

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

**TATRAKSHAK MUKHYALAYA**

Coast Guard Headquarters  
National Stadium Complex  
New Delhi – 110001

Quoting: CGHQ/IT/DMS/2018-19

01 Jan 19

**INVITATION OF ONLINE BIDS FOR OPEN TENDER ENQUIRY NO.CG HQ/IT/DMS-DR /2018-19 DESIGN, DEVELOPMENT, IMPLEMENTATION AND SUPPORT FOR ICG DOCUMENT MANGEMENT SYSTEM WITH DISTRIBUTED REPOSITORY (PROJECT DMS-DR) 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](http://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**

<b>SL.</b>	<b>DESCRIPTION</b>	<b>DATE &amp; TIME</b>
(a)	Published Date	01 Jan 2019 (1500 hrs)
(b)	Bid Document Download / Sale Start Date	01 Jan 2019(1510 hrs)
(c)	Clarification Start Date	NA
(d)	Clarification end date	NA
(e)	Pre-bid meeting	NA
(f)	Bid submission start date	01 Jan 2019 (1510 hrs)
(g)	Bid Document Download / Sale End Date	07 Jan 2019 (1400 hrs)
(h)	Bid Submission End Date	07 Jan 2019 (1500 hrs)
(j)	Technical Bid Opening Date	08 Jan 2019 (1530 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](mailto:vprotect@indiancoastguard.nic.in)

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

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,

(V Natarajan)  
Deputy Commandant  
Assistant 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`** : Abbreviations & Terminologies
- (q) **Appendix- `L`** : Instructions for Online Bidders

## **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 **30,00,000.00** (Rupees Thirty lakh only) 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 30<sup>th</sup> 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 **ICG Document Magement System – with Distributed Respository.** (Project DMS-DR) with warranty of three year, one onsite manpower to support functional aspects of DMS.

(b) Supply, implementation and support for **Zero-touch ROBO Cloud Edge Data rack** of 1kW IT load capacity with Server, L3 Switch, Cloud virtualisation with Software Defined Computer/Software Defined WAN, Virtual NGFW and Backup/replication software for 13 Nos. Data rack should have integrated cooling, UPS, access control, emergency cooling and required infrastructure accessories as required. Implementation should be carried out by OEM/ authorised partner of OEM. One onsite manpower from OEM of Cloud virtualisation to support Cloud Edge software during weekdays for first year further extendable upto two years.

(c) **Warranty for 03 year** for all hardware and software.

(d) **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

(e) **Consortium of Bidders.** DMS-DRR project is to be implemented on Trun-Key basis. Prime Bidder should be as nominated by Consortium of Bidders which includes DLS-DR developer, Data rack system integrator, SOA middleware platform integrator and database replication integrator as consortium members. Prime Bidder should obtain valid legal contract document to engage for implementation from consortium member and should provide as part of technical bid. Prime Bidder is solely responsible for project delivery and work order shall be released to Prime Bidder by the Buyer.

### **(e) Prequalification Criteria:**

<b>Sl.</b>	<b>Prequalification Criteria</b>	<b>Supporting Documents</b>	<b>Doc. Provided (Y/N)</b>
	<b>Package-A: DMS - DR</b>		
(i)	The bidder must be incorporated and registered in India under the Indian Companies Act 1956/ LLP Act 2008 /	Certificate of Incorporation /	

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
	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).	Copy of Registration Certificate (s)	
(ii)	The Bidding firm must be a positive networth making with annual turn over of minimum of 15 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>(aa) 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/ minimum of 200 licenses/ Users of DMS supply and Implementation within India, each costing not less than the amount equal to Rs. 25 Lakh towards Non-COTS development/ DMS COTS licensing</p> <p>(OR)</p> <p>The Bidder must have successfully completed/ongoing atleast one similar Central/State Govt contract of Document Management System (DMS) supply and Implementation within India, completed &amp; currently supporting minimum of 03 similar DMS contracts with Foreign Govts, each costing not less than the amount equal to Rs. 25 Lakh &amp; \$ 01 Million respectively towards Non-COTS development/ DMS COTS licensing.</p> <p>(ab) Reference clients should authenticate &amp; 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> <ol style="list-style-type: none"> <li>1. Work order with order value detailing the scope.</li> </ol> <p>(OR)</p> <ol style="list-style-type: none"> <li>2. Agreement copy defining the scope &amp; value.</li> </ol> <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	Self-declaration from the bidder in company letter head, signed by authorized signatory as per Annexure-XI	



Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
	Ministry/Department/ PSU/ Government Company.		
(vi)	The Bidder should have at least 25 technically qualified professionals in area of DMS 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>(aa) The Bidder should essentially employ solution architects and QA staff from DMS OEM, for certification on correct implementation at each stage/ level as a part of the team</p> <p>(ab) The DMS 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 DMS 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/ Project 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 source code control, Confluence DMS, MS Project/ Oracle Primavera Project Server and provide dedicated access to ICG over internet from the date of signing of contract.	Undertaking by Bidder.	

<b>Sl.</b>	<b>Prequalification Criteria</b>	<b>Supporting Documents</b>	<b>Doc. Provided (Y/N)</b>
	The agile development plan, project plan should be concurred by on-site project manager cum on-site Project Manager at every stage of project development.		
(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	

<b>Package-B: Zero-Touch ROBO Datarack (Consortium Member)</b>			
(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-certification and documentary	

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
	self-contained dataracks with order worth of minimum of Rs.25 Lakhs	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, Cloud virtualisation and SD-WAN Software	OEM MAF Certificates	
(viii)	POC demo project document requirements are complied and proforma included	Proforma as per Annexure-2 of Appendix-'J' attached	

## 2. **Technical Details:**

(a) **Technical Specifications:** - Package-A includes Design, configuration, customization, development, implementation and support for Document Management System with Distributed Repository (DMS-DR) application based on Open-Source middleware SOA platform using proven and matured COTS (Commercially-Off -The-Shelf) product/ Bespoke Software. Delivery of features shall be on 02 phases with 01<sup>st</sup> phase generally based on Out-of-the-Box BPM (Business Process Modelling) features of COTS/Bespoke product and 02<sup>nd</sup> phase involves Coast Guard specific specification/ customization/ integration/ development. Project includes supply, deployment of Zero-touch ROBO Cloud Edge Dataracks with Software Defined WAN.

(i) Required DMS-DR modules are as following.

(aa) Record lifecycle management with versioning module (FR-01)

(ab) Offline patch generation and sync module (FR-02)

(ac) Online patch generation and auto-sync module (FR-03)

(ad) Data encryption module (FR-04)

(ae) Central RMS on ICG SIMHA platform based on Oracle Fusion Middleware (FR-05)

(af) Centralised Record Dashboard module (FR-06)

(ag) Offline patch distribution portal on Indian Coast Guard website (FR-07)

(ah) Native data replication module between Server & ROBO DMS-DR instances module (FR-08)

(aj) User/ Role management module (FR-09)

(ak) Generic Database Replication Module with centralized monitoring console (FR-10)

(iii) Requirement for **Package-B**, Zero-touch ROBO Cloud Data rack 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'**

(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 **Rs 500/- (Rupees Five hundred)** only) towards tender fee and 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. Tender Fee and 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 as per QCBS system.**

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

4. **Delivery Period** –The job is to be completed within **08 months** 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**

**The Commanders,**

**DHQ-1(GJ)/Porbandar, DHQ-3(KA)/New Mangalore,  
DHQ-4(KL)/Kochi, DHQ-5(TN)/Chennai, DHQ-  
6 (AP)/Visakhapatnam, DHQ-7(OR)/Paradip, DHQ-8  
(WB)/Haldia, DHQ-9(A&N)/ Diglipur,  
DHQ-10 (A&N)/Campbell Bay,  
DHQ-11(GA)/Mormugao, DHQ-12(L&M)/Kavaratti,  
DHQ-13(PY)/Puducherry, DHQ-15(GJ)/Okha**

### **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 offence 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 entreated 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-02 of Appendix-'H')

<b>Stage</b>	<b>% of payment</b>	<b>Duration</b>
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 in Oracle Primavera/MS Project, test plan, ICG login on software project ticketing & monitoring portal of Jira, Oracle Primavera/MS Project hosted and

Stage	% of payment	Duration
		acceptance by ICG. (c) On submission of PBG
II	30% cost of Software development	(a) Delivery of RMS module (FR-01), Offline sync module (FR-02) and Online sync module (FR-03) as per Para-4.1 of <b>Appendix-A</b>  (b) On successful delivery of positioning of support manpower, availability of ITSM/ALM/Project Management portal, submission of source code, manuals, documents as per <b>Appendix-B</b> etc.
III	40% cost of Software development	(a) Delivery of remaining modules as per Para-4.1 of <b>Appendix-A</b>  (b) On successful delivery of source code, manuals, documents as per <b>Appendix-B</b> etc.
IV	20% cost of Software development	(a) After 03 months from Stage-III and satisfactory performance of all software modules (b) Completion of training

**Package-B: Zero-touch ROBO Cloud Edge Datarack** (Item Id B-01 to B-03 of Appendix-'H')

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 DMS-DR 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 DMS-DR 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 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.

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),(ii),(iii) of Part-II of RFP  
, Para-5(b) of Part-IV of RFP)*

### **TECHNICAL REQUIREMENTS - DESIGN, DEVELOPMENT, IMPLEMENTATION AND SUPPORT FOR DOCUMENT MANAGEMENT SYSTEM - WITH DISTRIBUTED REPOSITORY (DMS-DR) (PROJECT DMS - DR) - INDIAN COAST GUARD**

#### **Background.**

1.0 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.

2.0 ICG as part of ongoing digitization efforts intend to design, deploy implement Document management System (DMS) with user base of 15,000 and 250 Base Units/ Offices. Supply, installation, maintenance of Zero-touch edge cloud data rack with onsite support. DMS application to be developed on Open-Source Middleware Platform based on SOA (Service Oriented Architecture) and database replication module.

#### **Objective**

3.0 Objective of ICG Document Management System – with Distributed Repository (ICG DMS-DR) built on SOA and database replication module is to establish virtual record space spanning across ICG locations across India with off-line replication support. 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) DMS-DR to establish ICG wide virtual unified record repository
- (b) SOA Platform to support ROBO applications
- (c) Database replication between Central Oracle Database and ROBO database with support for both offline/ online replications
- (d) Zero-Touch ROBO Edge Cloud Data rack with SD-WAN.

#### **SCOPE OF WORK**

4.0 ICG intends to design, deploy and implement 'Unified ICG Enterprise Content Management System for ICG Ships and Units for internal Coast Guard official purpose. Total ICG Personnel users are approx. 15,000 Nos. and approx. 150 nos. of ICG units. The unified enterprise platform likely to have following functionalities.

##### **4.1 Functional Requirement**

- (a) Record lifecycle management with versioning module duly deployed on SOA platform (FR-01). Records should be replicated across Central and ROBO (Remote Office Branch Office) repositories. ROBO repositories shall be managed by local DMS-DR having database replication capabilities.
- (b) Offline patch generation and sync module (FR-02)
- (c) Online patch generation and auto-sync module (FR-03)
- (d) Data encryption module (FR-04). Records in ROBO repository should be encrypted-in-rest.
- (e) Central RMS on ICG SIMHA platform based on Oracle Fusion Middleware (FR-05). Central RMS should have provision to centrally monitor & manage all ROBO repositories through 'Single-pane-of-glass' console.
- (f) Centralised Record Dashboard module (FR-06). Should provide high-level dashboard to display overall repository status across Central and ROBO sites.
- (g) Offline patch distribution portal on Indian Coast Guard website (FR-07). Offline patches to be published on 'Indian Coast Guard website' and Users be allowed to download based on Roles
- (j) Native record replication module between Server & ROBO DMS instances module (FR-08)
- (k) User/ Role management module (FR-09). Shall replicate with central organisational hierarchy as managed on SIMHA platform
- (l) Generic Database Replication module to support Oracle to PostgreSQL/MySQL database on bi-directional (FR-10). Module should support multiple tables as applicable to 3<sup>rd</sup> party applications deployed on DMS-DR SOA platform. Should provide central and ROBO console to monitor and manage database replication from 'Single-pane-of-glass'.
- (m) Central 'Single-pane-of-glass' console to monitor & manage DMS, SOA Platform and Data Replication (FR-11).

#### 4.2 **Other Requirements**

- (a) Establish virtual centralised records repository to store and distribute Coast Guard Orders, Policies, Govt. regulations, various document templates etc.
- (b) Records of DMS instance to auto-sync with central Records Management System (RMS) based on Oracle CMS with RMS module
- (c) Ships, DHQs, Stations shall have access to digital documents in off-line mode. DMS to auto-sync on bi-directional with native central repository and also with Enterprise Oracle CMS
- (d) ICG Organisation Unit (OU) based record domains should be created and records should assigned/ updated

- (e) All documents shall be updated from central location and regular patches shall be distributed through Coast Guard website
- (f) Extend ICG SIMHA platform to ICG Units and Base units. ICG SIMHA is based on Oracle Middleware and Oracle Database to act as an enterprise application platform. DMS-DR should provide SOA platform capability along with data replication capability to 3<sup>rd</sup> party applications
- (g) Basic document management capabilities in sync with ICG SIMHA
- (h) Support for 3<sup>rd</sup> party applications to be added as plug-in into BRASS2 using native APIs or RESTful APIs as applicable
- (k) Basic Record Management System (RMS) capabilities
- (l) Seamless document collaboration
- (m) Centralised and ROBO level repository
- (n) Audit trail
- (p) Centralised security policy
- (q) Native database replication with central server. Vendor to provide proven database replication software having bi-directional replication capability
- (r) Replication will be natively encrypted
- (s) Broadcast record/ database updates from HO (Head Office) to ROBO and vice versa
- (t) Auto update of branch repository with respect to broadcasted updates released by HO
- (u) Group management
- (v) Strong versioning
- (w) Record tracking
- (x) User friendly graphical interface
- (y) Enterprise Service Bus (ESB) based architecture
- (z) Business Process Management (BPM)
- (aa) Support to digital signature
- (ab) Access to digital documents in offline mode for ROBO
- (ac) Platform independent architecture
- (ad) Basic/ advance search
- (ae) Open source and Open architecture
- (af) Source code with IPR for Coast Guard

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

## **Annexure-1**

(Refers to Appendix 'A')

### **DETAILS OF PENALTY CLAUSES**

1. 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).
2. In the event of support engineer/manpower remaining absent/on leave without substitute there of – Rs. 1500/ for each day of absence.
3. All penalty amounts may be deducted from outstanding bills/Performance Bank Guarantee as applicable.
4. 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.
5. Under no circumstances, on each occasion the cumulative continuous penalty total shall not exceed 5% of the contract value.
6. Coast Guard at its discretion may entirely/partly waive-off penalty under justifiable circumstances.

**NON-FUNCTIONAL REQUIREMENTS – PROJECT DMS-DRR**  
**FOR INDIAN COAST GUARD**

**1.0 General key non-functional requirements for DMS with SOA platform**

- (a) 'Single-glass-plane-monitoring' for Central BRASS monitoring & management Dashboard. It is imperative to have central monitoring dashboard, to ensure all ICG Ships are updated, working to satisfaction, healthy, Application/Platform & Databases are sync with Central site. All deployed components of Applications could be centrally viewed
- (b) Shall be developed on Java language
- (c) All applications including DMS shall be designed, developed and implemented on SOA/ Micro-services
- (d) All stack should be built on Open-Source
- (e) Entire solution shall be delivered as turnkey and shall include DMS as application, SOA as platform and Database replication
- (f) Application services should be built-on **RESTful APIs**. Presentation layer should be pure Web Server, getting data from RESTful APIs through Service Bus
- (g) Should **support 3<sup>rd</sup> party plug-in** extension for future extensions and integration with other enterprise systems
- (h) Should be developed on **open-source and open-architecture** model
- (j) Should be based on '**Service Oriented Architecture (SOA)**' with presentation, service bus and application layers clearly separated
- (k) Both Application and Platform need to be updated on regular basis. For example, MySQL may release new patches / version which need to be reliably updated across all ICG Ships. Also, hosted Applications such as Healthcare, Payroll, EOffice etc. may itself need to be centrally updated for all ICG Ships. Hence, suitable central update mechanism for both Applications and Platform be provisioned
- (l) Solution shall expose few key health & monitoring parameters of DMS/ SOA Platform/ Database replication as RESTful APIs. ICG shall integrate it further into ICG Command & Control Dashboard, which is designed to monitor all IT infrastructure, services, applications, security of ICG IT Systems.

**1.1 Key non-functional requirements of DMS**

- (a) Shall support Content Management Interoperability Services (CMIS)
- (b) Shall provide data-in-rest encryption for stored documents/ records
- (c) Shall integrate into unified portal of SOA platform
- (d) Shall provide central document replication management. Documents, metadata, security privileges as updated on central location should be replicated to ROBO sites as per configuration

**1.2 Key non-functional requirements of SOA platform**

- (a) Shall provide all required platform to support all applications to be deployed at ROBO sites including ICG Ships



- (b) Shall provide and integrate following essential open-source components
  - (i) Unified Presentation layer: Portal, HTML5 compliant
  - (ii) Services Integration layer: Enterprise Service Bus
  - (iii) Application layer: J2EE compliant API Server
  - (iv) Database layer: MySQL/ PostgreSQL as RDBMS Server
  - (v) Authentication/ Authorisation: Single-Sign-On Server
- (c) Shall provide Unified Portal framework to support both Application and Website features. Application Portal which will act as Presentation platform to any application such as Payroll, DMS, Healthcare, Vehicle Booking etc. Whereas, Website Portal pto act as Platform to host generic Website features such as News & Updates, Discussion forums, Photo / Video Gallery, Important notifications etc.
- (d) Integrate DMS as application into SOA platform

### 1.3 **Key non-functional requirements of Database replication**

- (a) Shall have proven database replication **across Central and ROBO** locations
- (b) Database replication shall support both **online and offline based replications**. Offline replication shall be patch files as created using XML/ JSON file formats. Online replication to support real-time synchronisation
- (c) In case of BRASS database is lost / corrupted, then BRASS database replication capable rebuilding entire database from Central database with latest updated data
- (d) Data consistency and integrity to be ensured across online & offline replications
- (e) Online replication should support over low bandwidth VSAT Links of 64Kbps into broadband Optical Fiber Cable (OFC) links
- (f) Shall support **multiple tables, schemas** as and when required during integration of 3<sup>rd</sup> party applications
- (g) Shall provide '**Single-pane-of-glass' monitoring & management console** to provide unified view of central and ROBO databases and replication status
- (h) Shall support **Oracle, MySQL and PostgreSQL** databases
- (j) Shall support policy driven database replication to support **full, partial replications**. For example, only part of HR database having 15,000 Users, shall be replicated for 25 Users HR record for a ROBO site having 25 Users.
- (k) Support for **RESTful API based data exchange between Central and ROBO** site replication agents

### 2.0 **Software development methodology**

- (a) **Agile development based on Scrum methodology** 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 proven Database Replication module respectively. All replication functions should be proven for Oracle to MySQL/ PostgreSQL from day one to ensure data integrity.

(e) **Middleware OEM consulting.** Vendor should get software sizing/ component compatibility audited by middleware OEM such as Oracle before commencement of development and during delivery of each sprint of software.

### 3.0 **ICG SIMHA (Enterprise Middleware Stack based on Oracle Middleware)** **Compliant enterprise features**

- (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 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.

4.0. **Inter-operability with 3<sup>rd</sup> Party Content Management Systems.** Should provide CMIS web services API as required to enable inter-operability with other Content Management Systems.

### 5.0 **User Management**

- (a) **Central Admin - DMS** should be enabled for.
  - (i) Create groups based on ICG Active Directory
  - (ii) Default groups based on Organizational 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 - DMS** 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.

## 6.0 **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.

## 7.0 **Standards** to be complied

- (a) DMS-DR general framework
  - (i) WFMC, BPMN, BPEL, WebDAV, ODMA, CMIS
  - (ii) Web 3.0 GUI
  - (iii) CMIS

## 8.0 **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 DMS-DR to be considered as one of the major module. On click of 'DRMS' first level, 2<sup>nd</sup> navigation panel should provide module level menus and on-click of 2<sup>nd</sup> 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.

9.0 **One database & replication.** Bidder should develop entire software stack based on Oracle Database as provided by Coast Guard for Central management console. 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. Vendor should deploy proven Database Replication software module to support central Oracle to ROBO MySQL/ PostgreSQL databases on bi-directional.

10.0 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

11.0 DMS-DR 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 DMS-DR Portal by Coast Guard.

## 12.0 **Multi-tenant, federated instance features**

(a) System should support multi-tenancy to provide local instance of DMS-DR suite to provide unified record directory, 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.

## 13.0 **Federated, local survivability and off-line features**

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

## 14.0 **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/ 3<sup>rd</sup> party developers for updating/ maintenance of SSO, Portal and ESB.

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

16.0 **Project management requirements.**

- (a) Detailed project timeline should be provided with SRS
- (b) 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.
- (c) 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
- (k) Skilled manpower to be assigned to project, should be available for fortnightly review/ as required by ICG. Details of project members alongwith 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) Business Analyst
  - (iii) Senior Middleware Developer
  - (iv) Senior Java Developer
  - (v) Senior Test Engineer
  - (vi) Oracle/MySQL DB Developer
  - (vii) Document Engineer
- (l) Minute of meetings should be commented & concurred by official email by Enterprise architect, Certified Test-in-charge, GUI designer and Database designer. 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

#### 17.0 **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.

#### 18.0 **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

#### 19.0 **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 then 02 working days and less than 07 days.

### **Standard non-functional requirements**

20.0 **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.

#### 21.0 **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

#### 22.0 **Application Lifecycle Management (ALM) portal.**

- (a) Vendor should deploy and maintain ALM portal such as JIRA. ALM should consist 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.

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

- (a) Should support IAM and enable staff onboarding feature
- (b) Support IAM from Oracle
- (c) All roles should be exposed to IAM for centralised user management

#### 24.0 **Provide API for internet website and mobile app**

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

#### 25.0 **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.

26.0 **Training.** Onsite training at Delhi NCR/ Chennai by qualified instructors should be provided to ICG personnel as follows.

<b>Sl</b>	<b>Training</b>	<b>Location</b>	<b>Personnel per Batch</b>
(a)	System administration, installation, backup & recovery, 01 Batch	Delhi NCR	04
(b)	User training	Mumbai, Chennai, Kolkatta, New Delhi and Port Blair	25

27.0 **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.

(c) 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 timeliline is hosted on Oracle Primavera 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.

(d) 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.
- (e) 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.
- (f) 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.
- (g) Stage-V: On Go Live. Vendor to provide design & developments artefacts as mentioned in Form-1 as per enclosure.
- (h) Interactive web documentation/ manual/ training. Vendor should provide standard visual training/ deployment/ technical as per ICG standards preferably developed on Adobe Premiere/Equivalent. 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 Cloud Edge Data rack unit specific non-functional requirements**

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

29.0 **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 data rack, ROBO Cloud Edge 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**'.

**DETAILED TECHNICAL SPECIFICATIONS -  
ZERO-TOUCH ROBO CLOUD EDGE DATA RACK WITH SD-WAN**

**Section-A – Zero-Touch ROBO Cloud Edge Data Rack**

<b>SL</b>	<b>Parameters</b>	<b>Technical Specification-Zero Touch ROBO Cloud Edge Data Rack</b>	<b>Complied (Yes/No)</b>
<b>1.1.0</b>	<b>Type of modular data rack for ROBO</b>	<b>Integrated Modular Data Rack. Rack should be intelligent and should have facility of inbuilt UPS, Precision1 cooling units and Remote Monitoring, Cooling, UPS. All should be in high availability configuration.</b>	
<b>1.2.0</b>	<b>Zero Touch Monitoring/Management</b>	<b>Zero-touch monitoring, management of key parameters of temperature, humidity, UPS, access control, automatic door rear door opening, smoke, fire suppression, Raw power, rodent ON/OFF status, water leakage detection ON/OFF status, compressor ON/OFF status/ Cooling system ON/OFF status, compressor running hour status/Cooling system ON/OFF status and IP PDU.</b>	
<b>1.3.0</b>	<b>Usable IT load to support</b>	<b>02 kW, scalable up to 03 kW with additional racks</b>	
<b>1.5.0</b>	<b>Design</b>	<b>(i) Modular and Scalable design for power and cooling (ii) Single Rack solution</b>	
<b>1.6.0</b>	<b>RU space for IT load</b>	<b>Minimum usable space 24U</b>	

1.7.0	UPS	<p>(a) Rack mountable, N+1 configuration for rack mountable internal SMF battery modules, Minimum backup of 10 minutes in full load.</p> <p>(b) PDU with strip level monitoring / monitoring at PDU level to be provided and connected to integrated monitoring system</p>	
1.8.0	PAC Unit	<p>(a) Cooling unit within Data Rack.</p> <p>(b) Cooling unit to ensure UPS &amp; Battery cooling positioned inside rack.</p> <p>(c) Split indoor &amp; Outdoor unit design.</p> <p>(d) High reliable Scroll compressor.</p> <p>(e) Electronically Commutated centrifugal evaporator fan for energy efficiency.</p> <p>(g) Air flow should be uniform inside rack.</p> <p>(h) Cooling unit must have safety protections - Under voltage and Overvoltage, High Pressure &amp; Low Pressure for safe operation.</p> <p>(j) Flare/mechanical type Thermostatic Expansion Valve for easy serviceability.</p> <p>(k) Each cooling system should have its individual breakers.</p>	
1.8.1	Scalability for PAC Unit	Provision for additional data rack Precision cooling unit for future upgradation, if required.	
1.9.0	Safety & security features	<p>(a) Smoke/ Fire detection, suppression with NOVEC1230/equivalent, Access control, Rodent Repellant.</p> <p>(b) Environment monitoring like water-leak detection, Temperature and Humidity sensor, Door sensor etc.</p> <p>(c) Front door of the rack should have IP bio metric access control / biometric access control can be monitored over monitoring system</p> <p>(c) Emergency automatic door opening for rear door based on higher temperature.</p>	

1.10.0	Single Pane of Glass of Monitoring and Management	<p>(a) 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, Raw power, Cooling/Cooling unit status via monitoring system, temperature, door position, humidity, etc.</p> <p>(b) 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>(c) Should 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 3rd party IBMS/ITOM software monitoring & management.	
1.13.0	Other	<p>(a) Project specific design should be certified for mentioned features by CDCP certified engineer from OEM</p> <p>(b) 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>(a) Centrally monitor &amp; manage all ROBO units over WAN</p> <p>(b) Should be deployed in virtual form factor</p>	

1.14.1	Real-time monitoring	<p>(a) All parameters of power, cooling and PDU should be available for remote monitoring.</p> <p>(b) Cooling monitoring should include parameters like compressor and fan running hours/ Cooling system ON/OFF Status, UPS monitoring should include battery health, environmental monitoring, raw incoming power parameters such as frequency /amperes /voltage, UPS outgoing power parameters, PDU strip level power, access control operational status, remote viewing of camera.</p> <p>(c) Alerts for over current on power consumption pattern at PDU strip level.</p> <p>(e) 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>(f) Software should have open architecture, open protocols to support wide variety of integration for different OEMs</p>	
1.14.2	Central Management Software Requirement for Central location	<p>(a) 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>(b) Delegate appropriate levels of administrative control at the regional level or centrally with role-based management.</p>	

1.14.3	WAN optimised	<p>(a) Should support network environment consists of no network connectivity, 64Kbps VSAT high-latency connectivity, 2 Mbps to 8 Mbps</p> <p>(b) 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>(c) 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.</p>	
1.14.4	User Permissions / Security	Use of LDAP and Active Directory for user authentication	
1.14.5	Biometric device integration	Biometric device should be compatible to integrate with LDAP.	
1.15.0	Site work	<p>(a) Provide Chemical earthing, cabling upto 50 mtrs</p> <p>(b) Provide electrical cabling, accessories from MCB of ICG within Server Room</p> <p>(c) Provide all necessary in-way work except for any addition/ alteration related civil work</p>	
1.16.0	ROBO OEM	ROBO components of datarack including, Cooling, PDU and centralised monitoring software similar to DCIM should be of same single OEM to have seamless integration and management support	

Section-B – Cloud Virtualization with SD-WAN for ROBO

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
<b>General</b>			
2.0.0	<b>Key requirements</b>	(a) Should provide Software Defined following: - (i) Compute (ii) WAN (b) <b>WAN</b> including router, load balancer (c) Security through Next Generation Firewall (Virtual <b>NGFW</b> ) (d) <b>Backup and recovery</b> including ROBO site recovery and sandbox testing (e) Enterprise wide centralised ' <b>Single-pane-of-monitoring and management</b> ' for all above 04 requirements.	
2.0.1	<b>Bandwidth throughput</b>	WAN bandwidth of 8 Mbps at ROBO site and 40 Mbps at Central Data Center site	
2.1.0	<b>Hardware specification</b>	(a) Rack Server - 02 Nos (b) CPU Sockets per Rack/ Node - 02 Nos (c) CPU loaded per Rack/ Node – 01 No. (d) Minimum of 64GB Memory RAM expandable upto 1TB for each server/node (e) Hybrid Support for SSD/SAS/NL-SAS (f) Storage of minimum 2 TB available space on RAID-10 for usage per Server. Storage should be SAS/NL-SAS (g) Lights-out management – Yes (h) Minimum Cores per CPU – Minimum of Intel, 16 Cores, 2.4Ghz or better (j) Maximum RU space server – 2U (k) VMware vSAN Ready	
2.2.0	<b>Form Factor</b>	Rack mounted	
2.3.0	<b>OEM</b>	(a) Zero-Touch ROBO OEM components of Cloud virtualization software, Virtual NGFW, Backup software of latest Gartner Report on Magic Quadrant for Hyper Converged Servers for Software/ Appliance. Cloud virtualization software should provide SD-Compute, and SD-WAN.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		<p>(b) Should be registered in India and present for minimum of 05 years</p> <p>(c) Should have minimum 03 deployments of provided hardware/ software in Central/State Govt. Organisations in India and 05 deployments in private sector</p> <p>(d) Should have OEM 24x7x365 onsite support for hardware/ software in India. Should provide Service Desk contact details and Service Level Agreement (SLA) in proof.</p>	
2.3.1	<b>OEM implementation</b>	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.	
<b>Centralised Management</b>			
2.4.0	Single pane of glass monitoring and management	<p>(a) All ROBO units should be managed from single centralised web based panel</p> <p>(b) Should provide aggregated single unified dashboard to monitor all ROBO sites. Single dashboard should not popup/ display multiple windows for each ROBO Cloud Edge unit.</p>	
<b>Business Continuity</b>			
2.5.0	<b>High Availability</b>	<p>(a) No Single-Point-of-Failure architecture for Server and Switch</p> <p>(b) Server should have RAID-10</p> <p>(c) Server and Switch should have redundant power supply</p>	
2.5.2	<b>Backup &amp; Recovery</b>	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	



Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		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.	
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	

<b>Srl.</b>	<b>Parameters</b>	<b>Technical Specification-Zero Touch ROBO Data Rack</b>	<b>Complied (Yes/No)</b>
		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 <sup>rd</sup> 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-touch at ROBO. Take backup of ROBO sites locally and then replicate it to central location	
<b>Networking</b>			
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	
<b>Software Defined Data Center (SDDC) characteristics</b>			
2.7.0	<b>Software Defined Compute</b>	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	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		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 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.	
2.10.0	<b>Software Defined WAN</b>	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.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		The proposed solution should provide an option of using the Orchestrator (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.	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
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 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.	
<b>2.11.0</b>	<b>Software Defined Security</b>	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	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		solution like IBM, Symantec, Microfocus, Splunk, RSA.	
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	

Srl.	Parameters	Technical Specification-Zero Touch ROBO Data Rack	Complied (Yes/No)
		of the signature in 5 mins from the time of detection. No file has to be shared and the 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	<b>SIMHA Framework compliance</b>	The solution should support latest version of Oracle Fusion Middleware, Oracle Database running on multi-OS environment including Oracle Linux, Microsoft Windows, RedHat Linux.	



**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 DOCUMENT  
MANAGEMENT SYSTEM - DISTRIBUTED REPOSITORY (PROJECT DMS-DR)  
- INDIAN COAST GUARD**

1. Refer to your RFP No.IT/3014/DMS-DR dated \_\_\_ Dec 2018.
2. This is to notify you that our company intends to submit a proposal for "Design, Development, Implementation and Support for Document Management System - Distributed Repository (Project DMS-DR) - Indian Coast Guard".
3. Primary and Secondary contacts for our company are:

	<b>Primary Contact</b>	<b>Secondary Contact</b>
<b>Name:</b>		
<b>Title:</b>		
<b>Company Name:</b>		
<b>Address:</b>		
<b>Phone:</b>		
<b>Mobile:</b>		
<b>Fax:</b>		
<b>E-mail:</b>		

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**

<b>Sl.</b>	<b>Details</b>	<b>Bid Page No.</b>	<b>Check (Yes/No)</b>
<b><u>General Documents</u></b>			
(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> ).		
(h)	Technical Solution document (' <i>Proposed Solution (60 Marks)</i> ') of Para-6(f)(g)(h)(j) in <i>Appendix-'G'</i> including following. (i) DMS-DR (ii) Middleware Platform including Portal, Service Bus, IAM, SSO, J2EE Application Server, Database Server etc. (iii) Data Replication Module		
(j)	Bill of Material & Sizing of Solution sheet( <i>Annexure-II of Appendix-'D'</i> )		
(k)	POC of DMS demo project document included ( <i>Annexure-1 of Appendix-'J'</i> )		
(l)	POC of Zero-touch ROBO data-rack document included ( <i>Annexure-3 of Appendix-'J'</i> )		
(m)	POC demo app for SIMHA and project document included ( <i>Annexure-2 of Appendix-'J'</i> )		
(p)	ICG SIMHA compliance included ( <i>Appendix-'L'</i> )		
(q)	All COTS components qualify Coast Guard criteria and duly supported documents are attached	N/A	
(s)	MAF Certificate from OEM for DMS, if applicable		

Sl.	Details	Bid Page No.	Check (Yes/No)
(t)	MAF Certificates from OEM for Zero-touch ROBO Data Rack, Cloud virtualization software, SD-WAN software is attached. MAF to include undertaking of OEM to deploy respective solution through OEM/ Authorised partners.		

## 2. Technical Brochures/ Data Sheets/ Manuals

Sl.	Technical Brochures/ Data Sheets/ Manuals	Bid Page No.	Check (Yes/No)
(a)	Brochure & Datasheet of DMS Software		
(b)	Brochure & Datasheet of Zero-touch ROBO Rack. Datasheets should include all sub-components including UPS, SMF battery, Compressor, Evaporator, Cooling Fans, Rodent Repellent, Biometric access-control, DCIM software		
(c)	Brochure & Datasheet for Cloud virtualization software		
(d)	Brochure & Datasheet for virtual NGFW software		
(e)	Brochure & Datasheet for Backup & replication software		
(f)	Brochure & Datasheet of UPS		
(g)	Brochure & Datasheet of Compressor, Evaporator and Cooling Fans		
(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 Document  
MANAGEMENT SYSTEM - DISTRIBUTED REPOSITORY (PROJECT DMS-DR)  
- INDIAN COAST GUARD**

1. Refer to your RFP No. IT/3014/DMS-DR dated \_\_\_\_ Dec 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 Document Management System - Distributed Repository (Project DMS-DR) - 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 you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ service specified in the bid response without assigning any reason whatsoever.



**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
<b>01.</b>	<b>RFP Covering letter, Para-1 to 7</b>	Covering letter for RFP No.IT/3014/DMS-DR dated ___ Aug 2018 of Coast Guard Headquarters, New Delhi	
<b>02.</b>	<b>Part-I of Encl.-I:- General Information</b>		
(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	
<b>03.</b>	<b>Part II – Essential Details of Items/Services required</b>		
(a)	Para-1	Schedule of Requirements.	
(b)	Para-2	Technical Details. Detailed compliance submitted as per <b>Appendix-'A'</b> .	
(c)	Para-3	Two bid system	
(d)	Para-4	Delivery Period	
(e)	Para-5	INCOTERMS for Delivery and Transportation	
(f)	Para-5	Consignee Details	
<b>04.</b>	<b>Part III – Standard Conditions</b>		
(a)	Para-1	Law	
(b)	Para-2	Effective Date of the Contract	
(c)	Para-3	Arbitration	



<b>Sl.</b>	<b>RFP Clause</b>	<b>RFP Requirement</b>	<b>Compliance (Yes/No), deviations if any</b>
(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	
<b>05.</b>	<b>Part IV – Special Conditions</b>		
(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	
(z)	Para-24	Inspection Authority	
(aa)	Para-25	Pre-Dispatch Inspection	

<b>Sl.</b>	<b>RFP Clause</b>	<b>RFP Requirement</b>	<b>Compliance (Yes/No), deviations if any</b>
(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	
<b>06.</b>	<b>Part V – Evaluation Criteria &amp; Price Bid issues</b>		
(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**

<b>SL.</b>	<b>QR Requirement</b>	<b>QR Specification</b>	<b>Compliance (Yes/ No). Deviations, if any.</b>
01.	Schedule of Requirements <i>(Para-1, Part-II of RFP)</i>	(a) Design, Development, Implementation and Support for ICG Document Management System with Distributed Repository (Project DMS-DR)  (b) Warranty for 03 years from final GoLive including onsite functional manpower support	
02.	Vendor Requirement <i>(Para-2, Part-II of RFP)</i>	<u>Technical Specifications:</u> - Design, configuration, customization, development, implementation and support for ICG DMS-DR application using proven and matured COTS (Commercially-Off - The-Shelf) product/ Bespoke Software. Delivery of features shall be on 02 phases with 01 phase generally based on Out-of-the-Box BPM (Business Process Modelling/ readily available features) features of COTS/Bespoke product and 02 phase involves Coast Guard specific specification/ customization/ integration/ development	

**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 DOCUMENT  
MANAGEMENT SYSTEM – DISTRIPTED REPOSITORY (PROJECT DMS-DR) -  
INDIAN COAST GUARD**

1. Refer to your RFP No. IT/3014/DMS-DR dated \_\_\_ Dec 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 Document Management System - Distributed Repository (Project DMS-DR) - 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.
5. We agree that you are not bound to accept the lowest or any bid response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ service specified in the bid response without assigning any reason whatsoever.



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

**Introduction.**

1. ICG Document Management System - Distributed Repository (Project DMS-DR) application 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	Normalized Technical score	Final Score
	(B)	score	
1	350	$(350/390)*400$	358.97
2	360	$(360/390)*400$	369.23
3	370	$(370/390)*400$	379.49
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\*Normalized Technical Score) + (0.30\* Normalized Commercial Score)

Bidders	Final Technical score	Final Commercial score	Final Score (70:30)
<b>1</b>	<b>358.97*.7</b>	<b>400*.3</b>	<b>371.28</b>
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

Bidders	Final Technical score	Final Commercial score	Final Score (70:30)
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 DMS-DR 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%)
	<b>Total</b>	<b>400</b>	<b>&gt;= 240 (60%)</b>

(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	Documentary Evidence	Max. Marks
		<b>Proposed DMS-DR Product, COTS/Non-COTS (80 Marks)</b>		
(a)	Acceptability of proposed DMS-DR Product (COTS/Non-COTS)	(i) The proposed DMS-DR solution is expected to have minimum of 05 active/ ongoing implementations and include Record Lifecycle Management module:-	Work Order/ Purchase Order supported by Customer Completion / Product	80



Sl.	Criteria	Details	Documentary Evidence	Max. Marks
		<p>&gt;=08 &amp; &lt;15 active implementations – 50 Marks</p> <p>&gt;=05 active implementations - 40 Marks</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>(OR)</p> <p>(ii) The DMS-DR System is expected to have 250 Professional Users and consists of minimum 10,000 active records in India for 03 current implementations and include Record Lifecycle, Data Encryption modules.</p> <p>&gt;=250 &amp; &lt; 399 active Professional users = 40</p> <p>&gt;=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>The references / certificates should clearly state users / implementations are actively being used as on date of Tender/RFP publishing.</p>	<p>Acceptance Certificate/ Self Certification by CS</p> <p>(OR)</p> <p>Reference letter from customers stating modules implemented and active users</p>	
		<b>Bidder's Experience (50 Marks)</b>		
(b)	Bidder Experience in DMS Implementation	<p><b>Prior Experience:</b> Active DMS 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: Document Management, Advanced Search using automated content indexing, Active Directory/ LDAP integration</p> <p>* 3 citations (atleast 1 should be successfully completed) = 40</p>	<p>Copy of work order + Completion Certificates from the client;</p> <p>(OR)</p> <p>Work Order + Self Certificate of Completion (Certified by CS/independent</p>	50

Sl.	Criteria	Details	Documentary Evidence	Max. Marks
		<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>	auditor of the bidding entity);	
		<b>Bidder Employee Strength (50 Marks)</b>		
(c)	Bidder Employee Strength	<p>The Bidder is expected to have:</p> <p>25 technically qualified professionals in the area of solution architecture, DMS implementation, software development, systems integration, functional subject matter experts (SME).</p> <p>Marks for the experience shall be awarded as under: -</p> <p>*--Java Certified: 30 Marks--*</p> <p>If 05 Java Certified: 30 Marks</p> <p>03 Java Certified: 20 Marks</p> <p>02 Java Certified: 10 Marks</p> <p>*--Oracle Middleware Certified: 15 Marks--*</p> <p>If 03 Middleware Certified: 15 Marks</p> <p>02 Middleware Certified: 10 Marks</p> <p>01 Middleware Certified: 05 Marks</p> <p>*--Oracle/ MS SQL DBA Certified: 05 Marks--*</p> <p>If 03 DBA Certified: 05 Marks</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 consulting service support from OEM, include citation of support from OEM.	50

Sl.	Criteria	Details	Documentary Evidence	Max. Marks
		02 DBA Certified: 03 Marks 01 DBA Certified: 02 Marks		
		<b>Certification (20 Marks)</b>		
(d)	Company Certification	The Bidder is expected to have at least ISO 9001:2008 or latest certification – 10 Marks.  * 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
		<b>POC of DMS app (80 Marks)</b>		
(e)	Software project planning & design expertise	The Bidder should provide demo DMS application & should display all of required features	Attach POC demo project documentation and to provide POC during TEC as per <b>Annexure-1 of Appendix-'J'</b> format	80
		<b>Proposed Solution (60 Marks)</b>		
(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	Documentation 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	- Presentation of Solution/ Demo  - Bill of Material  - Illustrations supporting solution's capability in area of scaling,	20

Sl.	Criteria	Details	Documentary Evidence	Max. Marks
		<p>(ii) Scalability to handle future load by adding additional compute and no constraints on the application</p> <p>(iii) Suitability of Tools &amp; Technologies proposed including capacity to handle large transactional load</p> <p>(iv) Approach for handling frequent changes to 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>	<p>modularity, load, business configurations, etc.</p> <p>- OEM Certified Brochure/Data Sheet/Product Manual</p>	
(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>	<p>Proposal and presentation OEM Certified Brochure/Data Sheet/Product Manual</p>	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>	<p>Proposal document and presentation</p>	20

Sl.	Criteria	Details	Documentary Evidence	Max. Marks
		<b>Demo of Application on SIMHA (60 Marks)</b>		
(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) Demo app for ROBO built native replication capabilities with Central DMS Server</p> <p>(iii) 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 <b>Annexure-2 of Appendix-'J'</b></p>	60
				<b>400</b>

**COMMERCIAL-BID FORMAT**

*Note: Bidder to submit commercial bid on-line only. However, Annexure-1 of Appendix-'H' need to be submitted in sealed cover separately.*

**1. Item/ service bill of material**

Item ID	Description	Qty.	Unit	Make & Model	Unit Price (Rs)	Total w/o Tax	GST Rate	GST Total	Total
<b>Package-A: DMS-DR Software</b>									
<b>(A) SUPPLY, CUSTOMISATION, IMPLEMENTATION AND SUPPORT FOR DMS SOFTWARE</b>									
A-01	Customisation, Development, Configuration, Installation, Testing, system integration and Commissioning of DMS on SOA Platform with database replication including 03 year warranty, onsite functional support manpower-01 no., Users are 15,000 Nos., and 150 ICG units	1	Set						
A-02	DMS application on SOA with Database Replication along with source code for 15,000. Warranty for 03 years.	1	Nos.						
<b>Package-B: Zero-touch ROBO Cloud Edge Data rack</b>									
<b>(B) ZERO-TOUCH ROBO CLOUD EDGE DATA RACK WITH RELATED INFRASTRUCTURE</b>									
B-01	Modular data rack with Cloud edge IT Infrastructure including Software Defined Compute, WAN	13	Nos.						

Item ID	Description	Qty.	Unit	Make & Model	Unit Price (Rs)	Total w/o Tax	GST Rate	GST Total	Total
	components. Data rack to IT load of 1kW, L3 switches with UPS. 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	13	No.						
B-03	Onsite manpower from OEM for Cloud virtualization software. Duration of 01 year, extensible upto 02 years. Vendor to provide back-to-back OEM support.	1	Year						
	<b>Grant Total</b>								

**(Total of Rupees \_\_\_\_\_ only including all taxes)**

**Note:**

- (a) **L1 shall be decided on overall basic cost (exclusive of taxes) to include all line items as single package on turn-key basis following QCBS system.** 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.2 Crore product value, product having atleast 25 current deployments, product to have dedicated support portal with datasheets/user manuals/ API manuals/admin manuals/ patches and published roadmap for next 05 years. All non-COTS products should be provided with source code with IPR to the Buyer/ICG. All non-COTS software should be provided with source code and Intellectual Property Rights (IPR) to Indian Coast Guard
- (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 for Annexure-1 to Appendix-'H' to be handed-over to the Buyer as part on online bid submission. However, in case of discrepancies in price, online bid prices shall be considered as actual.

**ICG DMS-DR - PROOF OF CONCEPT TESTS**

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

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

**PACKAGE-B: Zero-Touch ROBO Edge Cloud Datarack** (POC Demo for Technical Qualification)

<b>Test ID</b>	<b>Category</b>	<b>POC Description</b>	<b>Qualified (Yes/No)</b>
<b>General</b>			
01-00	<b>ROBO technical solution document</b> <i>(Should be submitted as part of Technical bid)</i>	As per Annexure-3 of Appendix-'J'	
02-00	<b>POC Setup</b> <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) Edge Cloud software (a) Setup with 03 ROBO instances (b) Centralised edge cloud 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 &amp; Recovery</p> <p>(a) Setup for 03 ROBO instances with backup software</p> <p>(b) Centralised Cloud Management console integrated 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>	
03-00	Presentation	Overall solution presentation to include layout diagram, sizing/bill of material and project plan	
04-00	Layout diagram	<p>(i) 2D layout diagram of Zero-Touch ROBO Cloud Edge 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 Cloud Edge Data rack with all power, cooling of 1U, 1U for L3 switch, MPLS STM-1 of 1U.</p>	
05-00	Sizing & Bill of Material list	<p>(i) Sizing of entire solution including Zero-Touch ROBO Cloud Edge Data rack, Cloud virtualisation with SD-WAN/SD-NGFW/Backup &amp; Recovery software</p> <p>(ii) Bill of Material with Make &amp; Model, Quantity</p>	
06-00	Project Plan	<p>(i) Delivery timeline for Zero-Touch ROBO Cloud Edge Data rack</p> <p>(ii) Delivery timeline for software</p> <p>(iii) Gantt chart based project timeline</p>	

<b>Test ID</b>	<b>Category</b>	<b>POC Description</b>	<b>Qualified (Yes/No)</b>
07-00	Zero-Touch ROBO Data rack	POC setup made available as per ICG requirement	
08-00	Single-pane-of-glass monitoring	DCIM software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard.	
08-01		Cloud virtualisation software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
08-02		SD-WAN software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
08-03		Virtual NGFW software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
08-04		Backup and recovery software of Zero-Touch ROBO configured and display all 03 ROBO instances aggregated into single unified dashboard	
09-00	WAN optimised DCIM, Cloud edge central monitoring systems	Should support network environment consists of no network connectivity, 64Kbps VSAT high-latency connectivity, 2 Mbps to 8 Mbps	
09-01		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.	
09-02		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.	

<b>Test ID</b>	<b>Category</b>	<b>POC Description</b>	<b>Qualified (Yes/No)</b>
10-00	Central policy defining, and applying from central location	Cloud virtualisation software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
10-01		Virtual NGFW software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
10-02		SD-WAN software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
10-03		SD-WAN software of Zero-Touch ROBO configured for central policy & enforcement dynamically for all 03 ROBO instances from central location	
11-00	Survivability	Provide live demo on Cloud virtualisation for Software Defined Computer, Storage & Networking to exhibit High-Availability (HA) within Site to provide both RTO & RPO to 12 hrs	
12-00	Disaster Recovery using backup software	Site Recovery (SR) to provide RTO & RPO of not exceeding 12 Hrs and automated Recovery Testing scenario of VMs to other remote site	
13-00	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	
14-01		App aware test recovery of MS Exchange. It is required to test disaster recovery drill at regular intervals without affecting production environment	
15-00	Backup software	Carryout demo backup & recovery of VM images, blocks and files	
16-00	Backup software for app aware	Carryout app aware backup & recovery of MS Exchange test deployment and recover granular data such as individual email and mail box	

## **Annexure-1 of Appendix-'J'**

### **Technical QCBS - POC demo of DMS-DR application and SOA Platform**

*Note:*

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

(i) *DMS-DR App. Bidder to demonstrate single episode of record lifecycle with bi-directional replication from central site with remote units.*

**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] ( $\geq 50\%$ )	
<b>1.0:</b>	<b>Check-in/ Check-out documents</b>	<b>10</b>			Para-6(e) of Appendix-'G'
1.1:	Check-in document (03 Marks)				
1.2:	Check-out document (03 Marks)				
1.3:	View list of documents per User (04 Marks)				
<b>2.0</b>	<b>Version Control</b>	<b>10</b>			

		Marks	Scored	Qualified [Y/N] (>= 50%)	
2.1	Upload document. DMS to assign new version (03 Marks)				
2.2	Replace document. DMS to update version number (03 Marks)				
2.3	Rollback to previous version (04 Marks)				
<b>3.0</b>	<b>Central to Remote Record Replication</b>	<b>10</b>			
3.1	Publish record on central repository (03 Marks)				
3.2	Create patch of records & apply to remote repository (03 Marks)				
3.3	Delete/ Update central record. Create patch and apply on remote repository (04 Marks)				
<b>4.0</b>	<b>Advanced Search</b>	<b>10</b>			
4.1	Search central repository by tags, record name, published between given dates (05 Marks)				
4.2	Search ROBO repository by tags, record name, published between given dates (05 Marks)				
<b>5.0</b>	<b>Database Replication</b>	<b>10</b>			
5.1	Replicate CRUD changes on central Oracle database to ROBO MySQL. All tables on sample Oracle HR to be included. (05 Marks)				
5.2	Replicate CRUD changes on ROBO MySQL database into central Oracle database. All tables on sample Oracle HR to be included. (05 Marks)				
<b>6.0</b>	<b>Demo SOA Platform</b>	<b>10</b>			
6.1	Demonstrate Open-Source Portal, ESB, Application Server,				

		Marks	Scored	Qualified [Y/N] ( $\geq 50\%$ )	
6.2	Database SSO, Workflow Components as integrated platform (05 Marks) Demo application of Employee Search on SOA platform (05 Marks)				
	<b>TOTAL</b>	<b>60</b>			



**DMS - 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)**

		Marks	Scored	Qualified [Y/N] (>= 50%)	
<b>1.0</b>	<b>Part-A: Introduction</b>	<b>05</b>			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	<b>Part-B: Analysis &amp; Design</b>	<b>05</b>			
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				
<b>3.0</b>	<b>Part-C: Deployment architecture</b>	<b>05</b>			
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				

		Marks	Scored	Qualified [Y/N] (>= 50%)	
	with cloud enabled characteristics				
<b>4.0</b>	<b>Part-D: Project Planning</b>	<b>05</b>			
4.1	Project planning & monitoring (a) Include Work Breakdown Structure (WBS), Resource Allocation etc using MS Project/ Oracle Primavera				
4.2	Agile project planning with Scrum (a) Use JIRA or equivalent software as mentioned in latest Gartner Magic Quadrant on 'Enterprise Agile Planning Tools'. Should have minimum of 03 sprints (b) Project members of developers, testers, project managers of minimum 10 personnel (c) Should follow DevOps methodology				
<b>5.0</b>	<b>Part-E: Development</b>	<b>05</b>			
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				

		Marks	Scored	Qualified [Y/N] (>= 50%)	
5.6	19.0: User Acceptance Test (UAT) format with details				
<b>6.0</b>	<b>Part-F: Documentation</b> and presentation (05 Marks)	<b>05</b>			
6.1	Documentation and quality of presentation shall be evaluated based on compliance to UML standards, IEEE standards, Agile standards, OOAD diagrams etc.				
	<b>TOTAL</b>	<b>30</b>			

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

		Marks	Scored	Qualified [Y/N] (>= 50%)	
<b>1.0:</b>	<b>SIMHA components used</b>	<b>10</b>			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				
<b>2.0</b>	<b>Demo of application</b>	<b>10</b>			
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				

		Marks	Scored	Qualified [Y/N] ( $\geq 50\%$ )	
<b>3.0</b>	<b>ALM, Project Mgmt. Software integration</b>	<b>10</b>			
3.1	A demo login for MS Project/Oracle Primavera.				
3.3	JIRA ALM with Bit- bucket source code control system. It should demonstrate ICG requirements of project management as required				
	<b>TOTAL</b>	<b>30</b>			

**POC Demo for Zero-Touch ROBO Edge Cloud Datarack with 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: 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: Centralied datarack monitoring 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: Document Management System – Distributed Repository**

<b>Sl.</b>	<b>Profile</b>	<b>Details</b>	<b>Remarks</b>
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.	



<b>Sl.</b>	<b>Profile</b>	<b>Details</b>	<b>Remarks</b>
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/Prima Vera 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/ Bit Bucket (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<sup>®</sup> 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	(a) Can you develop software applications on following Oracle Middleware Platform? <u>[Yes/No]</u> (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	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	(a) Name: _____ (b) Desig.: _____ (c) Email: _____ (d) Mobile: _____ (e) Office location: _____	
6.1	Single point of Contact (SPOC-Technical) for Coast Guard	(a) Name: _____ (b) Desig.: _____ (c) Email: _____ (d) Mobile: _____ (e) Office location: _____	
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**

<b>Sl.</b>	<b>Profile</b>	<b>Details</b>	<b>Remarks</b>
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 need to be included on POC demo.	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>(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 &amp; 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

Sl.	Platform Requirement	Comply (Yes/No)	Remarks, if any
<b>1.0 Development</b>			
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 <sup>1</sup> 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 <sup>2</sup> 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		
<b>2.0 Unified Enterprise Portal</b>			
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 version and backward version compatibility atleast upto last one year		
<b>3.0 Security</b>			
3.1	Support for Oracle SSO		

<sup>1</sup> Enterprise Agile Development (EAD) Tools review by Gartner. Refer ICG Terminologies

<sup>2</sup> COTS to qualify ICG standards in RFP. Refer ICG Terminologies

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		
<b>4.0</b>	<b>Service Oriented Architecture (SOA) support</b>		
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		
<b>5.0</b>	<b>Business Process Management (BPM) support</b>		
5.1	All Business Processes shall be built on Oracle BPM platform, and such processes shall not be duplicated using bespoke development		
<b>6.0</b>	<b>Document and Record Management (DMS/RMS) support</b>		
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		
<b>7.0</b>	<b>Software as a Service (SaaS) support</b>		
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		
<b>8.0</b>	<b>Application &amp; Data replication and maintenance support</b>		
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		
<b>9.0</b>	<b>Database</b>		
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.		
<b>10.0 Project Team &amp; regular reviews</b>			
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 tender fee / 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**

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

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

## 2. **Terminology**

<b>TERMINOLOGY</b>	<b>TERMINOLOGY DESCRIPTION</b>
<b>AHS</b>	: Allied Health Services. It includes Laboratories, Pharmacies, Imaging, Therapies, Social and Psychological Support services etc, that provide both diagnostic and therapeutic support to both the OPD and IPD patients
<b>ATS</b>	: Annual Technical Support, provided by OEM for patches, upgrades, remote support etc.
<b>Bidder</b>	: Vendor who participated in tender issued by ICG
<b>Buyer</b>	: Indian Coast Guard
<b>CDA(CG)</b>	: Controller of Defence Account (Coast Guard)
<b>CGHQ</b>	: Coast Guard Headquarters, New Delhi
<b>COTS</b>	: 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 05 years.
<b>CPMT</b>	: 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
<b>Database Replication</b>	Database Replication to replicate, filter, and transform data from one database to another database. It enables the replication by offline/ online of data between Oracle database and MySQL/ PostgreSQL databases. Offline replication through patch files and online replication through network such as MPLS-WAN.
<b>DISHA</b>	: Digital Infrastructure Services for Hosting Applications. A project of Coast Guard to deploy managed IT infrastructure.
<b>DMS-DR</b>	: Extended SIMHA platform to support ICG Ships. SOA enabled platform for ICG includes Document Management System-Distributed Repository. SOA Middleware Platform shall support all ICG software applications for ICG ships and hence, it includes main SOA components such as Portal, Service Bus, BPEL/ BPM, IAM, SSO, Database, Generic Database Replication module to support all ICG applications likely to be hosted. DMS-DR platform also referred as BRASS Platform
<b>EMS</b>	: Electronic Mail System
<b>HA</b>	: High-Availability. A configuration to provide maximum availability of IT infrastructure & services.
<b>IC4</b>	: 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.
<b>ISP</b>	: Internet Service Provider, who provide internet services
<b>NETRA</b>	: ICG Network of Tatrakshak Applications framework. Mother IT Framework provide end-to-end IT automation in ICG. It envisages

## TERMINOLOGY

## TERMINOLOGY DESCRIPTION

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.

<b>OU</b>	: 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
<b>PCDA(N)</b>	: Principle Controller of Defence Accounts (Navy). Defence accounting office for Indian Navy & Indian Coast Guard located at Mumbai.
<b>QCBS</b>	: 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%
<b>SaaS</b>	: 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
<b>SDOT</b>	: 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.
<b>Seller</b>	: Vendor who participated in tender and issued supply/ work order by ICG
<b>SI</b>	: System Integrator. Bidder who is issued with work order to implement involving multifaceted implementations/provisioning of turn-key projects at ICG
<b>SIMHA</b>	: ICG unified middleware software platform standard framework Secured Integrated Management for Hosting Applications (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.
<b>SOC</b>	: Security Operations Center. Monitors & manages all information security aspects of ICG. It is implemented as part of IC4.
<b>TSP</b>	: 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)*

