order Clause** – The contract will have a Repeat Order Clause, wherein the Buyer can order upto 50% quantity of the items under the present contract within six months from the date of supply/successful completion of this contract, the cost, terms & conditions remaining the same. The Bidder is to confirm acceptance of this clause. It will be entirely the discretion of the Buyer to place the Repeat order or not.

4. **Tolerance Clause** – To take care of any change in the requirement during the period starting from issue of RFP till placement of the contract, Buyer reserves the right to 100% plus/minus increase or decrease the quantity of the required goods upto that limit without any change in the terms & conditions and prices quoted by the Seller. While awarding the contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

5. **Payment Terms** - It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through ECS/EFT mechanism instead of payment through cheques, wherever feasible. A copy of the model mandate form prescribed by RBI to be submitted by Bidders for receiving payments through ECS is at Form DPM-11 (Available in MoD website). The stage wise payment will be made as per the following terms and production of the requisite documents:

Package-A: Software Development (Item Id A-01 to A-04)

Stage	% of payment	Duration
I	10% cost of Software development	(a) After completion of system requirement study (SRS) and acceptance by ICG. (b) Vendor submission of Design artefacts as per UML standards, detailed project timeline

Stage	% of payment	Duration
		in Oracle Primavera/MS Project, test plan, ICG login on software project ticketing & monitoring portal of Jira, Oracle Primavera/MS Project hosted and acceptance by ICG. (c) On submission of PBG
II	20% cost of Software development	Delivery of 03 of 11 {mutually agreed (Sprint-1)} functional modules and accepted by ICG and delivery of items no A-02
III	20% cost of Software development	Delivery of 03 of 11 {mutually agreed (Sprint-2)} functional modules and accepted by ICG
IV	20% cost of Software development	Delivery of remaining modules on final GoLive of software features (Sprint-3), positioning of support manpower, Digitisation of minimum of 50% of medical records along with medical transcriptions.
V	Remaining 30% cost of the project	After 3 months of successful implementation including availability of ITSM/ALM/Project Management portal, completion of training, submission of source code, manuals, documents as per Appendix-B etc

Package-A: One –Time scanning/Medical Transcriptions/Data entry of medical records, billing on pro-rata basis (Item Id A-05 to A-08)

Stage	% of payment	Duration
I	100% cost of scanning/medical transcription/data entry of medical records	On completion of satisfactory work mentioned against Item No A-05 to A-08 and acceptance by ICG.

Package-B: Zero-touch ROBO Datarack

Stage	% of payment	Duration
I	80% cost of the project	On delivery and ICG acceptance of ROBO datarack, hardware and software to respective ICG sites
II	Remaining 20% cost of the project	On GoLive of entire system at all sites

6. **Payment terms for Foreign Sellers:** - NA

7. **Advance Payments:** No advance payment(s) will be made. Stage wise payment as per para 5 above.

8. **Paying Authority:** CDA(CG), New Delhi.

(a). Indigenous Sellers: (Name and address, contact details). The payment of bills will be made on submission of the following documents by the Seller to the Paying Authority along with the bill:

- i. Ink-signed copy of contingent bill / Seller's bill.
- ii. Ink-signed copy of Commercial invoice / Seller's bill.
- iii. Copy of Supply Order/Contract with U.O. number and date of IFA's concurrence, where required under delegation of powers.
- iv. CRVs in duplicate.
- v. Inspection note.
- vi. Claim for statutory and other levies to be supported with requisite documents / proof of payment such as Excise duty challan, Customs duty clearance certificate, Octroi receipt, proof of payment for EPF/ESIC contribution with nominal roll of beneficiaries, etc as applicable.
- vii. Exemption certificate for Excise duty / Customs duty, if applicable.
- viii. Bank guarantee for advance, if any.
- ix. Guarantee / Warranty certificate.
- x. Performance Bank guarantee / Indemnity bond where applicable.
- xi. DP extension letter with CFA's sanction, U.O. number and date of IFA's concurrence, where required under delegation of powers, indicating whether extension is with or without LD.
- xii. Details for electronic payment viz Account holder's name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code (if these details are not incorporated in supply order/contract).
- xiii. Any other document / certificate that may be provided for in the Supply Order / Contract.
- xiv. User Acceptance.
- xv. Photo copy of PBG.

9. **Fall clause** - The following fall clause will form part of the contract placed on successful bidder -

a. The price charged for the services provided under the contract by the seller shall in no event exceed the lowest prices at which the seller provides service or offer to services of identical description to any persons/Organisation including the purchaser or any department of the Central government or any Department of state government or any statutory undertaking the central or state government as the case may be during the period till jobs as per the orders placed during the currency of the rate contract is completed.

b. If at any time, during the said period the service provider, provides service to any person/organisation including the buyer or any Department of central Govt. or any Department of the State Government or any Statutory undertaking of the Central or state Government as the case may be at a price lower than the price chargeable under the contract, the shall forthwith notify such reduction in service provided to the Director general of Supplies & Disposals and the price payable under the contract for the services of such reduction of service shall stand correspondingly reduced.

c. The seller shall furnish the following certificate to the Paying Authority along with each bill for payment for supplies made against the Rate contract – “We certify that there has been no reduction in services charged to the Government under the contract herein and such services have not been offered/sold by me/us to any person/organisation including the purchaser or any department of Central Government or any Department of a state Government or any Statutory Undertaking of the Central or state Government as the case may be upto the date of bill/the date of completion of job against all orders placed during the currency of the Rate Contract at price lower than the price charged to the government under the contract.

10. **Exchange Rate Variation Clause:** - NA

11. **Risk & Expense clause:** -

(i). Should the software / media stores or any installment thereof not be delivered within the time or times specified in the contract documents, or if defective delivery is made in respect of the stores or any installment thereof, the Buyer shall after granting the Seller 45 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, to declare the contract as cancelled either wholly or to the extent of such default.

(ii). Should the software/media or any installment thereof not perform in accordance with the specifications / parameters provided by the SELLER during the check proof tests to be done in the BUYER's country, the BUYER shall be at liberty, without prejudice to any other remedies for breach of contract, to cancel the contract wholly or to the extent of such default.

(iii). In case of a material breach that was not remedied within 45 days, the BUYER shall, having given the right of first refusal to the SELLER be at liberty to purchase, manufacture, or procure from any other source as he thinks fit, other stores of the same or similar description to make good: -

a. Such default.

b. In the event of the contract being wholly determined the balance of the stores remaining to be delivered thereunder.

(iv). Any excess of the purchase price, cost of manufacturer, or value of any stores procured from any other supplier as the case may be, over the contract price appropriate to such default or balance shall be recoverable from the SELLER. Such recoveries shall not exceed 2% of the value of the contract.”.

12. **Force Majeure clause:** a. Neither party shall bear responsibility for the complete or partial nonperformance of any of its obligations (except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the present contract), if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operation, blockade, Acts or Actions of State Authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present contract.
b. In such circumstances the time stipulated for the performance of an obligation under the present contract is extended correspondingly for the period of time of action of these circumstances and their consequences.
c. The party for which it becomes impossible to meet obligations under this contract due to Force Majeure conditions, is to notify in written form the other party of the beginning and cessation of the above circumstances immediately, but in any case not later than 10 (Ten) days from the moment of their beginning.
d. Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be a sufficient proof of commencement and cessation of the above circumstances.
e. If the impossibility of complete or partial performance of an obligation lasts for more than 6 (six) months, either party hereto reserves the right to terminate the contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.
13. **Buy-Back offer :** - NA
14. **Specification:** - The following Specification clause will form part of the contract placed on successful Bidder –
 - a. The Seller guarantees to meet the specifications as per Part-II of RFP and to incorporate the modifications to the existing design configuration to meet the specific requirement of the Buyer Services as per modifications/requirements recommended after the Maintenance Evaluation Trials. All technical literature and user manuals shall be amended as the modifications by the Seller before supply to the Buyer. The Seller, in consultation with the Buyer, may carry out technical upgradation/alterations in the design, technical literature/user manuals and specifications due to change in manufacturing procedures, indigenization or obsolescence. This will, however, not in any way, adversely affect the end specifications of the equipment. Changes in technical details, repair and maintenance techniques alongwith necessary tools as a result of upgradation/alterations will be provided to the Buyer free of cost within (30) days of affecting such upgradation/alterations.
15. **OEM Certificate:** - Coast Guard specific MAF certificate to be obtained from OEM and submitted as part of technical bid.
16. **Export License:** - NA
17. **Earliest Acceptable Year of Manufacture:** - NA
18. **Buyer Furnished Equipment:** - NA

19. **Transportation:** NA
20. **Air lift:** - NA
21. **Packing and Marking:** - NA
22. **Quality:** The quality of the software with media provided according to the present Contract shall correspond to the technical conditions and standards valid for the deliveries of the same services for in seller's country or specifications enumerated as per RFP and shall also include therein modification to the services suggested by the buyer. Such modifications will be mutually agreed to. The seller confirms that the services to be provided under this Contract shall be latest and shall incorporate all the latest improvements and modifications thereto.
23. **Quality Assurance:** - N/A.
24. **Inspection Authority:** The inspection will be carried out by Directorate of Information Technology on completion of the job. The mode of inspection will be departmental inspection
25. **Pre-Dispatch Inspection:** - NA
26. **Joint Receipt Inspection:** - NA
27. **Franking clause:** - NA
28. **Claims:** - NA
29. **Warranty :-**
 - a. The following Warranty will form part of the contract placed on the successful bidder –
 - i. Except as otherwise provided in the invitation tender, the seller hereby declares that the goods, stores articles sold/supplied / services provided to the Buyer under this contract shall be of the best quality and workmanship and new in all respects and shall be strictly in accordance with the specification and particulars contained/mentioned in contract. The seller hereby guarantees that the said services (including fixing of bugs) would continue to conform to the description and quality aforesaid for a period of **36 months** from the date of provisioning of the said services to the buyer and notwithstanding the fact that the buyer may have inspected and/or approved the said services, if during the aforesaid period of 36/15 months the goods, stores articles sold/supplied are discovered not to conform to the description and quality aforesaid not giving satisfactory performance or have deteriorated, and the decision of the buyer in that behalf shall be final and binding on the seller and the buyer shall be entitled to call upon the seller to provide the entire services or such portion thereof as is found to be defective by the buyer within a reasonable period, or such specified period as may be allowed by the buyer in his discretion on application made thereof by the seller, and in such an event, the above period shall apply to the services provided from the date of rectification mentioned in warranty thereof, otherwise the seller shall pay to the buyer such compensation as may arise by reason of the breach of the warranty therein contained.
 - ii. The seller warrants that the goods/software supplied/installed under the contract conform to technical specifications prescribed and shall perform according to the said technical specifications.

iii. The seller warrants for a period of 36 months from the date of installation and commissioning, that the goods/stores/ software developed and installed/ supplied under the contract and each component used in the manufacture thereof shall be free from all types of defects/failures.

iv. If within the period of warranty, the goods are reported by the buyer to have failed to perform as per the specifications, the seller shall either replace or rectify the same free of charge, within a maximum period of 45 days of notification of such defect received by the seller, provided that the goods are used and maintained by the buyer as per instructions contained in the Operating Manual.

v. The seller shall associate technical personnel of the Maintenance agency and Quality Assurance Agency of the buyer during warranty repair and shall also provide the details of complete defects, reasons and remedial actions for defects.

30. **Product Support:** - The following Product Support clause will form part of the contract placed on successful Bidder –

a. The Seller agrees to provide Product Support for the software, subcontracted from other agencies/ manufacturer by the Seller for a period of **03 year** after the delivery and commissioning of software application as part of software supply.

b. In the event of any obsolescence during the above mentioned period of product support in respect of any component/ sub-system/ software, it is the liability of the seller to provide the alternate in free of cost.

c. Any improvement/modification/ up gradation being undertaken by the Seller or their sub suppliers on the software being purchased under the Contract will be communicated by the Seller to the Buyer and, if required by the Buyer, these will be carried out by the Seller at Buyer's cost.

31. **Annual Maintenance Contract (AMC) Clause :** - N/A

32. **Engineering Support Package (ESP) clause :** - NA

33. **Price Variation (PV) Clause:** - NA

PART V – EVALUATION CRITERIA & PRICE BID ISSUES

1. **Evaluation and Acceptance Process**. The broad guidelines for evaluation of Bids will be as follows:

a. Only those Bids will be evaluated on QCBS method (**Appendix-'G'**) qualifying pre-qualification criteria as per Part-II of RFP.

b. The technical Bids forwarded by the Bidders will be evaluated by the Buyer with reference to the technical characteristics of the equipment/item as mentioned in the RFP. The compliance of Technical Bids would be determined on the basis of the parameters specified in the RFP. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.

c. The Lowest Bid will be decided upon the QCBS marks quoted by the particular Bidder as per the Price Format given in the RFP. The consideration of taxes and duties in evaluation process will be as follows:

i. In cases where only indigenous Bidders are competing, all taxes and duties (including those for which exemption certificates are issued) quoted by the Bidders will be considered. The ultimate cost to the Buyer would be the deciding factor for ranking of Bids.

ii. In cases where both foreign and indigenous Bidders are competing, following criteria would be followed –

aa. In case of foreign Bidders, the basic cost (CIF) quoted by them would be the basis for the purpose of comparison of various tenders.

ab. In case of indigenous Bidders, excise duty on fully formed equipment would be offloaded.

ac. Sales tax and other local levies, i.e. octroi, entry tax etc would be ignored in case of indigenous Bidders.

d. The Bidders are required to spell out the rates of Customs duty, Excise duty, VAT, Service Tax, etc in unambiguous terms; otherwise their offers will be loaded with the maximum rates of duties and taxes for the purpose of comparison of prices. If reimbursement of Customs duty / Excise Duty / VAT is intended as extra, over the quoted prices, the Bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duties will be entrained after the opening of tenders. If a Bidder chooses to quote a price inclusive of any duty and does not confirm inclusive of such duty so included is firm and final, he should clearly indicate the rate of such duty and quantum of excise duty included in the price. Failure to do so may result in ignoring of such offers summarily. If a Bidder is exempted from payment of Customs duty / Excise Duty / VAT duty upto any value of supplies from them, they should clearly state that no excise duty will be charged by them up to the limit of exemption which they may have. If any

concession is available in regard to rate/quantum of Customs duty / Excise Duty / VAT, it should be brought out clearly. Stipulations like, excise duty was presently not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a Bidder that excise duty will not be charged by him even if the same becomes applicable later on. In respect of the Bidders who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of excise duty which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders. The same logic applies to Customs duty and VAT also.

e. In import cases, all the foreign quotes will be brought to a common denomination in Indian Rupees by adopting the exchange rate as BC Selling rate of the State Bank of India on the date of the opening of Price Bids.

f. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

g. The Buyer reserves the right to evaluate the offers received by using Discounted Cash Flow method. In case cash flow involves more than one currency, the same will be brought to a common denomination in Indian Rupees by adopting exchange rate as BC Selling rate of the State Bank of India on the date of the opening of Price Bids.

h. The Lowest Acceptable Bid will be considered further for placement of contract / Supply Order after complete clarification and price negotiations as decided by the Buyer. The Buyer will have the right to award contracts to different Bidders for being lowest in particular items. The Buyer also reserves the right to do Apportionment of Quantity, if it is convinced that Lowest Bidder is not in a position to supply full quantity in stipulated time

j. The technical proposals forwarded by the Bidders will be evaluated by a Technical Evaluation Committee (TEC).

(i) The TEC will examine the extent of variations/differences, if any, in the technical characteristics of the HMS Solution offered by various SIs with reference to the requirements specified in this RFP.

(ii) The SIs will also be asked to carry out the Proof of Concept (PoC) demonstration as per the details provided in the **Appendix-J**. Subsequent to issue of bid clarifications, Indian Coast Guard may issue additional PoC scripts at bid submission stage or later. The PoC will be targeted to address major Indian Coast Guard processes but in no way indicate or limit the scope of the functional requirements specifications of the project. Evaluation of the PoC demonstration will be carried out for compliance of the demonstrated performance of the HMS Solution/ SIMHA Solution/ ROBO Solution vis-à-vis a few of the specific requirements of Indian Coast Guard

(iii) The Technical Offer will be evaluated by a Technical Evaluation

Committee (TEC) to confirm that the SI and HMS Solution being offered meet the essential parameters as elaborated at **Appendix-A & B** of this RFP. Thereafter, the SI shall carry out a PoC demonstration at 'No Cost No Commitment' basis of the application as a part of the technical evaluation process, as per the PoC scripts given in **Appendix-J** or issued later at the stage of bid submission or at any time prior to completion of TEC.

k. Evaluation of Commercial Proposals. The commercial proposals of the SIs whose offer is short-listed, after technical trials and evaluation have been accepted technically will only be opened and a comparative statement will be prepared. Comparison of offers will also be done on the same basis. The SI quoting lowest price (L1) based on QCBS evaluation, as determined by Contracts Negotiation Committee (CNC), would be invited for negotiations by CNC.

l. The Bidders are required to spell out the rates of Customs duty, Excise duty, VAT, Service Tax, etc in unambiguous terms; otherwise their offers will be loaded with the maximum rates of duties and taxes for the purpose of comparison of prices. If reimbursement of Customs duty / Excise Duty /VAT is intended as extra, over the quoted prices, the Bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duties will be entreated after the opening of tenders. If a Bidder chooses to quote a price inclusive of any duty and does not confirm inclusive of such duty so included is firm and final, he should clearly indicate the rate of such duty and quantum of excise duty included in the price. Failure to do so may result in ignoring of such offers summarily. If a Bidder is exempted from payment of Customs duty / Excise Duty / VAT duty upto any value of supplies from them, they should clearly state that no excise duty will be charged by them up to the limit of exemption which they may have. If any concession is available in regard to rate/quantum of Customs duty / Excise Duty / VAT, it should be brought out clearly. Stipulations like, excise duty was presently not applicable but the same will be charged if it becomes leviable later on, will not be accepted unless in such cases it is clearly stated by a Bidder that excise duty will not be charged by him even if the same becomes applicable later on. In respect of the Bidders who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of excise duty which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders. The same logic applies to Customs duty and VAT also.

m. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

2. **Price bid format:** As per **Appendix-'H'** of RFP.

3. The bidders are required to **UPLOAD** following:

(a) The Commercial bid format is provided as **BoQ.xls** along with this tender document at **<https://eprocure.gov.in>**. Bidders are advised **to download this BoQ.xls** as it is and quote their offer in the permitted column. **Bidders are also to fill the duties & Taxes columns as applicable**

(b) The Price Bid Format as per **Appendix-'H'** as required. Determination of L-1 will be done based on total of basic prices (**not including** levies, taxes and duties levied by Central/State/Local governments such as excise duty, VAT, Service tax, Octroi/entry tax, etc on final product) of all items/requirements as mentioned above.

Appendix-'A'

(Refer to Para-2(a)(i), (iii) of Part-II of RFP)

**TECHNICAL REQUIREMENTS - DESIGN, DEVELOPMENT, IMPLEMENTATION
AND SUPPORT FOR AUTOMATION OF SERVICE HEALTHCARE
ADMINISTRATION (PROJECT ASHA) - INDIAN COAST GUARD**

Background.

1. Indian Coast Guard (ICG) is the fourth armed force of Indian Union and is mandated to take actions as deemed fit to protect India's maritime and other national interests in the maritime zones of India. ICG carry out surveillance of 7,500 kms long coastline, 2.02 million Sq Km of Exclusive Economic Zone (EEZ) and over 06 million SqKms of Indian Maritime Search & Rescue Region (ISRR) to enforce Indian and International maritime laws and to provide swift Search and Rescue (SAR) support across ISSR using conventional assets such as ships and aircraft.
2. ICG as part of ongoing digitization efforts intend to implement a software application to automate healthcare management for ICG Service Personnel of about 14,000 and dependent their family members.

OBJECTIVE

3. Objective of ICG healthcare software system is to digitise required aspects of healthcare and medical care for ICG Personnel and dependent families, and includes Out Patient Department (OPD), In Patient Department (IPD) and Allied Health Services (AHS). The Bidder should include required features to achieve following objectives during SRS stage of project and discrepancies if any, the decision of the Buyer is final and has binding on the Bidder.
 - (a) Management of Medical Branch of Indian Coast Guard involving Healthcare Administration and Medical Administration including seamless integration of Information and Information flow across various hierarchies of the Medical Branch
 - (b) Maintain a detailed and comprehensive healthcare database of the ICG personnel and their dependents as per international standards and norms so that it is compatible with & interoperable with Healthcare Management software of other Services and Private Healthcare Establishments/ Facilities
 - (c) Digitisation of records held and generated in physical form including radiology images and integrating these with the proposed software for meaningful Healthcare Administration and analysis
 - (d) Statistical analysis of the database for medical planning and research

Automation of routine tasks and functions of various hierarchies of Medical Branch to all the Medical Branch to allow the Medical Branch to focus on patient outcomes and Healthcare Administration

- (e) Automation of routine office tasks to help the medical wing of ICG to focus on patient needs
- (f) Automated database of the patients to help in regular follow up for patients requiring long-term treatments
- (g) Electronic transfer of patient's records in the event of inter-hospital transfers
- (h) Design, implementation of Zero-touch ROBO dataracks at ICG units with centralised monitoring and support as pilot concept. Zero-touch ROBO dataracks on successful implementation likely to scale to ICG Ships, Bases of about 150 sites on phased manner
- (j) Offline access to information on various platforms including mobiles.

SCOPE OF WORK.

4. Vendor should design, develop, deploy and support healthcare automation for ICG. Healthcare application should be designed, developed on ICG enterprise middleware platform with Oracle database (ICG SIMHA Platform) details as mentioned in **Appendix-'B'** to achieve seamless integration of data, maintenance, licensing optimization etc. The Bidder should include required features to achieve following objectives during SRS stage of project and discrepancies if any, the decision of the Buyer is final and has binding on the Bidder. Detailed functional requirements are detailed in succeeding paragraphs.

5. Patient Management

- (a) Creating, storage and retrieval of records of ICG personnel and their dependents including importing of records from other sources such as Service/ Private Healthcare Establishments based on current international norms & standards.
- (b) Patient registration and appointment management including from a mobile based application.
- (c) OPD management including, but not limited to, clinical care management such as recording of patient's history, presenting complaints, clinical data and findings, clinical notes, diagnosis, diagnostic tests and investigations, prescription, dispensing of medication, special procedures, physiotherapy etc.
- (d) Inpatient care and ward management including but not limited to, clinical care, nursing care, store management, diet management, disposal etc.

(e) Diagnostic Services management including Laboratory, Radiology, etc. and integrating these with clinical care management.

(f) Statistical analysis of morbidity data from clinical care and diagnostic services modules.

6. **Store Management** Store management including inventory control of Medical and Non-medical stores. This is to include.

(a) Catalogue management

(b) Demand, receipt, storage, issue, disposal and transfer of stores

(c) Store accounting

(d) Equipment management planning through Computerised Maintenance Management System (including preventive and routine maintenance etc)

(e) Classifications and coding of stores in special categories eg. LASA (Look alike Sound Alike) drugs, DD (Dangerous Drugs)

(f) Statistical analysis and report generations including ABC, VED & FSN analysis

(g) To be compatible with software of parent Depot issuing stores eg. i-Aushadhi

7. **Healthcare Management**

(a) Conduct and record of various types of Medical Examinations

(b) Conduct and record of various types of Medical Boards

(c) Record of inoculations & vaccinations

(d) Generation, maintenance and Statistical Analysis of Health data

(e) Conduct of various health surveys and medical health inspections

8. **Medical Administration**

(a) Auto generation of various reminders, scheduling and alerts

(b) Online communication across various hierarchies of Medical Branch

(c) Online processing and tracking of documents

(d) Maintenance of various books and registers

(e) Generation of Reports and Returns

(f) Defining 'Authorised Medical Attendant (AMA)' and allocation of rights

(g) Incoming/ Outgoing routines

- (h) Medico-legal cases/ fatal case documents
- (j) Defining of various filters and parameters eg. Obesity, date of AME, obsolete drugs, SUSMED (Suspend Medical Stores) etc.

9. **Human Resource Management**

- (a) Designation of AMA
- (b) Course, Leave, Ty Duty, transfer of MOs & MAs.

10. **General**

- (a) Hierarchy based access to various features of the software
- (b) Biometric authentications – Patients and doctors/ Aadhaar linking
- (c) Mobile app for MOs, MAs & clientele
- (d) Digitisation of Physical records and linking them to specific events
- (e) Bar coding/ QR coding of documents, samples, stores etc.
- (f) Security of Data/ Data Breach
- (g) Training of personnel in software and development of CBT modules for training of future personnel
- (h) To follow international standards like HL-7, ICD-10, and DICOM etc.
- (j) Healthcare application would involve study, design and development of web-based for end to end healthcare management at ICG. Vendor should digitise but not limited to ICG healthcare process/ workflow as mentioned in **Annexure-2 of Appendix-'A'**.
- (k) Patient appointment, storage & retrieval of patient medical history, import medical records from service/ private hospitals following international medical standards, facilitate to conduct annual medical examination (AME) & medical boards, pharmacy management, medical equipment inventory management and development of personal health record vault in mobile phones and secured Medical iOS tablets for Medical Officers/ Personnel of ICG.
- (l) Should provide web services API as required following HL7/MDDS/appropriate medical standards to enable inter-operability with Hospital Management Systems of Military/Civil hospitals
- (m) Digitisation of medical records of about one million including physical radiology images of about 5,000 nos. Required qualified Medical Transcriptionists/ Medical Data Entry Operators to be provided for digitisation.

(n) System should support off-line mode for ships and remote offices where network connectivity is not reliable. Offline mode should be designed on Oracle database layer of ICG SIMHA platform which natively supports distributed replication and synchronization

DETAILED FUNCTIONAL REQUIREMENT FOR HEALTHCARE APPLICATION (PROJECT ASHA)

11. Required office automation areas are as follows is indicative in nature. Details of which is elaborated in succeeding paragraphs. The Bidder should also include required features as required to meet broader objectives & scope of works during SRS as mentioned in previous paragraphs.

- (a) Reception registration with facility for remote appointment (**FR-01**)
- (b) Creation & management of EMR/EHR as per international/ GOI standards. (**FR-02**)
- (c) Storage & retrieval of patient vitals (**FR-03**)
- (d) Patient detailed diagnosis, clinical notes, doctor prescription data (**FR-04**)
- (e) Dispensary & medical stores (**FR-05**)
- (f) Laboratory and radiological information system (**FR-06**)
- (g) Medical board / medical exam (**FR-07**)
- (h) Station healthcare organisation (SHO) health education system (**FR-08**)
- (j) MI room administration (**FR-09**)
- (k) Maternal and child welfare center/ family welfare center (**FR-10**)
- (l) Ward management (**FR-11**)

12. **FR-01: Reception registration with facility for remote appointment**

- (a) **User Requirement.** user should able to.
 - (i) Seek appointment through online
 - (ii) MI room to view daily appointment status
 - (iii) Create and manage new patient records for service personnel, family members and others
 - (iv) Requirements should be included further during SRS stage as per objectives & SOW mentioned.
- (b) **High-level technical Requirement.** System should provide features to
 - (i) Print patient appointment slip
 - (ii) Create/ update medical record from ICG HR databases

13. **FR-02: Creation & management of EMR/EHR as per international/ GOI standards**

- (a) **User Requirement.** user should able to.
 - (i) Store and display patient/ ICG personnel medical records in internet/ intranet and ICG mobile applications
- (b) **High-level technical Requirement.** System should provide features to
 - (i) Store and retrieve medical records of EMR/EHR as per international standards. Standards are elaborated in non-functional requirements
 - (ii) Should able to interface with civil/ military hospital records in available real-time/ offline connectivity, carryout appropriate ETL (Extract, Transform and Load) over medical data available from 3rd party applications and store in ASHA
 - (iii) Interface with existing ICG HR database to update ICG personnel health records

14. **FR-03: Storage & retrieval of patient vitals**

- (a) **User Requirement.** user should able to.
 - (i) Capture patients' vital signs such as body temperature, blood pressure, heart rate, respiratory rate etc. at MI room
- (b) **High-level technical Requirement.** System should provide features to
 - (i) Vital signs should be recorded using LOINC standards

15. **FR-04: Patient detailed diagnosis, clinical notes, doctor prescription data**

- (a) **User Requirement.** user should able to.
 - (i) Capture and store detailed patient diagnosis details
 - (ii) Create and maintain clinical notes
 - (iii) Store doctor's prescription
 - (iv) Doctor to view patient records in mobile tablet device
- (b) **High-level technical Requirement.** System should provide features to
 - (i) Physical records to be scanned as per medical standards and stored
 - (ii) Diagnosis, clinical notes and prescription data could be directly updated by doctor, nursing assistance as required.
 - (iii) Mobile tablet device to be exclusively used for viewing patient records in more secured manner. Patient data should be stored locally for offline access by medical staff of ICG

16. **FR-05: Dispensary & medical stores**

(a) **User Requirement.**

- (i) Dispensary user should be able to.
 - (aa) MI room medical staff to manage dispensary at ICG unit
 - (ab) manage medical stores of ICG unit
 - (ac) Create routine reports as required
 - (ad) Provide reminders, alerts in case of stock level goes below desired level, store likely to get expired etc.
 - (ae) Issue medicines to the patients based on prescription
 - (af) keep stocks of a variety of drugs procured from medical stores
 - (ag) Stocks to be replenished every fortnight/ at desired frequency on a voucher CIV to medical store
 - (ah) System to provide for raising supplementary demand in case of shortage
 - (aj) The medical officer of the dispensary able to validate the demand requisition voucher
 - (ak) The dispensary will be able to give the receipt for the material
 - (al) All the items issued will be accounted
 - (am) The system able to identify an item by PVMS or nomenclature accounting unit
 - (an) Detailed stock reports to be provided
 - (ap) MIS reports as required
- (ii) Medical store users should be able to.
 - (aa) Items to be identified by PVMS no as defined by ICG
 - (ab) All items will be classified into expendable and non-expendable items
 - (ac) The system provide for maintaining the composite list of authorized items
 - (ad) The system will maintain the details of the local purchase and their fund utilization
 - (ae) The system will also provide for inter MI room transfer

(b) **High-level technical Requirement.** System should provide features to

- (i) Should provide multi-tenancy on central single instance for all and multi-tenancy on federated distributed instance for selected units such as RHQs/DHQs/Stations and ships.

17. **FR-06: Laboratory and radiological information system**

- (a) **User Requirement.** user should able to.
 - (i) Lab Orders Processing Worksheet for Out Patients and In Patients
 - (ii) Sample Management
 - (iii) Result Processing with Soft / Hard Copy
 - (iv) Lab Reagents & Kits Inventory Management
 - (v) Lab Register Maintenance

- (b) **High-level technical Requirement.** System should provide features to
 - (i) Equipments Interface for capturing of result
 - (ii) Bar coded based sample management
 - (iii) Interface with auto analyzers
 - (iv) Tracking Film Jackets (viii) Should provide multi-tenancy on central single instance for all and multi-tenancy on federated distributed instance for selected units such as RHQs/DHQs/Stations and ships.

18. **FR-07: Medical board / medical exam**

- (a) **User Requirement.** user should able to.
 - (i) Manage following medical boards.
 - (aa) Re-categorisation medical board
 - (ab) Invalidating medical board
 - (ac) Re-survey medical board
 - (ad) Release medical board
 - (ae) Review medical board
 - (af) Commutation medical board
 - (ii) Provision to maintain annual medical exam details
 - (iii) System to provide for the comparison of the details of the previous years
 - (iv) Provide dashboard to display aggregated graphical statistics at various ICG authorities

- (b) **High-level technical Requirement.** System should provide features to
 - (i) Should provide multi-tenancy on central single instance for all and multi-tenancy on federated distributed instance for selected units such as RHQs/DHQs/Stations and ships.

19. **FR-08: Station healthcare organisation (SHO) health education system**

- (a) **User Requirement.** user should able to.
 - (i) Create and manage healthcare routines for ICG units
 - (ii) Keep records of sanitary rounds and provide reminders

- (b) **High-level technical Requirement.** System should provide features to
 - (i) Should provide multi-tenancy on central single instance for all and multi-tenancy on federated distributed instance for selected units such as RHQs/DHQs/Stations and ships.

20. **FR-09: MI Room administration**

- (a) **User Requirement.** user should able to.
 - (i) Manage various MI room related registers, but not limited to as following. All such registers to be digitized and maintained in ASHA.
 - (a) Permanent Stores Ledger IAFM-1224
 - (b) Red cross stores ledger IAFM-1224
 - (c) Local purchase stores ledger IAFM-1224
 - (d) Expendable ledger IAFM-1227
 - (e) Dangerous Drug Register IAFM-1227
 - (f) Log and service book IAFM-36
 - (g) X-ray film expenditure register IAFM-28
 - (h) Admission & Discharge book (A&D Book for officers and Sailors IAFM-40
 - (j) Attend 'C' Register
 - (k) Inoculation and Vaccination Register
 - (l) Venereal Diseases (VD Register)
 - (m) Sanitary Diary
 - (n) Injury Report Register
 - (p) Objection Statement Register
 - (q) Register of Personnel in low Medical Category
 - (r) Victual ling Register (in dieted sickbays only)
 - (s) Filer Survey Register
 - (t) Milk Test Register
 - (u) Water Test Register

21. **FR-10: Maternal and child welfare center/ family welfare center**

- (a) **User Requirement.** user should able to.
 - (i) Maintain records of ICG family members
 - (ii) Maintain maternal/ child welfare related medical support details

22. **FR-11: Ward management**

- (a) **User Requirement.** User should able to.
 - (i) Maintain patient discharge information
 - (ii) Track patients ward information
 - (iii) Maintain ward rooms status
 - (iv) Assign patient to ward room/ beds
 - (v) Check beds availability
 - (vi) Helps to easily search a patient allotted in a ward room and bed
 - (vii) Manage ward room related items such as bed sheets, utensils, patient specific food details etc.

Note: Bidders are requested to refrain from attaching additional unwanted documents.

Annexure-1

(Refers to Appendix 'A')

DETAILS OF PENALTY CLAUSES

1. Application not made fully operational for more than 02 working days – Rs. 2000 per day. In case situation exceeds 05 working days, enhanced penalty of Rs.5000 per day is applicable.
2. Late reporting to work by onsite support engineer/ manpower Rs. 500/- Per day (Support engineer/ manpower need to report for work at 0830 hrs. In a month maximum ten late reporting is permissible for entire resident engineer subject to maximum 03 late reporting).
3. In the event of support engineer/manpower remaining absent/on leave without substitute there of - Rs 1500/ for each day of absence.
4. Failure to maintain/renew/extend performance bank guarantee – Rs 1000/- per day (PBG should be restored to 100% if it is dip below 70% within 10 days. PBG should not fall below 60%. In case of AIAMC extension, PBG should be renewed for the same value irrespective viz-a-viz of period of such extension, i.e pro-rata not applicable. Coast Guard not mandated to return PBG before the expiry of initial validity period, and it is the responsibility of vendor to arrange PBG accordingly without any break in PBG availability).
5. ITSM software should be updated on daily basis and each service ticket should be assigned with unique ticket ID by onsite support engineer. Failure to update – Rs.500 per day.
6. ITSM Service Desk portal and ALM portals should be available on 365x24x7 during the entire contract period with minimum availability of 99%. Non-availability of ITSM Portal for more than 24 hours – Rs.1000 per day. Mutually agreed maintenance periods and other justifiable circumstances as accepted by Coast Guard are exempted.
7. Oracle Primavera/ MS Project portal to be updated and should be available on 365x24x7 during the till final GoLive + 06 months with minimum availability of 99%. Non-availability of Oracle Primavera/MS Project Portal for more than 24 hours – Rs.1000 per day. Mutually agreed maintenance periods and other justifiable circumstances as accepted by Coast Guard are exempted.
8. Application Lifecycle Management (ALM) portal should be available on 365x24x7 during the entire contract period with minimum availability of 99.9%. Non-availability of ALM Portal for more than 24 hours – Rs.1000 per day. Mutually agreed maintenance periods and other justifiable circumstances as accepted by Coast Guard are exempted.
9. When the Medical Tablet is down continuously for more than 04 hours, within 24 hours or next working day, alternate facilities, should be provided by vendor. Non-adherence shall invite penalty of Rs.500 per day
10. In case the vendor is not in a position to provide alternate/standby facility, Buyer shall have the right to get the issues rectified by a third party without effecting the contractors' obligations for maintenance of the systems under the contract. The payment

towards maintenance/ repair charges will be made to the third party and a sum equal to maintenance/ repair charges would be deducted from any outstanding bills/ PBG for the time actually lost.

11. All penalty amounts may be deducted from outstanding bills/Performance Bank Guarantee as applicable.

12. It may also be noted that in case of vender backing out in mid-stream without any explicit consent of Coast Guard, the vender will be liable to recovery at higher rates vis-a-vis those contracted with, which may have to be incurred by Coast Guard on maintenance of IT system for the balance period of contract by alternative means.

13. Under no circumstances, on each occasion the cumulative continuous penalty total shall not exceed 5% of the contract value.

14. Coast Guard at its discretion may entirely/partly waive-off penalty under justifiable circumstances.

Annexure-2 of Appendix-'A'

Sample basic patient treatment lifecycle process (one episode)

(One visit of patient considered as episode for Electronic Health Record)

Sl.	Event	Data need to be captured/ provided	Remarks
01.	Patient report to Medical Inspection(MI) Room of Indian Coast Guard (ICG) Unit	(a) Patient seeking appointment over website/ mobile phone (b) Doctor provide appointment time (c) Doctor details	MDDS ¹ Standard/HL7 ² – For messaging
02.	New patient record need to be created	-----	SNOMED-CT ³ , LOINC ⁴
03.	Basic personal details retrieved from Coast Guard existing HR software such as Name, Pno, Rank, Unit	(a) Patient Name, Service No., Unit name, Date of Birth, Address, Contact email, Contact address	MDDS Standard/HL7 – For messaging
04.	Vitals are taken and entered	(a) Weight, BP, Pulse etc.	SNOMED - CT
05.	Medical Officer(MO) diagnosis as high fever, prescribe some medicine and refer to Military Hospital (MH)	(a) Diagnosis details (b) Doctor should be provided with medical tablet with EHR (c) Prescription (d) Referral to next specialist and it to include all required data as above (e) ASHA provide necessary EHR through HL7/MDDS/ as appropriate standards using secure Web Services API	(a) SNOMED – CT (b) PVMS/NIV No. (c) HL7 / SNOMED-CT

¹ MDDS - Meta Data and Data Standards for Health Domain by Ministry of Health, Govt. of India

² HL7 – Health Level Seven, A standard for exchange of medical information

³ SNOMED-CT - Systematized Nomenclature of Medicine-Clinical Terms

⁴ LOINC - Logical Observation Identifiers Names and Codes

Sl.	Event	Data need to be captured/ provided	Remarks
06.	Medicines are issued by MI room pharmacy	(a) List of medicine issued	PVMS/NIV No.
07.	Report to MH & specialist give some lab tests such as MRI, Blood test, urine test etc.	(a) Required new tests (b) lab reports in digital form. It includes MRI, CT, blood test, urine etc. (c) lab report details manually entered from paper form it includes MRI, CT, blood test, urine etc.	LOINC
08.	Patient take all tests and submit lab reports to specialist	(a) Test reports in digital form such as MRI, X-Ray, Blood, Urine etc.	LOINC/HL7
09.	Specialist diagnose as common fever and enters his opinion/ clinical notes	(a) Diagnosis list (b) Doctor opinion	a) LOINC b) SNOMED-CT
10.	Specialist give some medicine and refer back to unit	(a) Prescription	PVMS/NIV No./HL7
11.	Patient take medicine and report to MI room	(a) Medicine cycle & reminder to patient	
12.	MO on review declare patient as fit	(a) Review notes	No Standard
13.	Software records all above data as medical history	Record all events in software system	LOINC / SNOMED-CT / PVMS/NIV No./HL7
Related medical standards			
14.	Storage of radiology and image based medical data	Radiology data	DICOM ⁵

⁵ DICOM - Digital Imaging and Communications in Medicine

Sl.	Event	Data need to be captured/ provided	Remarks
15.	Secured, open and granular access to medical information	Secured access	FHIR ⁶
16.	Compatibility and interoperability between independent systems	Interoperability between systems	ISO/TC 215

Note:

- (a) EHR to be maintained within the system in adherence to GoI notification on EMR standards and other international healthcare standards as applicable.
- (b) Healthcare data such as DICOM to be stored in Oracle DICOM and required licenses to be catered
- (c) EHR data structure of Oracle database to be clearly defined as per existing standards and variation, if any to be clearly brought out during Technical Solution document as part of Technical Bid.

⁶ FHIR - Fast Healthcare Interoperability Resources

NON-FUNCTIONAL REQUIREMENTS – PROJECT ASHA
FOR INDIAN COAST GUARD

ASHA specific non-functional requirements

1. Software development methodology

- (a) **Agile development based** with clearly mentioned Sprints during SRS. Minimum of 05 sprints with initial delivery in 90 days from date of work order.
- (b) Software should be developed on **Application Lifecycle Management (ALM)** and dedicated login should be provided for ICG
- (c) Entire software should be developed on **ICG provided Enterprise Middleware Platform (ICG SIMHA Platform)** only and duplication of components should be strictly avoided
- (d) Should support **offline capability** for ICG ROBO units and mobile devices using Oracle Database Golden Gate/ Mobile Server respectively. All replication functions should be built on Oracle database only to ensure data integrity.
- (e) **Middleware OEM consulting.** Vendor should get software sizing/ component compatibility audited by middleware OEM such as IBM/ Oracle before commencement of development and during delivery of each sprint of software.

2. ICG SIMHA (Enterprise Middleware Stack based on Oracle Middleware)

Compliant enterprise features (*Licenses shall be provided by ICG as required, except with '*' marked which need to be provided by Bidder*)

- (a) Enterprise Portal
- (b) Workflow Management System(WMS)
- (c) Business Process Management (BPM)
- (d) Enterprise Service Bus (ESB) Server
- (e) Case Management Server
- (f) Document Management System (DMS)
- (g) Record Management System (RMS)
- (h) Visualizer Component to build various charts for Dashboard
- (j) Identity and Access Management (IAM)
- (k) Oracle Database with Golden Gate, Mobile Server*, Advanced Data Encryption, Label Security and Data Vault
- (l) Application Lifecycle Management Server (ALM) like JIRA
- (m) Vendor should provide support for single middleware stack OEM vendor including Oracle & IBM. ICG SIMHA middleware stack shall be from single OEM with native middleware components [ie Srl.3(a) to (j) above] excluding Oracle database.

(n) Vendor application **should not duplicate any of the functionality of SIMHA platform** as provided by Coast Guard. Some of key functionalities are Enterprise Portal, Oracle Database, BPM, DMS, RMS etc.

3. **Inter-operability with Military/ Civil Hospital Management Systems.**

Should provide EHR web services API as required as per HL7/MDDS/appropriate medical standards to enable inter-operability with Hospital Management Systems of Military/Civil hospitals.

4. **Medical tablet/mobile compatible app.** Medical mobile app with offline sync capability to display EHR & related healthcare/ medical care data to be developed and provided. It should be compatible for both latest Android and iOS mobile versions. Data should sync with main Oracle database natively without any manual intervention.

5. **User Management**

(a) **Central Admin - ASHA** should be enabled for.

(i) Create groups based on ICG Active Directory

(ii) Default groups based on Organisational Unit (OU) of ICG Active Directory

(iii) Create custom group on any combination of OU

(iv) Delegate/ Invoke group admin to designated groups as available in ICG Active Directory

(v) Same 'Group admin' may be admin for one or more modules.

(vi) Integrate with ICG IAM for centralised Roles management

(b) **Group Admin - ASHA** is responsible for administration of group of users belong to particular unit/ combination of units. 'Group Admin' are created and managed by 'Central Admin'. Group Admin shall have following functionalities.

(i) Add/remove user/groups to pre-defined roles

(ii) Assign privileges as required.

6. **Access Control List (ACL) features.**

(a) Basic components of ACL are 'Roles' and 'Privileges'

(b) ICG units are to be organized as 'Unit' and managed by 'Group/Unit Admin'

(c) 'Group/Unit Admin' created and managed by 'Central Admin'. 'Central Admin' may create 'Group/Unit Admin' and assign any particular group from ICG AD for administration

(d) ICG users are added into particular 'Group/ Unit' by respective 'Group/Unit Admin' and assigned required privileges

(e) 'Group/ Unit Admin' shall have view of all eOffice activities related to particular unit only and shall never have access to other 'Group/ Units'. Similar to multi-tenancy feature of software systems

(f) Workflow may span across multiple units, users

(g) Dashboard for 'Central Admin' and 'Group/Unit Admin' should have following features.

(i) Should display graphical representation of entire 'Group/ Unit Admin' and assigned users/ roles with drill-down option.

(ii) Should display graphical charts for user vs login counts, user vs module access counts, user vs business process counts, dormant user statistics, dormant business process statistics and least/most used business process statistics

(iii) Detailed logs should be generated and made available for ICG SIEM software system to enable central monitoring of software usage pattern.

7. **Standards** to be complied

(a) ASHA general framework

(i) WFMC, BPMN, BPEL, WebDav, ODMA, CMIS

(ii) Web 3.0 GUI

(iii) US DoD 5015.2 for RMS software

(iv) ISO 15489 for RMS

(b) ASHA – Healthcare standards

(i) Electronic Health Record (EHR) Standards - 2016 for India, Standards Set Recommendations v2.0

(ii) MDDS/ HL7 Standards

(iii) SNOMED-CT, LOINC

(iv) PVMS/NIV No.

(v) DICOM

(vi) ISO/TC 215

(vii) FHIR

(viii) ICD-10

8. **Enterprise portal standards**

(a) Should be based on '**Responsive Web Design (RWD)**' and should adapt the layout to the viewing environment by using fluid, proportion-based grids, flexible images etc. RWD should be thoroughly tested before delivery of each sprint/ patches to Coast Guard

(b) Should provide atleast Graphical User Interface (GUI) design templates for User to select as per preference

(c) **Navigation.** Should use left navigation with cascading levels upto three with collapsible navigation panels. First level to display major modules, and ASHA to be considered as one of the major module. On click of 'ASHA' first level, 2nd navigation panel should provide module level menus and on-click of 2nd Navigation menu, main content page should provide context sensitive data/ or further menu/ options as required by Coast Guard

(d) Breadcrumb to be provided at global level

(e) **Help.** Help should be provided through Tooltip, footer help display and on selection of 'F1', a right side panel should be displayed with collapsible capability. F1 help panel should toggle to collapse on press of 'F1'

(f) Bidder to provide atleast 03 themes as part of Software Requirement Specification (SRS) and **wireframe templates** for approval of Coast Guard. Bidder should proceed with development only on approval of wireframes by Coast Guard

(g) **Independent unique home page** should be provided for each ICG User, ICG Unit as required by Coast Guard. User home/ landing page should have graphical charts to display statistics within the context of particular ICG User, ICG Unit and User Designation/ Role. User should be able to 'pin' module/ functionality of his/her favorite in their 'Home' page.

9. **One database & replication.** Bidder should develop entire software stack based on only Oracle Database as provided by Coast Guard. Bidder should use all security features of Oracle database such as Label security, Data Encryption and Data Vault. All data intensive queries should be implemented using Oracle PL/SQL stored procedures. All replication related functionality should be based on 'Oracle Golden Gate' functionality only and such functionalities should not be developed at application level.

10. Should be developed and deployed in Enterprise Middleware platform including **Java EE Application Server** and compatible with leading Java EE Application Servers of Oracle WebLogic/ IBM WebSphere

11. ASHA portal component shall be maintained by the vendor and shall be developed for ongoing new features by Coast Guard in-house software development team. Vendor should provide and support pre-configured Eclipse IDE environment for development ASHA Portal by Coast Guard.

12. **Multi-tenant, federated instance features**

(a) System should support multi-tenancy to provide local instance of ASHA suite to provide unified mail box, RMS and all key features as mentioned in para-3 of Appendix-'B'.

(b) All federated instances should be in sync with primary instance at Coast Guard Primary Data Center at Delhi NCR

(c) Should group ICG units into logical, hierarchical for management flexibility and deploy policies centrally to be used in conjunction with regional or functional policies. Delegate appropriate levels of administrative control at the regional level or centrally with role-based management.

13. **Federated, local survivability and off-line features**

(a) Designated federated installations should support local survivability to provide key features as required by ICG.

14. **Support**

(a) Support for three year from the date of go-live.

(b) Support to include minor feature updates, bug fixes

(c) Support for Coast Guard in-house/ 3rd party developers for updating/ maintenance of SSO, Portal and ESB.

15. **Integration with email**, task, contacts & calendar of MS Exchange.

16. **Project management requirements.**

(a) Onsite Medical consultant shall act as official representative of the Bidder and responsible for co-ordination between ICG and the Bidder. Bidder to provide project specific email id (asha-icg@bidder-site.com) which shall be jointly operated by Project Manager and onsite Medical Consultant. However, overall project management responsibility lies with Project Manager and onsite Medical Consultant shall act as co-ordinator/ standby Project Manager.

(b) Detailed project timeline should be provided with SRS

(c) Project plan to be planned in Oracle Primavera/ Microsoft Project server hosted by Bidder and dedicated login to be provided to ICG. Project timeline & artefacts should be updated for every versions/ stages as per ICG requirement.

(d) Project data sheet should be compatible with Oracle Primavera/ Microsoft Project Server. Vendor should submit/ upload into internal ICG project management servers as required by ICG

(e) Skilled manpower to be assigned to project, should be available for fortnightly review/ as required by ICG. Details of project members along with standby members (atleast 01 for each) to be provided. **Project members should not be changed without explicit permission of ICG and violation of the same shall be treated seriously and contract may be terminated with forfeiture of bank guarantee alongwith other obligations.** Minimum composition of project management team should as be following.

- (i) Project Manager, PMP certified
- (ii) Medical consultant, Onsite
- (iii) Business Analyst, CBAP certified
- (iv) Senior Java Developer
- (v) Senior Test Engineer
- (vi) Oracle DB Developer
- (vii) Technical Writer

(f) Minute of meetings should be commented & concurred by official email by Project Manager for project specific aspects and Enterprise architect for technical aspects. Such comments/ concurrences should be made available within 03 working days and exemption, if any with explicit approval of ICG.

(m) ICG may resort to cancellation of work order with forfeiture of EMD/ PBG, penalty clauses as applicable and other contractual clauses as deemed fit for following situations.

- (i) Change of project members without explicit concurrence of ICG
- (ii) Failure to provide replacement manpower within committed timeline

(iii) Non-availability of project management manpower for review meeting

(iv) Not responding and not providing concurrence/ non-concurrence for 'Minutes of meeting' by project team members within ICG specified timeline

17. **Source code for Non-COTS features & customizations.**

(a) ICG shall hold Intellectual Property Rights (IPR) on source code & documentation related to all 'Non-COTS' features and customisations. In case of disagreement on designation of 'Non-COTS' features, decision of ICG shall be final.

(b) Should be in compliance to 'Software Development & Re-Engineering Guidelines for Cloud Ready Applications Version 2.1 or latest as issued by Govt. of India' and ICG specifications. Decision of ICG is final in case of different interpretations of Government of India guidelines.

(c) Software for each stages prior to Go-live/ Post Go-live should be compiled & ported to ICG central version control software

(d) Complete documentation to create initial release software & subsequent builds.

18. **IT Service Desk for support.**

(a) Vendor should provide IT Service Desk portal for ICG on receipt of work order

(b) IT Service Desk software should be in compliance with ITIL standards and the same to be explicitly highlighted on respective COTS/ FOSS product specification

19. **Service Level Agreement (SLA) requirements** as following. Non-adherence of SLA shall invite penalty as mentioned in Appendix-'C'.

(a) Software application should be made available 24x7 basis and all service tickets raised through email/service portal should be responded within 04 working hours and to be resolved within 48 hours. Any specific request for change in response time should be concurred by Buyer on case to case basis

(b) IT service desk portal should provide 24x7 ticket creation facility to Buyer. ITSM should generate automated email to Buyer given official email ID during entire lifecycle of ticket for key phases including creation, assigned, resolved, hold and closed.

(c) Onsite support engineer should report to work at 0830hrs on all working days of Coast Guard

(d) Onsite support engineer should not be changed without explicit concurrence of Buyer

(e) Any replacement to support engineer should have obtained MAF Certified resource with required skillset and experience as per RFP clauses. Any delay in provision of appropriate skilled manpower shall be treated as absent of service engineer and relevant penalty clauses shall be made applicable.

- (f) Professional display and AIO multi-touch displays should be repaired within 02 working days. Replacement should be provided if expected repair time likely to exceed more than 02 working days and less than 07 days.

Standard non-functional requirements

20. **Enterprise Application Integration (EAI) requirement.** Coast Guard intend to build seamless integration between various software applications and avoid 'islands automation/ information silos'. Hence, compliance to EAI requirement of Coast Guard is one of the fundamental requirement.

- (a) Should support "**unrestricted sharing of data and business processes among any connected application or data sources in the enterprise**"
- (b) Should provide 'Data Dictionary', 'Business Process Dictionary' and detailed API interface specifications
- (c) Should support various web services API including RESTful
- (d) Should support integration with Coast Guard Primary ESB Application Integration Platform.

21. **Single-Sign-On (SSO) features**

- (a) Should be implemented as Central SSO for Coast Guard
- (b) SSO to use Coast Guard Active Directory as underlying Directory Services
- (c) Should have 'High-Availability (HA)' characteristics across primary & DR server rooms of Coast Guard
- (d) Should integrate with Coast Guard Security Information and Event Management (SIEM) systems

22. **Application Lifecycle Management (ALM) portal.**

- (a) Vendor should deploy and maintain ALM portal such as JIRA. ALM should consists of source code server on Git, document server, collaboration server for team interaction. Development of software should be on deployed ALM only.
- (b) Vendor should provide dedicated user accounts on ALM portal for Coast Guard
- (c) ALM portal should manage all Non-COTS related customizations & development. IPR shall be with ICG for all source code except COTS.
- (d) Should provide all development related documentations including wireframe, SRS, business use cases, use cases, traceability matrix, test plans, test reports, deployment plans, database ER diagrams and API specifications for EAI compliance.

23. **Integration with ICG IAM (Identity and Access Management) system.**

- (a) ASHA should support IAM and enable staff onboarding feature

- (b) Support IAM from leading vendors such as IBM/ Microsoft/ Dell RSA and Oracle
- (c) All roles should be exposed to IAM for centralised user management

24. **Provide API for internet website and mobile app**

- (i) Provide required RESTful API for appointment process through internet website and mobile app
- (ii) Expose selected functionalities for internet and mobile app

25. **Miscellaneous non-functional requirements**

- (a) Implementation, integration of on-campus PKI infrastructure
- (b) Database backup & restore
- (c) Virtualization compatible
- (d) High Availability configuration model
- (e) Active Directory integration information
- (f) Cloud-ready features/ compatibility metrics
- (g) Integration with touch-enabled features
- (h) User Management with switch role functionality
- (j) Provide unified intranet portal which should be updated through ESB. It is required in compliance to ICG SIMHA unified architecture.

26. **Training.** Onsite training at Delhi NCR/ Chennai by qualified instructors should be provided to ICG personnel as follows. Bidder has to provide all expenses for trainers related to training such as boarding, lodging, travel etc.

Sl	Training	Location	Personnel per Batch
(a)	System administration, installation, backup & recovery, 01 Batch. Training documentation to be provided in both hard and soft copies.	Delhi NCR	04
(b)	User training, Duration of minimum 03 Days. Training documentation to be provided in both hard and soft copies	Mumbai, Chennai, Kolkatta, New Delhi and Port Blair	25

27. **Documentation.**

- (a) Design standardards for documents:

- (i) Software Requirement Specification (SRS) as per ISO/IEC/IEEE 29148-2011 specifications or latest
 - (ii) Modeling language should be based on UML version 2.5-2015 or latest. All design documents should be clearly documented & generated in CASE tools supporting UML 2.5-2015 or later.
 - (iii) Test plan should be based on IEEE 829-2008 or later.
- (b) Vendor to deliver required documents strictly within specified timeline for each stage. In case of delay, Buyer at liberty to terminate the contract.
- (b) Stage-I: Software Requirement Specification (SRS).
- (i) SRS should be submitted within 10 days of date of Coast Guard work order. Vendor could enter into prior development initiate design & development phase only after obtaining approval of SRS
 - (ii) SRS and project planning with timeline is hosted on Oracle Primavera/MS Project at Bidder servers and dedicated login be provided to ICG
 - (ii) Initial version of EAI specifications to be provided
 - (iii) Artefact to be delivered: SRS
 - (iv) Timeline: 10 days from on receipt of work order.
- (c) Stage-II: Prior development phase.
- (i) Documents should be prepared as per UML standards. Vendor to provide business use cases, detailed use cases, list of actors, wireframes designs and traceability matrix.
 - (ii) Traceability matrix should clearly indicate trace between business use cases/ use cases/ wireframe/ planned version/ timeline/ associated project members/ components/ test plan and source code repository details. Traceability matrix should have 'Use Case' as primary reference column.
 - (iii) Test cases, data dictionary, terminology specific to project, logical database design, logical ER-design diagram, RESTful services API definitions, class diagram, deployment diagram during development of software.
 - (iv) Updated version of EAI specification be provided
 - (v) On approval of documents by Buyer only Vendor should officially commence development. Buyer may terminate contract in case of delay Failure to submit documents as per Buyer requirement sh
 - (vi) Artefacts to be delivered: Business use case, Use cases (fully-dressed UML format), Wireframe design, list of actors, test plan, timeline in MS Project/ Equivalent format, Bi-weekly project review meeting format, Minutes of meeting format and traceability matrix
 - (vii) Timeline: 02 months from work order date.

(c) Stage-III: During development. Class diagrams, package diagrams, interface, RESTful service related to use cases under development, updated wireframe, source code repository details, ALM ticket details related to bug/ minor enhancement/ minor changes as applicable for current development, regular updated test plan, updated EAI details, update ICG MediaWiki as and when required to update related diagrams and project development documents.

(d) Stage-IV: On release of each version of software. Update of ICG MediaWiki/ ICG DMS document repository with all related documents, interactive multimedia video contents.

(e) Stage-V: On Go Live. Vendor to provide design & developments artefacts as mentioned in Form-1 as per enclosure.

(f) Interactive web documentation/ manual/ training. Buyer has deployed 'DMS as part of SIMHA platform' as standard documentation/ training knowledge repository as on-campus deployment inside militarised zone with no access over internet to Vendor. Vendor should provide standard visual training/ deployment/ technical as per ICG standards preferably developed on Adobe Premiere/Equivalent. ICG DMS shall be made available to vendor at ICG campus. Vendor has to customise/ update as required to provide complete end-to-end maintenance/training material which should include step-by-step installation of application under development, project design documents such as wireframe/ details of project members/ use case diagrams/ project timeline/ screenshots of important setup/ configurations, maintenance steps, backup & recovery steps and detailed feature demonstrations.

Zero-Touch ROBO unit specific non-functional requirements

28. Technical requirements for each of major components should be as per '**Annexure-I of Appendix-B**'.

29. **Single-pane-of-glass-monitoring.** ROBO units designed to be deployed at remote locations where required IT skills for management unlikely to be available locally. Hence, entire system should be centrally manageable, deployable through 'Single-glass-pane-monitoring' software console. All ROBO unit key components such as ROBO datarack, ROBO HCI/HCA systems should have native 'Single-pane-of-glass-monitoring' to display all necessary parameters in single unified Dashboard as mentioned in '**Annexure-I of Appendix-B**'.

Annexure-I of Appendix-'B'

**DETAILED TECHNICAL SPECIFICATIONS -
ZERO-TOUCH ROBO DATA RACK WITH HYPER CONVERGED
INFRASTRUCTURE/ APPLIANCE (HCI/HCA), AND SECURED MEDICAL EHR
TABLET**

Section-A – Zero-Touch ROBO Data Rack

SL	Parameters	Technical Specification-Zero Touch ROBO Data Rack	
1.1.0	Type of modular data rack for ROBO	Integrated Modular Data Rack. Rack should be intelligent and should facility of inbuilt UPS, Precision cooling units and Fire detection.	
1.2.0	Zero Touch Monitoring/M anagement	Zero-touch monitoring, management of all parameters including Cooling and Power along with IP PDU, Fire detection, suppression and Safety Features of Biometric Access control, IP Cameras etc	
1.3.0	Usable IT load to support	2.2 KW , scalable upto 4kW with additional racks	
1.4.0	High-Availability with No Single-Point-of-Failure	All components including power, cooling, PDUs, monitoring should be in HA with no Single-Point-of-Failure, monitoring unit should also support redundant power supply source	
1.5.0	Design	(i) Modular and Scalable design for power and cooling (ii) Single Rack solution	
1.6.0	RU space for IT load	(i) Minimum usable space 18U (HCA Server-04U, L3 Switches-02U, GPON OLTs-04U, MPLS Router-2U, Spare-6U) (ii)	
1.7.0	UPS	(i) Rack mountable, N+1 configuration for rack mountable internal lithium-ion battery modules, Minimum backup of 5 minutes in full load. (ii) IP PDU with socket level monitoring to be provided and connected to integrated monitoring system	
1.8.0	Cooling	(i) 3.5 kW capacity Cooling Unit, rack mounted, Redundant units of minimum, N+1 configuration	

SL	Parameters	Technical Specification-Zero Touch ROBO Data Rack	
		<p>(ii) Cooling unit to ensure UPS & Battery cooling positioned inside rack</p> <p>(iii) Split indoor & Outdoor unit design</p> <p>(iv) Cooling Unit integrated in rack, rack mountable not more than 6U</p> <p>(v) High reliable Scroll compressor</p> <p>(vi) Electronically Commutated centrifugal evaporator fan for high energy efficiency</p> <p>(vii) Air flow suitable to rack equipment in vertical direction</p> <p>(viii) Cooling unit must have safety protections - Under voltage and Overvoltage, High Pressure & Low Pressure for safe operation</p> <p>(ix) For easy maintenance, washable filter 80% efficiency to 20 micron and HDPE media</p> <p>(x) Flare type Thermostatic Expansion Valve for easy serviceability</p> <p>(xi) Anticorrosive Condenser coil for coastal area environmental application</p> <p>(xii) Individual breakers at indoor and outdoor unit for protection</p> <p>(xiii) ON/OFF switch at indoor unit for emergency purpose</p>	
1.9.0	Safety & security features	<p>(i) Smoke detection and fire suppression, Biometric Access control, IP Camera, Rodent Repellant.</p> <p>(ii) Environment monitoring like water-leak detection, Temperature and Humidity sensor, Door sensor etc.</p> <p>(iii) Emergency automatic door opening for both front & back doors based on temperature</p>	
1.10.0	Single Pane of Glass of Monitoring and Management	<p>(i) All ROBO units across geographical locations should be centrally monitored and manageable through web based single window integrated monitoring of ROBO data racks for vital parameters such as UPS, Cooling, temperature, door position, humidity, etc.</p>	

SL	Parameters	Technical Specification-Zero Touch ROBO Data Rack	
		<p>(ii) Should be able to group ROBO units into logical, hierarchical for management flexibility. Delegate appropriate levels of administrative control at the regional level or centrally with role-based management</p> <p>(iii) Should be able to generate system status/alert.</p>	
1.11.0	Protocol support	SNMP/RS 485. Required interface units need to be provisioned. Should support ready integration with NMS & EMS for 3 rd party IBMS/ITOM software monitoring & management.	
1.12.0	High Availability features	Active Cooling redundancy as mentioned above, UPS system redundancy as mentioned above, PDU should have N+N redundancy. Redundant separate raw power supply & distribution units within data rack.	
1.13.0	Other	<p>(i) Project specific design should be certified for mentioned features by CDCP certified engineer from OEM</p> <p>(ii) Installation to include laying of appropriate power cabling from Main panel to rack along with Chemical earthing.</p>	
1.14.0	Centralised monitoring software	<p>(i) Centrally monitor & manage all ROBO units over WAN</p> <p>(ii) Should be deployed in virtual form factor</p>	
1.14.1	Real-time monitoring	<p>(i) All parameters of power, cooling and IP-PDU should be available for remote monitoring.</p> <p>(ii) Fire Detection system should also integrate with PFC contacts for status of health with main monitoring system.</p> <p>(iii) Cooling monitoring should include parameters like compressor and fan running hours, UPS monitoring should include battery health, environmental monitoring, raw incoming power parameters such as frequency /amperes /voltage, UPS outgoing power parameters, IP PDU socket level</p>	

SL	Parameters	Technical Specification-Zero Touch ROBO Data Rack	
		<p>power, access control operational status, remote viewing of camera.</p> <p>(iv) Alerts for abnormalities on power consumption pattern at IP PDU socket level, abnormalities in Compressor health pattern.</p> <p>(v) No 'Single-Point-Failure'</p> <p>(vi) Seamless 'Single-glass-plane-monitoring' for all ROBO units across India. Dashboard should display BI live-reports of all ROBO units in single unified Dashboard and should not pop-up/ display multiple windows for each ROBO unit management.</p> <p>(vii) Software should have open architecture, open protocols to support monitoring & management of all the mentioned parameters by wide variety of integration with 3rd party OEM DCIM/NMS/ITOM software systems such as Nagios etc.</p>	
1.14.2	Central Management Software Requirement for Central location	<p>(i) Group ROBO data racks into logical, hierarchical for management flexibility and deploy policies centrally to be used in conjunction with regional or functional policies.</p> <p>(ii) Delegate appropriate levels of administrative control at the regional level or centrally with role-based management.</p>	
1.14.3	WAN optimised	<p>(i) Should support network environment consists of no network connectivity, 64Kbps VSAT high-latency connectivity, 2 Mbps to 8 Mbps</p> <p>(ii) DCIM software should able to function within allotted WAN bandwidth and at predefined duration defined as custom WAN profile. For example, for Site-X, allotted maximum allotted bandwidth for DCIM software is 64 Kbps and only communicate during off-hours it mid-night 00:00 hrs to 04:00 hrs.</p> <p>(iii) Should support off-line no network environment such as remote islands and ICG ships. On availability/ restoration of network</p>	

SL	Parameters	Technical Specification-Zero Touch ROBO Data Rack	
		connectivity should sync with central servers subject to custom WAN profile.	
1.14.4	User Permissions / Security	Use of LDAP and Active Directory for user authentication	
1.15.0	ROBO OEM	ROBO components of datarack including, Cooling, UPS, IPDU and centralised monitoring software similar to DCIM should be of same single OEM to have seamless integration and management support	

Section-B – **Hyper Converged Infrastructure/Appliance (HCI/HCA) with accessories for ROBO**

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
General			
2.0.0	Key requirements	(i) Should provide Software Defined following: - (a) Compute (b) Storage (c) Networking (ii) WAN including router, load balancer (iii) Security through Next Generation Firewall (Virtual NGFW) (vi) Backup and recovery including ROBO site recovery and sandbox testing (v) Enterprise wide centralised ' Single-pane-of-monitoring and management ' for all above 04 requirements. (vi) High-Availability (HA) configuration with no 'Single-point-of-failure'	
2.0.1	Bandwidth throughput	WAN bandwidth of 8 Mbps at ROBO site and 40 Mbps at Central Data Center site	
2.1.0	Hardware specification	(i) Rack/ Node for clustering - 03 Nos (ii) CPU Sockets per Rack/ Node - 02 Nos (iii) CPU loaded per Rack/ Node – 01 No. (iv) Minimum of 64GB Memory RAM expandable upto 1TB for each server/node (v) All SSD support – Yes (vi) SSD storage per rack/node – 5 TB raw	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		(vii) Storage of minimum 10 TB available space for usage (viii) Lights-out management – Yes (ix) Minimum Cores per CPU – 20 Cores (x) Lights-out management (xi) Maximum RU space servers/HCA – 4U	
2.2.0	Form Factor	(i) Appliance with compute/storage nodes of minimum 03 nos. in single frame, as required for HCA configuration (or) (ii) Rack Servers of 1U each 03 Nos., as required for HCI configuration	
2.2.1		Overall Rack Unit (RU) size of entire solution including racks/ node, L3 switches should not exceed 6U	
2.3.0	OEM	(i) Zero-Touch ROBO OEM components of HCI software/HCA, Virtual NGFW, Backup software of latest Gartner Report on Magic Quadrant for Hyper Converged Servers for Software/ Appliance. HCI software should provide SD-Compute, Storage and Networking. (ii) Should be registered in India and present for minimum of 05 years (iii) Should have minimum 03 deployments of provided hardware/ software in Central/State Govt. Organisations in India and 05 deployments in private sector (iv) Should have OEM 24x7x365 onsite support for hardware/ software in India. Should provide Service Desk contact details and Service Level Agreement (SLA) in proof.	
2.3.1	OEM implementation	Design plan, implementation and validation for compute, storage, network virtualisation and SD-WAN to be done by OEM. Undertaking for the same to be mentioned on the MAF certificate.	
Centralised Management			
2.4.0	Single pane of glass monitoring and management	(i) All ROBO units should be managed from single centralised web based panel (ii) Should provide aggregated single unified dashboard to monitor all ROBO sites. Single	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		dashboard should not popup/ display multiple windows for each ROBO HCI/HCA unit.	
Business Continuity			
2.5.0	High Availability	High Availability of all active/ passive components including servers and switches. No Single-Point-of-Failure architecture and associated components should be provided	
2.5.1		The solution should support VM on HA configuration	
2.5.2	Backup & Recovery	The proposed Backup software must offer host based / CPU based licensing with no restrictions on type of arrays (protecting heterogeneous storage technologies), front end production capacity or backend backup target capacity for virtual or physical servers. Licenses and associated hardware should be supplied for primary and DR site.	
2.5.3		Backup software should be totally agentless but should support application aware backups for MS SQL, Oracle, Exchange transaction logs with non-staged granular recovery of all these applications. It should support crash consistent VM level backup for all other workloads.	
2.5.4		Backup software should be Hardware Agnostic software and it should support any type of storage for storing backups on disk and yet support de-duplication on the storage targets quoted. It should be able to backup data to tapes as well for long term retention.	
2.5.5		Backup software should support file level recovery from an image level backup of Windows/Linux guest file systems.	
2.5.6		Backup software should provide Recovery of Application Items, File, Folder and Complete VM recovery capabilities from the image level backup (irrespective of the source size) within 15Mins RTO.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
2.5.7		Replication in the software should be a VM level replication and must replicate the VM level data with or without backing it up at the source site. It should also include failover and failback capabilities and should be able to perform automatic acquisition of network addresses at the destination site.	
2.5.8		Backup software should provide Backup and Replication capabilities in one console only.	
2.5.9		The software should be Network-efficient, Secure backup data replication with variable-length encryption at the source, along with compression and encryption to ensure that backups are optimized for WAN transmission. This should be ensured without need of any other 3rd party WAN Accelerator requirements.	
2.5.10		Backup software must have a feature of data validation, whereby a workload is powered-on in a sandbox environment and tested for its recoverability.	
2.5.11		Recovery verification should automatically boot the server from backup and verify the recoverability of VM image, Guest OS and Application Consistency.	
2.5.12		The proposed backup solution must support at least AES 256-bit encryption capabilities.	
2.5.13		Should provide RESTful API for integration with 3 rd party Enterprise applications	
2.5.14		Should provide Enterprise level unified Dashboard 'Single-pane-of-glass-monitoring and management' from central site for all ROBO units. All ROBO sites backup servers' status should be available from single unified dashboard at central site.	
2.5.15		ROBO sites should auto replicate with central site on restoration of network without any manual intervention	
2.5.16		Recovery of ROBO sites from central backup at data center should be supported with zero-	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		touch at ROBO. Take backup of ROBO sites locally and then replicate it to central location	
Networking			
2.6.0	L3 Switch	Should provide L3 physical switch with 48 ports	
2.6.1	Network Patch Panel	Network patch panels external/ internal should be provided	
Software Defined Data Center (SDDC) characteristics			
2.7.0	Software Defined Compute	Virtualization software should be bare metal hypervisor with functionality of High Availability, Fault Tolerance, hot Add (CPU, Memory, Storage & Network), dynamic resource scheduler, distributed switch, dynamic power management, storage and network IO control, VM level encryption	
2.7.1		Virtualization software shall allow heterogeneous support for guest Operating systems like Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu, CentOS and Solaris x86)	
2.7.2		Virtualization software should support live Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option.	
2.7.3		Virtualization software should provide capabilities of Hot Add (CPU, Memory & devices) to virtual machines when needed, without disruption or downtime in working for both windows and Linux based VMs	
2.7.4		Virtualization solution should have the capability to provide out of box integration with Openstack API's and should support all services of Core Open Stack	
2.7.5		Virtualization software shall provide a Virtualization layer that sits directly on the	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		bare metal server hardware with no dependence on a general purpose OS	
2.7.6		Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, anti-malware solutions without the need for agents inside the virtual machines.	
2.8.0	Software Defined Storage	The solution should provide software based enterprise class storage services on server hardware available from all the leading server vendors in the industry. It should support both hybrid and all flash configurations on the server	
2.8.1		The solution should have a flexibility to choose any h/w OEM and not only the one with which the solution is being provided for future expansions.	
2.8.2		The software defined storage solution should support the capability of increasing the storage capacity by simply adding another hard drive in the physical node instead of adding another physical server in the cluster	
2.8.3		The solution should provide a single unified management console for the management of the entire environment including virtualized environment as well as software defined storage environment to simplify the manageability of the entire solution	
2.8.4		The solution should provide distributed RAID and cache mirroring for intelligent placement of VM objects across disks, hosts and server racks for enhanced application availability. Zero data loss with zero downtime in case of disk, host, network or rack failure.	
2.8.5		The solution should have in-built software defined storage capability integrated within or outside the hypervisor kernel itself and should work with or without the need for any specialized dedicated controller virtual appliance.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
2.9.0	Network Virtualization	The solution should offer to deploy virtualized network functions (like switching, routing, firewalling, VPN, DHCP and load-balancing). Administrators can build virtual networks for Virtual Machines without the need for complex VLANs, ACLs, or hardware configuration syntax on physical network.	
2.9.1		The Solution should offer Centrally managed distributed L2-L4 stateful firewall that is kernel-level integrated into the host architecture	
2.9.2		The solution should be capable to provide agent based or agentless guest introspection services like Anti-Malware etc. and Network introspection services like IPS/IDS etc.	
2.9.3		The virtual solution should offer extending Layer-2 network across multiple sites , without re-architecture or any configuration on physical network	
2.9.4		The Security policies must follow the VM in the event of migration (i.e. live migration)	
2.10.0	Software Defined WAN	The proposed branch solution should be available in both pre-packaged physical appliance and software virtual form factor.	
2.10.1		The solution should compromise of a centralized orchestrator capable of configuration and monitoring of multiple WAN Edge devices in the branches, data-centers and remote locations. Solution should also compromise of a high performance branch Customer Premises Equipment (CPE) or Virtual CPE devices which can replace traditional WAN routers or co-exist with traditional WAN routers. These branches are to be managed from the centralized orchestrator. The centralized orchestrator should also provide for an option of remote diagnostics to validate reachability of both WAN and LAN sides, packet captures ARP tables, route tables etc. The proposed solution should provide an option of using the Orchestrator	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		(Management and Provisioning Platform) from a public cloud and it should also have the capability to be deployed on-premises.	
2.10.2		The proposed hub/CPE devices should be able to aggregate the bandwidth across multiple links and should have zero-IT touch deployment capabilities.	
2.10.3		The solution should provide for sub-second per-packet link steering based on the measured performance metric, application requirements, business priority of the application and link cost The solution should provide for on-demand link remediation in the event of packet loss, increase in latency and jitter	
2.10.4		The proposed solution should be an enterprise grade WAN solution and should be completely transport independent. And, should support multiple technologies like MPLS, Internet, P2P Links, 3G/4G/LTE.	
2.10.5		The solution should be able to detect, classify and control various applications running over WAN. The solution should provide historical and real time link usage and performance of applications. The solution should provide for application usage related data over time and should provide an option to filter it down to things like Source Devices/IPs, destinations etc.	
2.10.6		The branch device should be capable of running/supported over major hypervisors like VMware, Hyper-V, Xen and KVM	
2.10.7		The solution should enable creation of full mesh, partial mesh and hub-n-spoke VPN tunnels including dynamic branch to branch tunnels with a single click.	
2.10.8		The solution should be capable of detecting WAN failures and dynamically steering the traffic to available WAN links in a sub-second manner.	
2.10.9		The solution must be able to define classes of application traffic and apply Quality-of-Service policies to each class. The solution	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		must be able to apply QoS policies to all traffic seen in the network, including both optimized and non- optimized traffic flows, including TCP, UDP, and other non-TCP traffic types.	
2.10.10		The solution must be able to apply inbound QOS by TCP/UDP rate limiting low priority traffic. QoS policies should be centrally defined and can be applied to classes of applications and individual applications	
2.10.11		The encryption scheme used by SD-WAN solution should be FIPS 140-2 compliant. The solution should provide 128-bit AES or 256-bit AES encryption on the VPN. The branch device should have an inbuilt firewall for providing Layer 4 policies and the branch device should also be capable of running 3rd part firewall VNFs and provide service chaining for the same.	
2.11.0	Software Defined Security	The proposed Next Generation Firewall should be in Software Form factor and can be either present in the Virtualization/ Hypervisor layer or as a Virtual Machine	
2.11.1		The proposed solution must allow single policy rule creation for application control, user based control, host profile, threat prevention, Anti-virus, file filtering, content filtering, QoS and scheduling at single place within a single rule and not at multiple locations. There must not be different places and options to define policy rules based on these parameters.	
2.11.2		It should have the Single-Pass Architecture approach. The architecture should enable full, contextual classification of traffic, followed by a rich set of enforcement and threat prevention options. The architecture should also classify and control traffic in a "single pass" through the firewall.	
2.11.3		The Firewall should be able to integrate on standard protocols with leading SIEM solution like IBM, Symantec, Microfocus, Splunk, RSA.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
2.11.4	Security Features	The solution must support Routing, load sharing, Firewall, Application visibility and control, User ID, IPS, Anti-virus from day one.	
2.11.5		The solution must provide application identification natively, without requiring any license/subscription/blade, provide real time traffic logs based on applications irrespective of ports. While monitoring real time traffic logs, solution must provide detailed view of Defense Services 's application and Users, not just ports and IP addresses. E.g. the solution must distinguish between telnet on port 80 and http traffic between same pair of source and destinations. The proposed solution must also have capabilities for decrypting SSL and SSH traffic for both inbound (connection across any port and not just 443 and 22) and outbound	
2.11.6		The firewall should support following hypervisor and orchestration environments VMware NSX, KVM with optional support for the OpenStack plugin, ESXi, Hyper-V, Citrix NetScaler SDX	
2.11.7		The device should be capable to identify and prevent in-progress phishing attacks by controlling sites to which users can submit corporate credentials based on the site's URL category thus blocking users from submitting credentials to untrusted sites while allowing users to continue to submit credentials to corporate and sanctioned sites.	
2.11.8		The proposed solution shall provide sandbox behavior based inspection and protection of unknown viruses and zero-day malware for any application and protocol (not limited to HTTP, SMTP, FTP) in future and the solution shall be able to provide automated signature generation for discovered zero-day malware and the solution should ensure the delivery of the signature in 5 mins from the time of detection. No file has to be shared and the	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		analysis should be done on premise at the central location if required.	
2.11.9	Performance Requirement	The proposed solution should support from 4 Mbps scalable to 100 Mbps of performance with Firewall, application control, IPS, Anti-Virus and Anti-malware enabled from day-1.	
2.11.10		The proposed solution must support 60,000 concurrent sessions and 2,500 new sessions per second. The session count must be active TCP connections. The concurrent sessions must not drop while enabling all requested features and should be scalable to 4 times.	
2.11.11		The proposed solution must support at least 100 Mbps of IPSEC VPN throughput and 500 IPsec VPN tunnels and 500 SSL VPN Users from Day one without requiring any license.	
2.11.12		The proposed solution must be in the Gartner Magic Quadrant of Enterprise Firewalls for the last 3 years- 2017, 2016 & 2015.	
2.11.13	Central Management Software Requirement for Central location	Should be deployed in virtual form factor and group devices into logical, hierarchical for management flexibility and deploy policies centrally to be used in conjunction with regional or functional policies. Delegate appropriate levels of administrative control at the regional level or centrally with role-based management.	
2.11.14		It should be capable of automatically correlate indicators of threats for improved visibility and confirmation of compromised hosts across network and centrally analyze, investigate and report network traffic, security incidents and administrative modifications.	
2.11.15		It should be possible to view a customizable graphical summary of security threats, applications, users and content.	
2.11.16		Should support XML based REST API and should have canned as well as option for customized reports for custom number of	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		days, geographical based reports, top threats, applications etc.	
2.11.17		Should provide RESTful API based integration with Enterprise systems	
2.12.0	SIMHA Framework compliance	The solution should support latest version of Oracle Fusion Middleware, Oracle Database running on multi-OS environment including Oracle Linux, Microsoft Windows, RedHat Linux as per Appendix-'L' SIMHA compatibility matrix.	

Section-C – **Secured medical tablet for EHR**

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
3.1.0	Display	Minimum size of 10.5", Minimum of 2224x1668 resolution at 264 pixels per inch (ppi), Multi-touch display	
3.1.1	Color	Grey/ Silver	
3.1.2	Capacity	Minimum of 4GB RAM of memory and 256GB storage	
3.1.3	Weight	Maximum of 500gms	
3.2.0	Biometric Security	Fingerprint authentication	
3.3.0	Camera	Minimum of 12 Megapixel with aperture of f/1.8, Optical image stabilization, Panorama upto minimum of 63 Megapixels, Photo geotagging	
3.3.1	Video recording	4K video recording at 30fps, Optical image stabilization for video, Slow-motion video support for 1080p at 120fps, Time-lapse video with stabilization, continuous autofocus video, Body and face detection, Video geotagging	
3.3.2	Microphones	Dual microphones for calls, video recording and audio recording	
3.4.0	Sensors	Biometric fingerprint sensor, Three-axis gyro, accelerometer, Barometer, Ambient light sensor and GPS	
3.5.0	Connectivity	Wired docking station to Ethernet LAN	
3.6.0	Battery	Up to 9 hours of surfing the web using a mobile data network	
3.7.0	Docking station	Yes	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
3.8.0	Accessories	All accessories including docking station, Ethernet connectors etc. should be from tablet OEM	

Appendix-'C'

(Refer to Para-5 of RFP)

Company letter head

[Date]

The Director General
{for D(IT) }
Directorate of IT, Coast Guard Headquarters
New Delhi – 110 001

Dear Sir,

**SUB: DESIGN, DEVELOPMENT, IMPLEMENTATION AND SUPPORT FOR
AUTOMATION OF SERVICE HEALTHCARE ADMINISTRATION (PROJECT ASHA)
- INDIAN COAST GUARD**

1. Refer to your RFP No.CG HQ/IT/ASHA/2018-19 dated 30 May 2018.
2. This is to notify you that our company intends to submit a proposal for "Design, Development, Implementation and Support for Automation of Service Healthcare Administration (PROJECT ASHA) - Indian Coast Guard".
3. Primary and Secondary contacts for our company are:

	Primary Contact	Secondary Contact
Name:		
Title:		
Company Name:		
Address:		
Phone:		
Mobile:		
Fax:		
E-mail:		

4. We confirm that the information contained in this response as per **Annexure-1 of Appendix-'C'** or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to the Indian Coast Guard is true, accurate, verifiable and complete.

Dated this Day of 2018

(Signature) (In the capacity of)

Duly authorized to sign

Sincerely,

[SYSTEM INTEGRATOR'S NAME]

Name

Title

Signature

Date

(Name and Address of Company) Seal/Stamp of System Integrator

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am of the, and that who signed the above response is authorized to bind the corporation by authority of its governing body.

Date

(Seal here)

Annexure-1 of Appendix-'C'

(Refer to Para-5 of RFP, Para-4 of Appendix-B)

CHECKLIST & INDEX OF BID

[Important note: All filenames of documents uploaded in e-procurement website should be numbered to match with 'Bid Page' without exception. For example: 04-technical-bid-covering-letter.pdf, 22-datasheet-datarack.pdf etc.]

1. RFP with enclosures

Sl.	Details	Bid Page No.	Check (Yes/No)
<u>General Documents</u>			
(a)	Checklist & Index of Bid is attached		
(b)	Bid submission covering letter (<i>Appendix-'B'</i>)		
(c)	Technical Bid with Covering letter. Covering letter & EMD to be placed inside sealed cover (<i>Appendix-'C'</i>)		
(d)	RFP acknowledgement & compliance (<i>Copy of RFP duly signed on each page</i>)		
(e)	Bidder profile format included (<i>Appendix-'K'</i>)		
(f)	Technical Compliance (<i>Appendix-'D'</i>)		
(g)	Commercial Bid (<i>Appendix-'F'</i>) with Covering letter (<i>Appendix-'E'</i>).		
<u>Package-A: Healthcare Software bidders</u>			
(h)	Technical Solution document including Bill of material and sizing of solution (<i>'Proposed Solution (60 Marks)' of Para-6(f)(g)(h)(j) in Appendix-'G'</i>)		
(j)	POC of HMS demo project document included (<i>Annexure-1 of Appendix-'J'</i>)		
(k)	POC demo app for SIMHA project document included (<i>Annexure-2 of Appendix-'J'</i>)		
(l)	ICG SIMHA compliance included (<i>Appendix-'L'</i>)		
(m)	Necessary Oracle database components including Oracle Database Mobile Server are included.	N/A	
(n)	All COTS components qualify Coast Guard criteria and duly supported documents are attached	N/A	
(p)	MAF Certificate from OEM for HMS, if applicable		
<u>Package-B: Zero-Touch ROBO Data rack bidders</u>			
(q)	POC of Zero-touch ROBO data-rack document included (<i>Annexure-3 of Appendix-'J'</i>)		

(r)	MAF Certificates from OEM for Zero-touch ROBO Data Rack, Hyper Converged Appliance, SD-WAN software is attached. MAF to include undertaking of OEM to deploy respective solution through OEM/ Authorised partners.		
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2. Technical Brochures/ Data Sheets/ Manuals

Sl.	Technical Brochures/ Data Sheets/ Manuals	Bid Page No.	Check (Yes/No)
Package-A			
(a)	Brochure & Datasheet of HMS Software		
(b)	Brochure & Datasheet of EHR medical tablet device		
(c)	Brochure & Datasheet for ODMS Server		
Package-B			
(d)	Brochure & Datasheet of Zero-touch ROBO Rack. Datasheets should include all sub-components including UPS, Lithium-ion battery, Compressor, Evaporator, Cooling Fans, Fire Detection & Suppression, Rodent Repellent, Biometric access-control, DCIM software		
(e)	Brochure & Datasheet of UPS with Lithium-ion batteries		
(f)	Brochure & Datasheet of Compressor, Evaporator and Cooling Fans		
(g)	Brochure & Datasheet for Fire Detection & Suppression		
(h)	Brochure & Datasheet for Biometric access control		
(j)	Brochure & Datasheet for DCIM/Equivalent Software		
(k)	<i>Any other documents as required</i>		

3. List of Enclosures

Sl.	Appendix Description	Bid Page No.	Check (Yes/No)
(a)	Technical Offer with EMD, if applicable(In separate sealed cover)		
(b)	Commercial Offer (In separate sealed cover)		

Note:

- (a) The check list as above is to be fully completed and enclosed along with the bid covering letter along with technical bid.
- (b) The technical bid shall, additionally, consist of the following documents in the sequence given below: -
 - (i) Index page indicating the technical bid contents with appropriate page numbers.
 - (ii) Deviations, assumption and exclusions from Scope of Work.
- (c) In case necessary documentary proofs are not enclosed the firm would be rejected during Technical Evaluation.

Signature with date & Stamp of Firm

Covering letter format for Technical Bid

(Company letter head) [Date]

To

The Director General
{for D(IT) }
Directorate of IT, Coast Guard Headquarters
New Delhi-110 001

Dear Sir,

**SUB: DESIGN, DEVELOPMENT, IMPLEMENTATION AND SUPPORT FOR
AUTOMATION OF SERVICE HEALTHCARE ADMINISTRATION (PROJECT ASHA)
- INDIAN COAST GUARD**

1. Refer to your RFP No. CGHQ/IT/ASHA/2018-19 dated ___ May 2018.
2. Having examined the bid document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer for "Design, Development, Implementation and Support for Automation of Service Healthcare Administration (PROJECT ASHA) - Indian Coast Guard" as required and outlined in the RFP for Indian Coast Guard. To meet such requirements and provide such services as required are set out in the bid document.
3. We attach hereto the bid technical response as required by the bid document as per format in **Appendix-'D'**, which constitutes our proposal. We undertake, if our proposal is accepted, to provide all the functional and non functional requirements of the solution put forward in Part II of the RFP or such features as may subsequently be mutually agreed between us and Indian Coast Guard or its appointed representatives. We agree for unconditional acceptance of all the terms and conditions set out in the bid document and also agree to abide by this bid response for a period of SIX (06) MONTHS from the date of submission of bids and it shall be valid proposal till such period with full force and virtue. Until within this period a formal contract is prepared and executed, this bid response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us and Indian Coast Guard.
4. We confirm that the information contained in this proposal or any part thereof, including its exhibits, schedules and other documents and instruments delivered or to be delivered to Indian Coast Guard is true, accurate and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead Indian Coast Guard as to any material fact.
5. We agree that you are not bound to accept the lowest or any bid response

TECHNICAL COMPLIANCE SHEET

(Note: Vendor to upload duly ink-signed copy of RFP alongwith technical compliance sheet. Details of following RFP clauses as per RFP issued by this Office)

Sl.	RFP Clause	RFP Requirement	Compliance (Yes/No), deviations if any
01.	RFP Covering letter, Para-1 to 7	Covering letter for RFP No.IT/3014/ASHA dated ___ May 2018 of Coast Guard Headquarters, New Delhi	
02.	Part-I of Encl.-I:- General Information		
(a)	Para-1	Last date and time for depositing the Bids	
(b)	Para-2	Manner of depositing the Bids	
(c)	Para-3	Time and date for opening of Bids	
(d)	Para-4	Address of Submission of EMD	
(e)	Para-5	Place of opening of the Bids: [DIT,CGHQ, New Delhi]	
(f)	Para-6	Two-Bid system	
(g)	Para-7	Forwarding of bids	
(h)	Para-8	Clarification regarding contents of the RFP	
(j)	Para-9	Modification and Withdrawal of bids	
(k)	Para-10	Clarification regarding contents of the bids	
(l)	Para-11	Rejection of Bids	
(m)	Para-12	Unwillingness to Quote	
(n)	Para-13	Validity of Bids	
(p)	Para-14	Earnest Money Deposit	
03.	Part II – Essential Details of Items/Services required		
(a)	Para-1	Schedule of Requirements.	
(b)	Para-2	Technical Details. Detailed compliance submitted as per Appendix-'A' .	
(c)	Para-3	Two bid system	
(d)	Para-4	Delivery Period	
(e)	Para-5	INCOTERMS for Delivery and Transportation	
(f)	Para-5	Consignee Details	
04.	Part III – Standard Conditions		
(a)	Para-1	Law	
(b)	Para-2	Effective Date of the Contract	

Sl.	RFP Clause	RFP Requirement	Compliance (Yes/No), deviations if any
(c)	Para-3	Arbitration	
(d)	Para-4	Penalty for use of Undue influence	
(e)	Para-5	Agents / Agency Commission	
(f)	Para-6	Access to Books of Accounts	
(g)	Para-7	Non-disclosure of Contract documents	
(h)	Para-8	Liquidated Damages	
(j)	Para-9	Termination of Contract	
(k)	Para-10	Notices	
(l)	Para-11	Transfer and Sub-letting	
(m)	Para-12	Patents and other Industrial Property Rights	
(n)	Para-13	Amendments	
(p)	Para-14	Taxes and Duties	
(q)	Para-15	Pre-Integrity Pact Clause	
05.	Part IV – Special Conditions		
(a)	Para-1	Performance Guarantee	
(b)	Para-2	Option Clause	
(c)	Para-3	Repeat Order Clause	
(d)	Para-4	Tolerance Clause	
(e)	Para-5	Payment Terms for Indigenous Sellers	
(f)	Para-6	Payment terms for Foreign Sellers	
(g)	Para-7	Advance Payments	
(h)	Para-8	Paying Authority	
(j)	Para-9	Fall clause	
(k)	Para-10	Exchange Rate Variation Clause	
(l)	Para-11	Risk & Expense clause	
(m)	Para-12	Force Majeure clause	
(n)	Para-13	Buy-Back offer	
(p)	Para-14	Specification	
(q)	Para-15	OEM Certificate	
(r)	Para-16	Export License	
(s)	Para-17	Earliest Acceptable Year of Manufacture	
(t)	Para-18	Buyer Furnished Equipment	
(u)	Para-19	Transportation	
(v)	Para-20	Air lift	
(w)	Para-21	Packing and Marking	
(x)	Para-22	Quality	
(y)	Para-23	Quality Assurance	

Sl.	RFP Clause	RFP Requirement	Compliance (Yes/No), deviations if any
(z)	Para-24	Inspection Authority	
(aa)	Para-25	Pre-Dispatch Inspection	
(ab)	Para-26	Joint Receipt Inspection	
(ac)	Para-27	Franking clause	
(ad)	Para-28	Claims	
(ae)	Para-29	Warranty	
(af)	Para-30	Product Support	
(ag)	Para-31	AMC Clause	
(ah)	Para-32	ESP Clause	
(aj)	Para-33	PV Clause	
06.	Part V – Evaluation Criteria & Price Bid issues		
(a)	Para-1	Evaluation Criteria	
(b)	Para-2	Price Bid Format	

Annexure-I to Appendix-'E'
(Refer to Para-3(a) & (b) of Appendix-'E')

SCHEDULE OF REQUIREMENT & TECHNICAL SPECIFICATION COMPLIANCE

SL.	QR Requirement	QR Specification	Compliance (Yes/ No). Deviations, if any.
01.	Schedule of Requirements <i>(Para-1, Part-II of RFP)</i>	(a) Design, Development, Implementation and Support for Automation of Service Healthcare Administration (Project ASHA) with warranty of one year including onsite manpower. Warranty to commence from date of final GoLive on delivery of all functional modules. Cost of All Inclusive Annual Maintenance Contract (AIAMC) to be provided separately along with other breakdown cost in commercial bid. Supply, integration and deployment of Zero-touch ROBO dataracks including required software, hardware with 03 years on-site warranty support (b) Warranty for 03 year for other hardware and software.	
02.	Vendor Requirement <i>(Para-2, Part-II of RFP)</i>	<u>Technical Specifications:</u> - Design, configuration, customization, development, implementation and support for healthcare application using proven and matured COTS (Commercially-Off -The-Shelf) product/ Bespoke Software. Delivery of features shall be on 03 phases with 01 st phase generally based on Out-of-the-Box BPM (Business Process Modelling/ readily available features) features of COTS/Bespoke product with 03 out of 11 modules and 02 nd phase involves Coast Guard specific specification/ customization/ integration/ development of another 03 out of 11 modules and 03 rd phase to include remaining modules.	

Covering letter format for Commercial Bid.

Company letter head

[Date]

The Director General
{for D(IT) }
Directorate of IT, Coast Guard Headquarters
New Delhi – 110 001

Dear Sir,

**SUB: DESIGN, DEVELOPMENT, IMPLEMENTATION AND SUPPORT FOR
AUTOMATION OF SERVICE HEALTHCARE ADMINISTRATION (PROJECT ASHA)
- INDIAN COAST GUARD**

1. Refer to your RFP No CGHQ/IT/ASHA/2018-19 dated 30 May 2018.
2. Having examined the bid document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer for "Design, Development, Implementation and Support for Automation of Service Healthcare Administration (PROJECT ASHA) - Indian Coast Guard" as required and outlined in the RFP for Indian Coast Guard. To meet such requirements and provide such services as required are set out in the bid document.
3. We attach hereto the bid of commercial response as required by the bid document, which constitutes our proposal. We undertake, if our proposal is accepted, to provide all the functional and non functional requirements of the solution put forward in Part II of the RFP or such features as may subsequently be mutually agreed between us and Indian Coast Guard or its appointed representatives. We agree for unconditional acceptance of all the terms and conditions set out in the bid document and also agree to abide by this bid response for a period of SIX (06) MONTHS from the date of submission of bids and it shall be valid proposal till such period with full force and virtue. Until within this period a formal contract is prepared and executed, this bid response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us and Indian Coast Guard.
4. We confirm that the information contained in this proposal or any part thereof, including its exhibits, schedules and other documents and instruments delivered or to be delivered to Indian Coast Guard is true, accurate and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead Indian Coast Guard as to any material fact.

Appendix-'G'

(Refer to Para-1(a) of Part-II, RFP)

TECHNICAL/COMMERCIAL EVALUATION FRAMEWORK
(QUALITY & COST BASED SELECTION)

Introduction.

1. ASHA Healthcare applications need to be made available on reliable basis for Coast Guard and hence Coast Guard intend to qualify vendors having strong experience in implementing similar projects and Healthcare products qualifying to meet challenging conditions of Coast Guard.

Evaluation of Quotation:

2. Technical Evaluation: -

(a) Each Technical bid will be assigned a technical score out of a maximum of **400 marks** (marks breakup described in **Appendix-'G'**). Only the bidders who get a technical score of **50 percent or more** in each section and **60 percent or more** overall will qualify for commercial evaluation stage. Failing to secure minimum marks shall lead to technical rejection of the bid.

(b) The normalized technical score of the bidder shall be calculated as follows:

Normalized Technical Score of a bidder = {Technical Score of that bidder/Score of the bidder with the highest technical score} X 400 (adjusted to 2 decimals)

(c) **Final score calculation through QCBS (Quality and Cost based selection)**

Example: Technical Score

Bidders	Technical score (B)	Normalized Technical score	Final Score
1	350	$(350/390)*400$	358.97
2	360	$(360/390)*400$	369.23
3	370	$(370/390)*400$	379.49

Bidders	Technical score (B)	Normalized Technical score	Final Score
4	380	$(380/390)*400$	389.74
5	390	$(390/390)*400$	400

3. **Commercial Evaluation:** -

(a) Technically qualified bidders as per technical evaluation process will participate in commercial bid opening process. The bidder with the lowest commercials as per Price Formats provided by ICG (**as uploaded in e-procure website**) will be declared commercially L1 bidder and further evaluated as per following method:

(b) Normalized Commercial Score of a bidder = {lowest quote/ bidders quote} X 400 (adjusted to 2 decimals)

Example: Commercial Score

Bidders	Price Quoted by bidders (in Lakhs)	Normalized commercial score	Final Score
1	10	$(10/10)*400$	400
2	11	$(10/11)*400$	363.64
3	12	$(10/12)*400$	333.33
4	13	$(10/13)*400$	307.61
5	14	$(10/14)*400$	285.71

4. **Final score calculation through QCBS**

(a) The final score will be calculated through Quality and Cost based selection method with the following weightage:-

Technical: 70% Commercial: 30%

(b) Final Score = $(0.70 * \text{Normalized Technical Score}) + (0.30 * \text{Normalized Commercial Score})$

Bidders	Final Technical score	Final Commercial score	Final Score (70:30)
1	358.97*.7	400*.3	371.28
2	369.23*.7	363.64*.3	367.55
3	379.49*.7	333.33*.3	365.64
4	389.74*.7	307.61*.3	365.13
5	400*.7	285.71*.3	365.71

(c) The bids with Highest Final Score will be selected.

5. **Technical Evaluation Framework**

(a) The bidder's technical solution proposed in the technical evaluation bid document will be evaluated as per the evaluation criteria mentioned in the table below:

#	Evaluation Criteria	Total Marks	Minimum Qualifying Marks (Cut-off)
(i)	Proposed Healthcare Product, COTS/Non-COTS	80	>=40 (50%)
(ii)	Bidder's Experience	50	>=25 (50%)
(iii)	Bidder Employee Strength	50	>=25 (50%)
(iv)	Certification	20	>=10 (50%)
(v)	Project planning for POC demo app	60	>=30 (50%)
(vi)	Proposed Solution	90	>=45 (50%)
(vii)	Demo	50	>=25 (50%)
	Total	400	>= 240 (60%)

(b) The Buyer reserves the right to check/validate the authenticity of the information provided in the pre-qualification and Technical evaluation criteria and requisite support must be provided by the bidder.

6. The following sections explain how the bidders will be evaluated on technical evaluation criteria.

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		Proposed Healthcare Product, COTS/Non-COTS (80 Marks)		
(a)	Acceptability of proposed HMS Product (COTS/Non-COTS)	<p>(i) The proposed Healthcare solution is expected to have minimum of 08 active implementations including 03 in India and include Appointment, Reception, IPD, Store and Dispensary modules:-</p> <p>>=08 & <14 active implementations – 50 Marks</p> <p>>=07 active implementations - 40 Marks</p> <p>* 10 additional marks if 02 of the implementation is from Central/State Government departments/public sector units</p> <p>* 20 additional marks if one of the implementation is from Armed Forces/ Defence PSU departments of India/ Abroad</p> <p>(OR)</p> <p>(ii) The Healthcare System is expected to have 250 Professional Users and consists of minimum 10,000 active EHR records in India for 03 current implementations and include Appointment, Reception, IPD, Store and Dispensary modules.</p> <p>>=250 & < 399 active Professional users = 40</p> <p>>=400 active Professional users = 50</p> <p>* 10 additional marks if 01 of the implementation is from Central/State Government departments/public sector units</p> <p>* 20 additional marks if one of the implementation is from Armed Forces/ Defence PSU departments of India/Abroad</p>	<p>Work Order/ Purchase Order supported by Customer Completion / Product Acceptance Certificate/ Self Certification by CS</p> <p>(OR)</p> <p>Reference letter from customers stating modules implemented and active users</p>	80

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		<p>The references / certificates should clearly state users / implementations are actively being used as on date of Tender/RFP publishing.</p> <p>(OR)</p> <p>(i) The Healthcare solution is expected to have minimum of 10 active implementations including atleast 01 completed/ ongoing State/Central Govt Healthcare Project in India. Minimum of 03 completed HMS projects abroad in Armed Forces and include Appointment, Reception, IPD, Store and Dispensary modules:-</p> <p>>=15 & <14 active India/abroad implementations and 02>= ongoing/ completed implementations in India at Central/State Govt of India - 50 Marks</p> <p>>=10 active implementations and 01 >= ongoing/completed projects in Central/State Govt of India - 40 Marks</p> <p>* 10 additional marks if 02 of the implementation is from Central/State Government departments/public sector units at India</p> <p>* 20 additional marks if one of the implementation is from Armed Forces/ Defence PSU departments of India/ Abroad</p>		
		Bidder's Experience (50 Marks)		
(b)	Bidder Experience in Healthcare Implementation	<p>Prior Experience: Active Healthcare solution in last 5 years:</p> <p>* At least one (1) citation should be successfully completed, and should cover following module items in single work order: Appointment,</p>	Copy of work order + Completion Certificates from the client; (OR)	50

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		<p>Reception, IPD, Store and Dispensary</p> <p>* 3 citations (atleast 1 should be successfully completed) = 40</p> <p>* 2 citations (atleast 1 should be successfully completed) = 30,</p> <p>* 1 citation (successfully completed) = 20</p> <p>* 5 additional marks if one of the citations is from government departments/public sector units</p> <p>* 10 additional marks if two of the citations are from government departments/public sector units. Wherever there is problem in providing name or cost of project due to Non-disclosure agreements with the clients, the bidder can provide a certificate from an independent auditor or Company Secretary. The certificate should include the scope of work and the remuneration received for the same.</p>	<p>Work Order + Self Certificate of Completion (Certified by CS/independent auditor of the bidding entity);</p>	
		<p>Bidder Employee Strength (50 Marks)</p>		
(c)	<p>Bidder Employee Strength</p>	<p>The Bidder is expected to have:</p> <p>(i) 100 technically qualified professionals in the area of solution architecture, Healthcare implementation, software development, systems integration, functional subject matter experts (SME). Qualified SME in Healthcare should be minimum of 02 Nos. with minimum of MBBS degree with 03 years' experience and 02 certified software professionals on Middleware platform on Oracle/IBM.</p> <p>(ii) 10 out of the above Healthcare experts (Reference certificates to be provided from clients in India)</p>	<p>Self-declaration on company letter head signed by authorized signatory + Resume of key resources. If considering third party experts, include authorization from the employing party. If considering</p>	<p>50</p>

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		<p>should have experience on the bidder's offered implementation model (public cloud/private cloud/hybrid) of proposed Healthcare software on company's payroll. Marks for the experience shall be awarded as under:-</p> <ul style="list-style-type: none"> * If on-roll at least 200 qualified professionals as per (i) above, 10 Middleware certified and 05 MBBS qualified = 30 * If on-roll at least 100 qualified professionals as per (i) above, 05 Middleware certified and 02 MBBS qualified= 20 * If on-roll at least 100 qualified professionals as per (i) above, 02 Middleware certified and 02 MBBS qualified = 10 *-----* * at least ≥ 10 and < 14 qualified healthcare professional as per (ii) above = 10 * ≥ 15 qualified healthcare professionals qualifying as per (ii) above = 15 * 5 additional marks for at least 5 healthcare professionals qualifying as per (ii) in Central/State Govt projects 	<p>consulting service support from OEM, include citation of support from OEM.</p>	
		Certification (20 Marks)		
(d)	Certification	<p>The Bidder is expected to have at least ISO 9001:2008 or latest certification – 10 Marks.</p> <ul style="list-style-type: none"> * 10 additional marks will be awarded if the Bidder also has any 2 of the following additional certifications. - ISO 27001:2013 or latest - ISO 20000 or latest - CMMi-3/CMMi 5 	Valid copy of certificate	20

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		POC of HMS app (80 Marks)		
(e)	Software project planning & design expertise	The Bidder should provide demo EHR application & should display all of required features	Attach POC demo project documentation and to provide POC during TEC as per Annexure-1 of Appendix-'J' format	80
		Proposed Solution (60 Marks)		
(f)	Proposed Solution Document	The Bidder submits a detailed implementation plan for the project, with clear milestones. The bidder is expected to define execution methodology, and how incremental development can be made operational. Evaluation shall be done based on how efficiently implementation window is planned	Documentatio n of proposed solution including sizing, architecture, integration, project plan. Document to be submitted as part of Technical Bid.	10
(g)	Solution-Architecture	Functional architecture, Application architecture, Integration architecture, & Infrastructure deployment architecture proposed, Project Plan and presentation covering at minimum the below key aspects: (i) Modularity of the system (ii) Scalability to handle future load by adding additional compute and no constraints on the application (iii) Suitability of Tools & Technologies proposed including capacity to handle large transactional load (iv) Approach for handling frequent changes to	- Presentation of Solution/ Demo - Bill of Material - Illustrations supporting solution's capability in area of scaling, modularity, load, business configurations, etc. - OEM Certified Brochure/Data	20

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
		<p>Workflows/Rules/Organization Structures/Policies</p> <p>(v) Approach for making runtime changes, new reports/dashboards</p> <p>(vi) Cross browser compatibility - mention cross browser testing results, if available</p> <p>(vii) Risk and mitigation Plan</p> <p>(viii) Single sign on with ICG domain Marking will be based on evaluation of design/architecture aspects by ICG</p> <p>(ix) Project plan in MS Project/Oracle Primavera</p>	Sheet/Product Manual	
(h)	Solution- Multi Channel Delivery	<p>The solution shall be capable of delivering multi-channel delivery in terms of mobility, desktop.</p> <p>(i) Responsive UI with menu/forms/UI out-of-box optimized for display on mobile/tablet/laptop/desktop without any distortion or loss of usability</p>	Proposal and presentation OEM Certified Brochure/Data Sheet/Product Manual	10
(j)	Solution - Information Security	<p>The proposal shall clearly state approach for security while:</p> <p>(i) Integrating with ICG domain/LDAP/AD for SSO</p> <p>(ii) Security architecture deployed for transactional data</p> <p>(iii) Native security features of Oracle database such as Data vault, Label security, Advanced Data Encryption etc.</p> <p>(iv) Integration with SIEM</p> <p>(v) Integrate with ICG Oracle Identity and Access Management (IAM)</p>	Proposal document and presentation	20
		Demo of Application on SIMHA (60 Marks)		

Sl.	Criteria	Details	Documentar y Evidence	Max. Marks
(k)	Demo	<p>Demo of the sample application on SIMHA to the TEC members. One-hour demo to showcase the following: -</p> <p>(i) Sample application built on Oracle Middleware platform containing ICG SIMHA components of Portal, Service Bus, BPM, CMS and IAM.</p> <p>(ii) Local survivability Healthcare module for ROBO built native replication capabilities of Oracle Database Golden Gate</p> <p>(iii) Local survivability Healthcare module for Medical Tablet built native replication capabilities of Oracle Database Mobile Server</p> <p>(iv) A demo login for MS Project/equivalent and JIRA ALM with Bit-bucket source code control system. It should demonstrate ICG requirements of project management as required.</p>	<p>Demo to TEC of Coast Guard. Provide demo POC project document and presentation as per Annexure-2 of Appendix-1</p>	60
				400

Appendix-'H'
(Refer to Para-2, Part-V of RFP)

COMMERCIAL-BID FORMAT

Note: Bidder to submit commercial bid on-line only (in the form of BOQ only) . However, Annexure-1 of Appendix-'H' need to be uploaded as PDF alongwith commercial bid.

1. Item/ service bill of material

(a) PACKAGE-A (Software Development)

Item ID	Description	Qty.	Unit	Unit Price(Rs)	Total w/o Tax	GST Rate	GST Total	Total
CUSTOMISATION, IMPLEMENTATION AND SUPPORT								
A-01	Customisation, Development, Configuration, Installation, Testing, system integration and Commissioning including 01 year warranty with one onsite support engineer. Users are 14,000 Nos.	1	Set					
A-02	Healthcare Records medical mobile tablet containing ICG personnel including family members Electronic Healthcare Record (EHR). EHR mobile device should have offline capability with secure database including Oracle Database Mobile Server (ODMS)	1	Set					
A-03	Project Co-ordinator & Consultant. Onsite medical consultant with minimum of MBBS qualified,	1	No.					

Item ID	Description	Qty.	Unit	Unit Price(Rs)	Total w/o Tax	GST Rate	GST Total	Total
	experience on end-to-end implementation of healthcare application of similar size (01 No.), available from contract signing date to final GoLive+03 months, during normal working hours (8hrs x 5days) at Delhi NCR							
ASHA COTS SOFTWARE (APPLICABLE ONLY FOR COTS HMS)^[2f]								
A-04	HMS COTS application licenses including EMR, Mobile personal app for 14,000 users with concurrency approx. is 5 to 10%. Warranty for 01 years.	1	Nos.					
ONE-TIME SCANNING/MEDICAL TRANSCRIPTIONS/DATA ENTRY OF MEDICAL RECORDS, BILLING ON PRO-RATA BASIS ^[2g]								
A-05	Initial scanning medical documents onsite of of each A4, Black & White till GoLive+03 Months. Quote for unit price of 01 page, one-time scanning, uploading into RMS (Delhi- 80000 Approx Pages; Mumbai - 20000 Approx. pages)	100000	No.					
A-06	Initial scanning of medical images of X-Ray, MRI of 21,500 images till GoLive+03 Months. Quote for unit price of 01 image, one-	21500	No.					

Item ID	Description	Qty.	Unit	Unit Price(Rs)	Total w/o Tax	GST Rate	GST Total	Total
	time scanning, uploading into RMS (Delhi- 3500 Nos.; Mumbai - 18000 Nos)							
A-07	Initial scanning ^[2] of 10,000 pages of each A4, Colour till GoLive+03 Months. Quote for unit price of 01 page, one-time scanning, uploading into RMS (Delhi- 2000 Approx. Pages; Mumbai - 8000 Approx. Pages)	10000	No.					
A-08	Medical transcription, data entry of scanned medical documents ^[2] & images till GoLive+03 Months(Delhi - 50,000 Approx. Pages; Mumbai - 5,50,000 Approx. Pages)	600000						
GRANT TOTAL for Package-A								

(Grant total for Package-A is Rupees _____ only including taxes)

(b) PACKAGE-B (ZERO-TOUCH ROBO DATA RACKS)

Item ID	Description	Qty.	Unit	Unit Price(Rs)	Total w/o Tax	GST Rate	GST Total	Total
REMOTE OFFICE DATA RACK WITH RELATED INFRASTRUCTURE (TECHNICAL SPECIFICATION AS PER ANNEXURE-I OF APPENDIX-B)								
B-01	Modular data rack with Hyper-Converged Infrastructure (HCI) including Software Defined Compute,	4	Nos.					

Item ID	Description	Qty.	Unit	Unit Price(Rs)	Total w/o Tax	GST Rate	GST Total	Total
	Storage, Networking, WAN components and provide 'Single-pane-of-glass-monitoring' software including for Datarack/HCI/NGFW. Data rack to support usable IT load of 2.2kW, L3 switches in HA. Onsite warranty for 03 years							
B-02	Integration, deployment, and support of Zero-Touch ROBO including all hardware, software, required internal/electrical accessories, chemical earthing, external breakers, labour cost etc. as turnkey project	1	No.					
GRANT TOTAL for Package-B								

(Grant total for Package-B is, Rupees _____ only including taxes)

(Grant total for entire packages of both A & B is, Rupees _____ only including taxes)

Note:

(a) **L1 shall be decided on final QCBS score as per Para-4 of Appendix-'G' (exclusive of taxes) for Package-'A' and L1 commercial bid for Package-'B'.** Vendors may bid for either one package or both as per qualification criteria.

(b) Individual taxes need to be added as separate columns.

(c) Taxes mentioned in the format are indicative only, and vendor need to mention taxes as applicable at the time of bidding.

(d) Training is conducted at 5 locations only (Mumbai, Chennai, Gandhinagar, Port Blair, Kolkatta and New Delhi) and each batch include 25-30 candidates.

- (e) Provide detailed line item for each 'Item ID' as required by the Coast Guard as per Annexure-1 of Appendix-H.
- (f) To qualify as COTS software, product should have 10 years of maturity, atleast 03 certified support partners in India each having atleast 02 current client each with minimum of Rs.1 Crore product value, product having atleast 10 current deployments, product to have dedicated support portal with datasheets/user manuals/ API manuals/admin manuals/ patches and published roadmap for next 03 years.
- (g) All scanning includes required manpower, hardware such as document scanner etc.

Annexure-1 to Appendix-'H'

Detailed breakdown Bill of Material/Services

(To be submitted in sealed cover separately)

Sl.	Item ID	Detailed Description of OEM items	Qty.	Unit	Make & Model with Part No.	Unit Price(Rs)	Total w/o Tax	GST	Total with Tax	Total
1	A-01		1	No.						
2	A-01		1	No.						
3	A-03	<i>(Any other items as required)</i>	0	No.	<i>Make as applicable</i>					

Note:-

- (a) 'Item ID' as per para-1 of Appendix-'H'
- (b) Line item should be as per OEM description along with respective 'Part No/ Code'
- (c) Sealed cover consisting detailed breakdown of items along with commercials for **Annexure-1 to Appendix-'H'** to be handed-over/ uploaded on eprocure website to the Buyer as part on online bid submission. However, in case of discrepancies in price, online bid prices shall be considered as actual.

ASHA - PROOF OF CONCEPT TESTS

PACKAGE-A (QCBS Marks for Technical Presentation, documentation & demo)

Test ID	Category	POC Description	Checked (Yes/No)
General			
01-00	POC Setup for SIMHA	As per Annexure-1 of Appendix-'J'	
02-00	Demo app on SIMHA platform	As per Annexure-2 of Appendix-'J'	

PACKAGE-B: Zero-Touch ROBO (POC Demo for Technical Qualification)

Test ID	Category	POC Description	Qualified (Yes/No)
General			
02-00	ROBO technical solution document <i>(Should be submitted as part of Technical bid)</i>	As per Annexure-3 of Appendix-'J'	
03-00	POC Setup <i>(Carry out as part of Technical Evaluation)</i>	(i) Centralised monitoring software (DCIM) as per tender for ROBO Rack (a) 03 ROBO site instances simulating ROBO data-rack (b) Centralised DCIM to provide Enterprise level unified 'Single-pane-of-glass' dashboard at central site (ii) HCI/ HCA software (a) Setup with 03 ROBO instances (b) Centralised HCI/HCA setup with 'Single-pane-of-glass' dashboard at central site	

Test ID	Category	POC Description	Qualified (Yes/No)
		<p>(c) SD-WAN of 03 instances with central management console</p> <p>(iii) Backup & Recovery</p> <p>(a) Setup for 03 ROBO instances with backup software</p> <p>(b) Centralised HCI/HCA with Backup software setup with 'Single-pane-of-glass' dashboard at central site</p> <p>(iv) Virtual Next Generation Firewall</p> <p>(a) Setup for 03 ROBO instances with backup software</p> <p>(b) Centralised HCI/HCA with NGFW software setup with 'Single-pane-of-glass' dashboard at central site</p>	
01-00	Presentation	Overall solution presentation to include layout diagram, sizing/bill of material and project plan	
01-01	Layout diagram	<p>(i) 2D layout diagram of Zero-Touch ROBO data-rack, depicting electrical, piping, room layout for a sample room size of 10ft x 10ft with ICG provided raw power as boundary</p> <p>(ii) 3D layout diagram of Zero-Touch ROBO depicting data rack with all power, cooling, fire detection/suppression of 1Ux4 size for HCI, 1Ux2 for L3 switch, MPLS STM-1 of 1U.</p>	
01-02	Sizing & Bill of Material list	<p>(i) Sizing of entire solution including Zero-Touch ROBO, HCI/HCA with SD-WAN/SD-NGFW/Backup & Recovery software</p> <p>(ii) Bill of Material with Make & Model, Quantity</p>	
01-03	Project Plan	<p>(i) Delivery timeline for Zero-Touch ROBO data rack</p> <p>(ii) Delivery timeline for software</p> <p>(iii) Gantt chart based project timeline</p>	

Test ID	Category	POC Description	Qualified (Yes/No)
02-00	Zero-Touch ROBO Data rack	POC setup made available as per ICG requirement	
02-01	Single-pane-of-glass monitoring	DCIM/equivalent software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard.	
02-02		HCI/HCA software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
02-03		SD-WAN software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
02-04		Virtual NGFW software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
02-05		Backup and recovery software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
03-00	WAN optimised DCIM, HCA central monitoring systems	Should support network environment consists of no network connectivity, 64Kbps VSAT high-latency connectivity, 2 Mbps to 8 Mbps	
		DCIM software should able to function within allotted WAN bandwidth and at predefined duration defined as custom WAN profile. For example, for Site-X, allotted maximum allotted bandwidth for DCIM software is 64 Kbps and only communicate during off-hours it mid-night 00:00 hrs to 04:00 hrs.	
		Should support off-line no network environment such as remote islands and ICG ships. On availability/ restoration of network connectivity should sync with central servers subject to custom WAN profile.	

Test ID	Category	POC Description	Qualified (Yes/No)
04-00	Central policy defining, and applying from central location	HCI/HCA software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
02-02		Virtual NGFW software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
02-03		SD-WAN software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
02-04		SD-WAN software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
03-00	High Availability	Provide live demo on HCI/HCA for Software Defined Computer, Storage & Networking to exhibit High-Availability (HA) within Site to provide both RTO & RPO to zero	
04-00	Disaster Recovery using backup software	Site Recovery (SR) to provide RTO & RPO of not exceeding 15 Minutes and automated Recovery Testing scenario of VMs to other remote site	
05-00	Test recovery using backup software	Able to test backup & recovery on sandboxed network environment of having different subnet IP. Backup should be recovered for testing from production backup on disk	
05-01		App aware test recovery of MS Exchange. It is required to test disaster recovery drill at regular intervals without affecting production environment	
06-00	Backup software	Carryout demo backup & recovery of VM images, blocks and files	
07-00	Backup software for app aware	Carryout app aware backup & recovery of MS Exchange test deployment and recover	

Test ID	Category	POC Description	Qualified (Yes/No)
		granular data such as individual email and mail box	

Annexure-1 of Appendix-'J'

Technical QCBS - POC demo of HMS application

Note:

(a) *Sample demo application of Bidders' existing HMS software application as POC. Bidder need to exhibit required software engineering expertise and healthcare information system expertise to ICG Technical Evaluation Committee (TEC).*

(i) *Healthcare App. Bidder to demonstrate single episode of patient EHR/EMR record as per Indian/International standards. Application should retrieve EHR for a given patient ID. EHR to include HR details, Clinical data, Prescription data, Diagnostics data, Diet, Disease details, Radiology data such as MRI, X-Ray etc.*

POC Project Document (Refer. Para-6(3) of Appendix-'G' of RFP). The Bidder should prepare document and submit Part-A as part of Technical Bid in following structure and provide detailed demo of Part-B during TEC

Part-A: Project Document for POC (20 Marks) [To be submitted with Technical Bid]

1.0: Title of POC demo project

2.0: Index

3.0: Executive Brief (Should be within single A4 size page)

4.0: User Requirement

4.1: Storyboard of sample patient episode to cover all POC modules

4.2: Use Cases for 4.1

4.2: Screenshots, description of each Use Case as per 4.2

Part-B: POC Demonstration (60 Marks) during POC to TEC

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
1.0:	Reception registration	10			Para-6(e) of Appendix-'G'
1.1:	Provision of transfer, rescheduling and cancellation of the scheduled appointment				

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
1.2:	Seek appointment through online				
1.3:	view daily appointment status				
2.0	Storage & retrieval of patient vitals	10			
2.1	Capture patients' vital signs such as body temperature, blood pressure, heart rate, respiratory rate etc. at OPD				
2.2	Display patients' history of vitals				
3.0	EMR/EHR of patient	10			
3.1	EMR/EHR containing detailed diagnosis, clinical notes, doctor prescription data as per standards				
3.2	Scanning of medical documents and data entry				
3.3	Mapping of medical standards to each of EHR fields. All fields to be in compliance with International/ Indian medical standards and such standards should be clearly elaborated.				
4.0	Dispensary & medical stores	10			
4.1	keep stocks of a variety of drugs				
4.2	Issue medicines to the patients based on prescription				
4.3	Provide reports, reminders, alerts in case of stock level goes below desired level, store likely to get expired				
4.4	Drug issue based on expiry				
4.5	Return of drugs				

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
4.6	Prescription of non available drugs				
4.7	Stock register				
4.8	Issue register				
5.0	IPD Ward management	10			
5.1	Bed status monitoring				
5.2	Admission Card				
5.3	Bed allocation, transfer				
5.4	Manage ward room related items such as bed sheets, utensils, patient specific food details etc				
5.5	5.5: Printing discharge summary				
6.0	MIS Reports	10			
6.1	Patient registration details for a given period				
6.2	ICD based report				
6.3	Admission/ Discharge statistics				
6.4	Drugs expiry control statistics				
6.5	Drugs consumption analysis & dynamic reorder level				
	TOTAL	60			

Annexure-2 of Appendix-'J'
(Refer. Para-6(k) of Appendix-'G')

ASHA - SIMHA POC Demo project software engineering document structure

Note:

(a) Bidder should provide demo POC project documentation in following format as part of Technical Bid. Subsequently should provide live demo and MS PowerPoint presentation to Coast Guard Technical Evaluation Committee (TEC))

(b) Sample demo application to demonstrate Bidders' expertise on integration of key components of SIMHA platform including Oracle database with security, Oracle Enterprise Portal, Oracle SOA, Microservices, Oracle WebLogic Server, Oracle CMS, Oracle IAM and Oracle BPM for POC. Bidder may provide following preferred application or provide equivalent to exhibit required software engineering expertise to TEC.

(i) Vehicle Booking App. Provide vehicle booking facility to Office users. App should contain minimum of 10 vehicles such as Car/ Van/Bus and minimum 10 drivers. App to provide list of vehicles, list of drivers and booking status at any given point in time.

(or)

(ii) Similar application which can be deployed on SIMHA.

(c) POC consists of documentation as part of Technical Bid (30 Marks) and demonstration of software (30 Marks).

Template format for POC Project Document. The Bidder should prepare document in following structure and submit along with technical bid and provide demo subsequently to TEC as part of technical evaluation.

(A) POC Documentation (Total: 30 Marks) (To be submitted as part of Technical Bid)

		Marks	Scored	Qualified [Y/N] (>= 50%)	
1.0	Part-A: Introduction	05			Para-6(e) of Appendix-'G'
1.1:	Title of POC demo project				
1.2:	Index				
1.3:	Executive Brief (Should be within single A4 size page)				
1.4:	User Requirement				
1.5:	Storyboard				

		Marks	Scored	Qualified [Y/N] (>= 50%)	
2.0	Part-B: Analysis & Design	05			
2.1	Business Use Case, Use Cases and Actors in UML				
2.2	Activity, Class Diagrams, Package Diagram, Object Diagram, Interfaces, RESTful API definitions with descriptions in UML				
2.3	Wireframes				
2.4	Logical, Physical schema of Oracle database. ER diagrams and Data Dictionary to be provided				
2.5	Computer Aided Software Engineering (CASE) Tools generated Software Design diagrams. CASE tools such as RSA or equivalent to be demonstrated				
2.6	List of project software including Agile, Project management, Test software, DevOps software				
2.7	List of Project Team composition, team member designation/role/responsibilities				
3.0	Part-C: Deployment architecture	05			
3.1	Overall deployment architecture on SIMHA				
3.2	High Availability/ Site Recovery/ Total Disaster Recovery & Test Environments				
3.3	SIMHA Data Replication architecture				
3.4	Central Database, Local Unit Database, Container Database & Mobile Database support layout and details				
3.5	Micro-services architecture. Demo application should be deployable on Docker container with cloud enabled characteristics				
4.0	Part-D: Project Planning	05			
4.1	Project planning & monitoring				

		Marks	Scored	Qualified [Y/N] (>= 50%)	
4.2	<p>(a) Include Work Breakdown Structure (WBS), Resource Allocation etc using MS Project/ Oracle Primavera</p> <p>Agile project planning</p> <p>(a) Use JIRA or equivalent software as mentioned in latest Gartner Magic Quadrant on 'Enterprise Agile Planning Tools'. Should have minimum of 03 sprints</p> <p>(b) Project members of developers, testers, project managers of minimum 10 personnel</p> <p>(c) Should follow DevOps methodology</p>				
5.0	Part-E: Development	05			
5.1	16.0: Development IDE details				
5.2	16.1: Java IDE such as JDeveloper, IntelliJ IDEA to be configured with Git as background repository				
5.3	16.2: Jenkins/ Bamboo to be used for DevOps CI/CD				
5.4	17.0: Testing to provide Test plan, Black/ White box testing				
5.5	18.1: GUI automated testing to be demonstrated. It should test for 'Responsive Web Design (RWD)'. RWD test should include similar demo page delivered to Desktop Web Browser, Mobile Web Browser, Android Mobile App and Apple iPad Tablet				
5.6	19.0: User Acceptance Test (UAT) format with details				
6.0	Part-F: Documentation and presentation (05 Marks)	05			
6.1	Documentation and quality of presentation shall be evaluated based on compliance to UML standards, IEEE standards, Agile standards, OOAD diagrams etc.				

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
	TOTAL	30			

(B) POC Demonstration of sample application (Total: 30 Marks)

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
1.0:	SIMHA components used	10			Para-6(e) of Appendix-'G'
1.1:	Oracle Enterprise Portal driven through RESTful API data from SOA				
1.2:	Oracle SOA				
1.3:	Oracle CMS, Oracle BPM, Oracle IAM				
1.4	Oracle Database with security				
2.0	Demo of application	10			
2.1	Application to exhibit complete lifecycle of as CRUD (Create/ Read/ Update/ Delete)				
2.2	Local survivability demo app module for ROBO built native replication capabilities of Oracle Database Golden Gate Local survivability module for Tablet computer built native replication capabilities of Oracle Database Mobile Server				
2.3	Multi-tenancy by creating multi-instances of demo as per ICG hierarchy				
3.0	ALM, Project Mgmt. Software integration	10			
3.1	A demo login for MS Project/Oracle Primavera.				

		Marks	Scored	Qualified [Y/N] ($\geq 50\%$)	
3.3	JIRA ALM with Bit-bucket source code control system. It should demonstrate ICG requirements of project management as required				
	TOTAL	30			

Annexure-3 of Appendix-'J'

POC Demo for Zero-Touch ROBO Datarack including Hyper Converged Infrastructure and SD-WAN

Note:

(a) Bidder should provide demo POC project documentation in following format as part of Technical Bid. Subsequently should provide live demo and MS PowerPoint presentation to Coast Guard Technical Evaluation Committee (TEC)

Template format for POC Project Document. The Bidder should prepare document in following structure

Part-A: Introduction

1.0: Title of POC demo project

2.0: Index

3.0: Executive Brief (Should be within single A4 size page)

4.0: User Requirement

4.1: Solution architecture diagram including 3D CAD diagram of ROBO

4.2: Bill of material & purpose of each item

Part-B: Design & Deployment architecture

5.0: Solution sizing including power/ heat calculation

5.1: Overall deployment architecture of ROBO

5.2: High Availability features of Datarack

5.3: Deployment architecture of Data Center Infrastructure Management (DCIM) software and Centralised management console sample screen depicting all 04 ROBO racks in unified Dashboard

Part-D: Project Planning

6.0: Project planning & monitoring

(a) Include Work Breakdown Structure (WBS), Resource Allocation etc using MS Project/ Oracle Primavera

(b) Overall timeline

Part-E: Deployment at site

7.0: Sample Site diagram and area of responsibility for Vendor and Coast Guard

7.1: Scope of work for Vendor

Responsibilities of Vendor

7.2: DCIM integration

Part-F: Live POC Demo setup

8.0: Documentation of POC demo setup architecture layout, objective, test cases

Part-G: Documentation and presentation

9.0: Documentation and quality of presentation shall be evaluated based on compliance to Datacenter standards, Business Continuity standards, Safety standards diagrams etc.

BIDDER PROFILE

PACKAGE-A: Healthcare Software Application bidders

Sl.	Profile	Details	Remarks
1.0	Company Name, Contact Person & Address		
1.1	Company turn-over with positive net worth	(a) 2015-16: Rs. _____ (b) 2016-17: Rs. _____ (c) 2017-18: Rs. _____	Positive net worth to be mentioned for past 03 years
1.2	Certifications	(a) CMMi-5: ___ Year (b) CMMi-3: ___ Year (c) ISO 27001: ___ Year (d) ISO 20000: ___ Year (e) ISO 9001: ___ Year	Any other certifications, if any. All certifications should be currently valid.
1.3	Branch Offices	(a) Total: ___ Nos. of branches in India & Employees: ___ Nos. (b) Total: ___ Nos. of branches in Abroad & Employees	
1.4	Software project implemented in Central/ State/PSU organisations (Rs.25 Lakhs and more) in past 05 years	(a) Central Govt: ___ Nos. (b) State Govt: ___ Nos. (c) PSUs: ___ Nos. (d) Non-Govt/ Corp.: ___ Nos.	Indian/ Abroad projects be mentioned separately.
2.0	Total manpower	(a) Software: ___ Nos. (b) ICT: ___ Nos. (c) India: ___ Nos. (d) Abroad: ___ Nos. (e) Total (b+c+d): ___ Nos.	India/ abroad manpower be separately mentioned. Parent company be excluded. Software/ ICT manpower separately mentioned.
2.1	Business Analyst	(a) CBAP certified: ___ Nos. (b) Non-Certified: ___ Nos.	

Sl.	Profile	Details	Remarks
2.2	Sr. Software Architect	(a) Total: ___ Nos.	(a) Minimum experience as architect for 05 projects (b) Minimum of 05 year experience (c) Experience on CASE tools to architect software systems (d) Experience on ALM software such as JIRA (e) Experience on Project mgmt. software
2.3	Oracle Middleware Manpower	(a) OEM Certified: ___ Nos. (b) Non-Certified: ___ Nos.	
2.4	Oracle Database Manpower	(a) OCP Certified, SQL/PLSQL: ___ Nos. (b) OCP Certified, DBA: ___ Nos. (c) Non-Certified: ___ Nos.	
2.5	Project Management Manpower	(a) PMP Certified: ___ Nos. (b) MS Project/PrimaVera Certified excluding PMP: ___ Nos. (b) Non-Certified: ___ Nos.	
2.6	Java Developers	(a) Java Certified: ___ Nos. (b) Non-Certified: ___ Nos.	
2.7	Testers	(a) Certified Testers: ___ Nos. (b) Non-Certified: ___ Nos.	
2.8	GUI Designers	(a) Certified Designers: ___ Nos. (b) Non-Certified: ___ Nos.	
3.0	Development/Support/DevOps Tools	(a) CASE Tools: _____ (b) Source Code Server: _____ (c) GUI Testing: _____ (d) Unit Testing: _____ (e) ALM Software: _____ (f) ITIL Service Desk: _____ (g) Project Mgmt: _____ (h) Java IDE: _____	(a) Computer Aided Software Engineering Tools such as Rational Software Architect etc. (b) Source Code Server such as Git/Subversion/ Bitbucket (c) GUI testing such as 'Selenium' etc. (d) Application Lifecycle Management (ALM) such as

Sl.	Profile	Details	Remarks
			<p>Atlassian JIRA, Confluence, Bamboo, Jenkins etc.</p> <p>(e) ITIL Service Desk as duly certified by PinkVerify© such as JIRA Service Desk, BMC etc.</p> <p>(f) 'Project Management' software such as MS Project, Oracle PrimaVera etc.</p> <p>(g) Java IDE such as Eclipse, IntelliJ IDEA, JDeveloper etc</p>
4.0	Demo application to exhibit skillset by vendor	<p>(a) Can you showcase a demo POC application during TEC to display your skillset on Analysis/Design/Development/Test/Deployment and Maintenance? <u>[Yes/No]</u>. If Yes, following characteristics need to be included on POC application.</p> <p>(a) CASE tools usage for OOAD of project</p> <p>(b) MS Project/PrimaVera for project planning/costing/duration</p> <p>(c) GUI design patterns for web application/ desktop applications</p> <p>(d) DevOps based development</p> <p>(e) Agile planning</p> <p>(f) Complete project from User Requirement to Testing on Agile to be based on any of ALM software such as JIRA and all related documents should be available on Confluence or equivalent</p> <p>(g) Testing for Blackbox/ Whitebox and automated GUI testing</p>	<p>POC demo application document need to be submitted as part of Technical Bid and subsequently, during evaluation vendor need to provide live demo for given simple sample application.</p>

Sl.	Profile	Details	Remarks
		(h) SOA/Micro services based architecture, deployed on Docker Containers	
5.0	Coast Guard Middleware Platform (SIMHA Framework) compliance	<p>(a) Can you develop software applications on following Oracle Middleware Platform? <i>[Yes/No]</i></p> <p>(i) Oracle Enterprise Portal (ii) Oracle SOA (iii) Oracle Identity Access Management (IdAM) (iv) Oracle Content Management Software (CMS) and Record Management Software (RMS) (v) Oracle BPM & Case Management (vi) Oracle Database with datavault/label security/Advanced Security</p>	For standardisation, Coast Guard has deployed complete middleware platform based on Oracle Fusion Middleware. Hence, all software applications should comply with platform
6.0	Single point of Contact (SPOC-Business) for Coast Guard	<p>(a) Name: _____ (b) Desig.: _____ (c) Email: _____ (d) Mobile: _____ (e) Office location: _____</p>	
6.1	Single point of Contact (SPOC-Technical) for Coast Guard	<p>(a) Name: _____ (b) Desig.: _____ (c) Email: _____ (d) Mobile: _____ (e) Office location: _____</p>	
7.0	Any other information		Provide any other details as you may feel relevant to Coast Guard.

Note: India/ abroad manpower to be mentioned separately.

PACKAGE-B: Zero-Touch ROBO Datarack

Sl.	Profile	Details	Remarks
1.0	Company Name, Contact Person & Address		
1.1	Company turn-over with positive net worth	(a) 2015-16: Rs. _____ (b) 2016-17: Rs. _____ (c) 2017-18: Rs. _____	Positive net worth to be mentioned for past 03 years
1.2	Certifications	(a) ISO 27001: ___ Year (b) ISO 20000: ___ Year (c) ISO 9001: ___ Year	Any other certifications, if any. All certifications should be currently valid.
1.3	Branch Offices	(a) Total: ___ Nos. of branches in India & Employees: ___ Nos. (b) Total: ___ Nos. of branches in Abroad & Employees	
1.4	Modular dataracks projects implemented in Central/ State/PSU organisations (Rs.25 Lakhs and more) in past 05 years	(a) Central Govt: ___ Nos. (b) State Govt: ___ Nos. (c) PSUs: ___ Nos. (d) Non-Govt/ Corp.: ___ Nos.	Indian/ Abroad projects be mentioned separately.
2.0	Total manpower	(a) ICT: ___ Nos. (b) India: ___ Nos. (c) Abroad: ___ Nos. (d) Total (b+c+d): ___ Nos.	India/ abroad manpower be separately mentioned. Parent company be excluded.
4.0	POC Demo and Presentation to exhibit skillset by vendor	(a) Can you showcase a demo POC with presentation during TEC to display your skillset on Design sizing/deployment & Maintenance? [<i>Yes/No</i>]. If Yes, following characteristics	POC demo document need to be submitted as part of Technical Bid and subsequently, during evaluation vendor need to provide live demo as required.

Sl.	Profile	Details	Remarks
		<p>need to be included on POC demo.</p> <p>(a) 3D-diagram of datarack depicting power, cooling, IT load components</p> <p>(b) CAD layout diagram of entire deployment including all related components of both external/ internal to datarack such as electrical cabling, piping, earthing etc.</p> <p>(c) DCIM software simulating 05 ROBO box integrated monitoring & management of power, cooling, environment, PDU socket level power consumption etc.</p> <p>(d) Centralised unified dashboard to display all 05 ROBO dataracks with aggregated data in single webpage</p>	
6.0	Single point of Contact (SPOC-Business) for Coast Guard	<p>(a) Name: _____</p> <p>(b) Desig.: _____</p> <p>(c) Email: _____</p> <p>(d) Mobile: _____</p> <p>(e) Office location: _____</p>	
6.1	Single point of Contact (SPOC-Technical) for Coast Guard	<p>(a) Name: _____</p> <p>(b) Desig.: _____</p> <p>(c) Email: _____</p> <p>(d) Mobile: _____</p> <p>(e) Office location: _____</p>	
7.0	Any other information		Provide any other details as you may feel relevant to Coast Guard.

Note: India/ abroad manpower to be mentioned separately.

Check-off list for ICG SIMHA Compatibility
(For Package-A Bidders only)

Sl.	Platform Requirement	Comply (Yes/No)	Remarks, if any
1.0 Development			
1.1	Java language for project development		
1.2	Oracle WebLogic as J2EE Server		
1.3	Agile project management		
1.4	Enterprise class Agile Development (EAD) tools ⁷ shall be used for Agile development and unrestricted login shall be provided to ICG		
1.5	EAD shall include Agile project management, Source Code Versioning, Team collaboration, Document management, Bug Tracking, Change Request Tracking, Project Task Tracking		
1.6	ICG shall be sole IPR owner for non-COTS ⁸ products/code		
1.7	Project run-time code to be compiled at ICG environment		
1.8	Each version of Project code to be delivered along with source code, documentation, version history, traceability matrix into user requirement/bugs/feature enhancement/change requests		
1.9	DevOps based development. CI/CD based delivery/deployment of project versions		
1.10	Shall provide detailed Black & White box testing plan before each sprint of software.		
1.11	Shall carryout GUI testing to validate Responsive Web Design (RAD) and shall provide GUI test plan		
1.11	Shall carryout detailed User Acceptance Test (UAT) at developer side before releasing beta version to ICG		
1.12	Shall carryout various test types including Unit Test, Integration Test, Functional Test, System Test, Stress Test, Performance Test, Usability Test and Regression Test for each release of software to ICG. All test plans and test results shall be shared as required by ICG		
2.0 Unified Enterprise Portal			
2.1	Built on unified ICG Enterprise Portal based on Oracle WebCenter Portal		
2.2	RAD to support unified Web portal, Mobile App, Mobile Web browser, Tablet app, Tablet Web browser		
2.3	Support for leading web browsers of Google Chrome, Microsoft Edge, Mozilla Firefox. Should support latest		

⁷ Enterprise Agile Development (EAD) Tools review by Gartner. Refer ICG Terminologies

⁸ COTS to qualify ICG standards in RFP. Refer ICG Terminologies

	version and backward version compatibility atleast upto last one year		
3.0	Security		
3.1	Support for Oracle SSO		
3.2	Support for web based, mobile based biometric authentication and authorisation as required		
3.3	Capable of integrating with leading SIEM products		
3.4	Shall leverage Oracle database security products of Oracle Advanced Encryption, Oracle Label Security and Oracle Data Vault		
3.5	Shall support Enterprise Role based access using Oracle Identity Access Management		
3.6	Shall support MS Active Directory		
3.7	Shall secure all APIs with adequate security		
4.0	Service Oriented Architecture (SOA) support		
4.1	Shall support Microservices and Containers		
4.2	Shall support Oracle Service Bus and all processes shall be RESTful API enabled. Exceptions, if any shall be provided alongwith Technical Bid		
5.0	Business Process Management (BPM) support		
5.1	All Business Processes shall be built on Oracle BPM platform, and such processes shall not be duplicated using bespoke development		
6.0	Document and Record Management (DMS/RMS) support		
6.1	All documents shall be stored in Oracle CMS and no document shall be deployed outside Oracle CMS to ensure security		
6.2	All records as comply to ISO 15489 shall be stored only at Oracle CMS configured for RMS compliance		
7.0	Software as a Service (SaaS) support		
7.1	Application shall be developed to support SaaS model		
7.2	Shall support multi-tenancy on SaaS. Users shall be able to instantiate respective Organisation Unit (OU) specific software applications		
8.0	Application & Data replication and maintenance support		
8.1	Shall support data replication at four zones ie Central Oracle Database, Unit Local Oracle Database, Container Database and Mobile Database. Shall support WAN optimised data replication across all four data zones of ICG		
8.2	Shall support software application at three application server zones ie Central Application Server, Unit Local Application Server and Containerized Application Server. Shall support WAN optimised application patch and DevOps based application updates across across all four data zones of ICG		
9.0	Database		

9.1	Project to be developed for latest version of Oracle Database and support versions as required by ICG. All software applications to support Oracle Database. Exception if any to be clearly mentioned in Technical Bid.		
9.2	Cloud enabled application should support cloud database for containerization based on Docker/ Kubernetes.		
10.0 Project Team & regular reviews			
10.1	Project Team composition and details of team members should be shared on continuous basis through MS Project Software under resources option		
10.2	Project Manager (PM) shall respond to all official emails/ queries by ICG. PM shall be reachable as required by ICG and shall visit ICG at the minimum notice of one working day		
10.3	PM shall not be changed without explicit approval of ICG		
10.4	Entire project management, activities shall be updated by Bidder on MS Project/Oracle PrimaVera as hosted by Bidder. Dedicated unrestricted access to Project Management portal should be provided to ICG. Bidder shall update Project Planning and keep it updated on continuous basis		

Instructions for Online Bid Submission:

1. The bidders are required to submit soft copies of their bids electronically on the 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. More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.
3. **Registration**
 - (a) Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "**Online bidder Enrollment**" on the CPP Portal which is free of charge.
 - (b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
 - (c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
 - (d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
 - (e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
 - (f) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
4. **Searching for tender documents**
 - (a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
 - (b) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
 - (c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

5. **Preparation of bids**

- (a) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- (b) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please 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.
- (c) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- (d) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

6. **Submission of bids**

- (a) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- (b) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- (c) Bidder has to select the payment option as "offline" to pay the EMD as applicable and enter details of the instrument.
- (d) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- (e) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- (f) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the

bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

(g) All the documents being submitted by the bidders would be encrypted using PKI 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. Data storage encryption of sensitive fields is done. 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.

(h) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

(j) Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

(k) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

7. **Assistance to bidders**

(a) 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.

(b) 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.

ABBREVIATIONS & TERMINOLOGY

1. **Abbreviations**

ABBREVIATION	ABBREVIATION DESCRIPTION
AD	: Active Directory
AHS	: Allied Health Services
ATS	: Annual Technical Support
Bidder	: Vendor who participated in tender issued by ICG
BPEL	: Business Process Execution Language
BPM	: Business process management
BPMN	: Business Process Model and Notation
Buyer	: Indian Coast Guard
CAL	: Client Access License
CDA(N)	: Controller of Defence Account (Navy)
CGHQ	: Coast Guard Headquarters, New Delhi
COTS	: Commercially-Off-The-Shelf software
CPMT	: ICG Cloud Provisioning and Maintenance Team
DISHA	: Digital Infrastructure Services for Hosting Applications.
EAD	: Enterprise-class Agile Development
EAI	: Enterprise Application Integration
EMS	: Electronic Mail System
GPON	: Gigabit Passive Optical Network
HA	: High-Availability
HQ.	: Headquarter
IC4	: ICG Cyber Command and Control Center
ICG	: Indian Coast Guard
IDC	: ICG Interim Data Center
IDR	: ICG Disaster Recovery Data Center

ABBREVIATION	ABBREVIATION DESCRIPTION
IPADS	: Integrated Pay And Disbursement System (IPADS)
IPD	: In Patient Department
ISP	: Internet Service Provider, who provide internet services
MAF	: Manufacture Authorisation Form
NAS	: Network Access Storage
NETRA	: ICG Network of Tatrakshak Applications framework
NOC	: Network Operations Center
OEM	: Original Equipment Manufacturer
OPD	: Out Patient Department
OU	: Organisation Unit (OU) in ICG Active Directory
PCDA(N)	: Principle Controller of Defence Accounts (Navy)
QCBS	: Quality and Cost Base Selection
RHQ	: Coast Guard Regional Headquarters
RWD	: Responsive Web Design
SaaS	: Software as a Service
SAN	: Storage Area Network
SDOT	: ICG Software Development and Overseeing Team
SI	: System Integrator
SIMHA	: ICG Secured Integrated Management for Hosting Applications (SIMHA). ICG specific framework is based on Oracle Middleware stack.
SOC	: Security Operations Center
SOW	: Scope of Work
TSP	: Telecom Service Provider

2. **Terminology**

TERMINOLOGY	TERMINOLOGY DESCRIPTION
AHS	: Allied Health Services. It includes Laboratories, Pharmacies, Imaging, Therapies, Social and Psychological Support services

TERMINOLOGY	TERMINOLOGY DESCRIPTION
	etc, that provide both diagnostic and therapeutic support to both the OPD and IPD patients
ATS	: Annual Technical Support, provided by OEM for patches, upgrades, remote support etc.
Bidder Buyer	: Vendor who participated in tender issued by ICG
CDA(CG)	: Indian Coast Guard
CGHQ	: Controller of Defence Account (Coast Guard)
CGHQ	: Coast Guard Headquarters, New Delhi
COTS	: Commercially-Off-The-Shelf software. To qualify as COTS software, product should have 10 years of maturity, atleast 03 certified support partners in India each having atleast 01 current client, product having atleast 10 current deployments, product to have dedicated support portal with datasheets/user manuals/ API manuals/admin manuals/ patches and published roadmap for next 03 years.
CPMT	: ICG Cloud Provisioning and Maintenance Team. It is responsible to provide all required IT infrastructure including compute/storage/network/security and IT middleware platform including SIMHA in support of most if the ICG software applications
DISHA	: Digital Infrastructure Services for Hosting Applications. A project of Coast Guard to deploy managed IT infrastructure.
EMS	: Electronic Mail System
HA	: High-Availability. A configuration to provide maximum availability of IT infrastructure & services.
IC4	: ICG Cyber Command and Control Center. It monitors and manages all aspects of ICG IT Operations including NOC, SOC, Cloud, Application Support and Service Desks. IC4 to operate 24x7x365.
IPD	: In Patient Department. In includes areas of the hospital where patients are accommodated after being admitted, based on doctors/specialist's assessment, from the Emergency Services, Ambulatory Care, and Clinical/Specialty Outpatient Departments due to their presenting and emerging medical condition(s). Inpatients typically require a higher level of care and intensity of treatment, such as need for surgery, intensive medical, surgical or infection management, special observation and/or isolation, sustained therapy, or extensive testing.
ISP	: Internet Service Provider, who provide internet services

TERMINOLOGY	TERMINOLOGY DESCRIPTION
NETRA	: ICG Network of Tatrakshak Applications framework. Mother IT Framework provide end-to-end IT automation in ICG. It envisages five core domains including ERP for cradle-to-grave asset lifecycle of Acquisition/Maintenance/Logistics/Finance/HR, Non-ERP for office automation, IT infrastructure, Information Security and ICG Dashboard to provide high-level executive view.
OPD	: Out Patient Department. Caters to a population of patients who only need a consultation with a doctor/specialist and/or obtain ongoing medical treatment or services as a result of an earlier visit. Patients arrive, complete their appointment, and then leave the Outpatient Clinic or Department.
OU	: Organisation Unit (OU) in ICG Active Directory. Usually individual ICG units are to be considered as OU, which contain Users/Computers and managed as single unit. ICG SaaS enabled applications shall provide multi-tenancy at OU level which can be aggregated at various ICG admin authority levels. Typical OU within ICG context are ICG units such as ICGS Chennai, Admin Authority OUs are DHQ at State level, RHQ at Regional level, CGC at Western/Eastern Seaboard level and ICG level
PCDA(N)	: Principle Controller of Defence Accounts (Navy). Defence accounting office for Indian Navy & Indian Coast Guard located at Mumbai.
QCBS	: The method of selection is Quality and Cost Base Selection (QCBS). The weights given to the Technical and Commercial Bids are: Technical = 70% and Commercial = 30%
SaaS	: Software as a Service. ICG SaaS enabled applications should support multi-tenancy at OU level and shall be aggregated at various ICG admin authority levels. Typical OU within ICG context are ICG units such as ICGS Chennai, Admin Authority OUs are DHQ at State level, RHQ at Regional level, CGC at Western/Eastern Seaboard level and ICG level
SDOT	: ICG Software Development and Overseeing Team. Nodal institution under Directorate of IT, CGHQ responsible for overall software development to ensure compliance to ICG standards. SDOT shall act as Single-Point-of-Contact (SPOC) for all software projects.
Seller	: Vendor who participated in tender and issued supply/ work order by ICG
SI	: System Integrator. Bidder who is issued with work order to implement involving multifaceted implementations/provisioning of turn-key projects at ICG
SIMHA	: ICG unified middleware software platform standard framework Secured Integrated Management for Hosting Applications

TERMINOLOGY

TERMINOLOGY DESCRIPTION

(SIMHA). It includes common Oracle middleware and database components of Enterprise Portal, API manager, BI Server, Enterprise Service Bus (ESB) Server, BPM, Case Management, DMS Server, RMS Server, J2EE Application Server and Oracle Database with Golden Gate replication, ADE, Label Security, Data Vault. All applications other than ERP should be built on SIMHA as per ICG NETRA Framework standards.

SOC

: Security Operations Center. Monitors & manages all information security aspects of ICG. It is implemented as part of IC4.

TSP

: Telecom Service Provider, who provide various telecom related services including MPLS, Leased Line & VSAT

(Note: All abbreviations & terminology are within context of Coast Guard unless otherwise explicitly mentioned)