

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

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

Quoting: CGHQ/IT/SIP/2018-19

12 Feb 19

**INVITATION OF ONLINE BIDS FOR OPEN TENDER ENQUIRY NO.  
CGHQ/IT/SIP/2018-19 SUPPLY, IMPLEMENTATION AND SUPPORT OF  
SECURED VOICE ACCESS MANAGEMENT FOR CGCs, RHQs, DHQs, BUVIK  
CGS HUTBAY, CGS MAYABHANDER AND CGS MINICOY**

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	12 Feb 19 (1600 HRS)
(b)	Bid Document Download / Sale Start Date	12 Feb 19(1730 HRS)
(c)	Clarification Start Date	12 Feb 19 2019(1730 hrs)
(d)	Clarification end date	19 Feb 2019(1500 hrs)
(e)	Pre-bid meeting	19 Feb 2019(1430 hrs)
(f)	Bid submission start date	12 Feb 2019(1730 hrs)
(g)	Bid Document Download / Sale End Date	06 Mar 2019 (1300hrs)
(h)	Bid Submission End Date	06 Mar 2019 (1400 hrs)
(j)	Technical Bid Opening Date	07 Mar 2019 (1430 hrs)
(k)	Opening of Commercial Bids	Will be intimated in due course after technical evaluation by TEC

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

The Director General{for Director (IT)}  
Coast Guard Headquarters  
Purana Quilla Road, 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:

(a) Part I- Contains General Information and Instructions for the

Bidders about the RFP such as the time, place of submission and opening of tenders, Validity period of tenders, etc.

(b) Part II - Contains essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical Specifications, Delivery Period, Mode of Delivery and Consignee details.

(c) Part III - Contains Standard Conditions of RFP, which will form part of the Contract with the successful Bidder.

(d) Part IV - Contains Special Conditions applicable to this RFP and which will also form part of the contract with the successful Bidder.

(e) Part V - Contains Evaluation Criteria and Format for Price Bids.

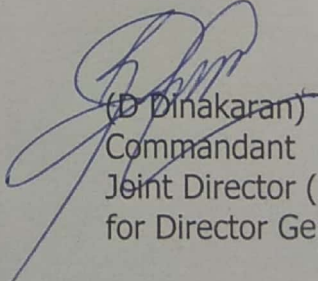
4. This RFP is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof at any stage. Buyer also reserves the right to withdraw the RFP, should it become necessary at any stage.

5. You are requested to comply with all the terms and condition mentioned in the RFP and certificate in this regard is to be endorsed on the quote submitted by your firm. Relaxation/deviation of terms/conditions if any, should be clearly brought out for consideration, however acceptance of same will solely be at discretion of Coast Guard. Part I, II, III, IV & V of the RFP are enclosed herewith.

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

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

Yours sincerely,

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

**Enclosures: -**

- (a) **Appendix-'A'** : Technical Requirements
- (b) **Appendix-'B'** : Covering Letter to Bid Submission

- (c) **Appendix-'C'** : Covering Letter to Technical Bid
- (d) **Appendix-'D'** : Technical Bid Compliance Sheet
- (e) **Appendix-'E'** : Covering Letter to Commercial Bid
- (f) **Appendix-'F'** : Commercial Bid Format
- (g) **Appendix-'G'** : Abbreviations & Terminologies
- (h) **Appendix- 'H'** : 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 on CPPP website <https://eprocure.gov.in/eprocure/app> before due date and time. Late tenders will not be considered. No responsibility will be taken for technical delay or not uploading of bids of Bid documents. Bids sent by FAX or e-mail will not be considered. Samples and EMD to be deposited manually at addressed 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 on their original memo / letter pad, signed, scanned and uploaded by the Bidders on <https://eprocure.gov.in/eprocure/app>. 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 and uploaded along with bids.

**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 "CDA (IN/CG), Delhi". 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 or 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) Supply of SIP phones and software. High level of bill of material as following:-

<b>Item ID</b>	<b>Description</b>	<b>Qty.</b>	<b>Unit</b>
	<b>(A) SUPPLY HARDWARE, 03 YRS WARRANTY</b>		
A-01	Basic IP Phone	1112	No.
A-02	Executive IP Phone with add-on key module and HD Video conference support	122	Set
A-03	Operator console workstation	7	No.
A-04	Gateway for PRI/ SIP, 01 Line each	7	Nos.
A-05	Gateway for FXO, 08 lines each	16	No.
	<b>(B) SUPPLY OF SOFTWARE, 03 YRS WARRANTY</b>		
B-01	User license for IP Phone, Softphone client, voicemail (for executive phone) & EMS	1234	No.
B-02	Operator console software	7	Set
B-03	Session Mediation Enterprise (SME) software	2	No.
B-04	RightFax (Fax over IP), 01 Channel	23	No.
	<b>(C) INSTALLATION, SUPPORT &amp; MAINTENANCE</b>		
C-01	Design, installation, integration, commissioning and maintenance, 01 year warranty	1	No.
C-02	Onsite support engineer for RHQs	6	No.
C-03	Central support for all ICG Units, 01 Onsite engineer on 24x7 basis at Data Center, New Delhi	1	Set
	<b>(D) SUPPLY &amp; DEPLOYMENT OF ZERO-TOUCH ROBO DATA RACK, 03 YRS WARRANTY</b>		
D-01	Zero-touch ROBO datarack with Hyper-Converged Appliance, SDDC and NGFW Software	3	No.
D-02	Installation, integration, commissioning and maintenance, 03 year warranty	3	No.

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

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

- (i) Not submitted in format as specified in the tender document
- (ii) Received without the Letter of Authorization (Power of Attorney)

- (iii) Found with suppression of details
- (iv) With incomplete information, subjective, conditional offers, and partial offers submitted
- (v) Submitted without the documents requested
- (vi) Non-Compliant to any of the clauses mentioned in the tender
- (vii) With lesser validity period
- (viii) Without EMD

(d) **Prequalification Criteria:**

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
(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 average 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)	(aa) During last 5 years ending last day of month previous to the one in which applications are invited:-  The Bidder must have successfully completed/ ongoing one similar contracts/ minimum of 100 licenses/ supply and Implementation within India, each costing not less than the amount equal to Rs. 25 Lakh  (ab) Reference clients should authenticate & recommend the	Completion certificate (GO-Live / Implementation) with date and  1. Work order with order value detailing the scope.  (OR)	



<b>Sl.</b>	<b>Prequalification Criteria</b>	<b>Supporting Documents</b>	<b>Doc. Provided (Y/N)</b>
	Bidder through official email within 05 days/as required by ICG, of request email sent by ICG.	2. Agreement copy defining the scope & value.  Also provide client reference detailing Name, Designation, Phone and Email ids.	
(iv)	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 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.	
(vi)	The Bidder should have ISO 9001:2008/CMMi-3	Valid copy of certificate at the time of bidding.	

<b>Sl.</b>	<b>Prequalification Criteria</b>	<b>Supporting Documents</b>	<b>Doc. Provided (Y/N)</b>
(vii)	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	
(viii)	Bidder profile attached with Technical Bid	Bidder profile attached as per Appendix-'K'	
(x)	Provided hardware/ software should be compliant to existing Cisco CUCM and provide atleast 02 reference project with minimum of 100 IP phones in past 05 years.	Reference client documents and architecture, OEM document to support compliance	
(xi)	Should have atleast 01 Central/ State Govt client with active deployment/support of self-contained dataracks with order worth of minimum of Rs.25 Lakhs	Self-certification and documentary proof. Details of contact official for reference to be provided.	
(xii)	Should have been issued with OEM MAF Certificate specific to Coast Guard project for IP Phones, Cisco Software, ROBO data rack, Cloud virtualisation and SD-WAN Software	OEM MAF Certificates	
(xiii)	POC demo project document requirements are complied and proforma included	Proforma as per Annexure-1 of	

Sl.	Prequalification Criteria	Supporting Documents	Doc. Provided (Y/N)
		Appendix-'G' attached	
(xiv)	POC of Zero-touch ROBO	Annexure-1 of Appendix-'G'	
(xv)	Should have support office at Delhi NCR	Office Registration documents	

## 2. **Technical Details:**

(a) **Technical Specifications:** - High level technical specifications as following. Refer Appendix-'A' of RFP for detailed technical specifications.

(i) **Telephony and UC (Unified Communication).** ICG has deployed Cisco CUCM 12.0 as central UC. The System supports IP telephony, video conferencing, messaging, presence and instant messaging (IM). System support following user types:

(aa) **Executive Users.** Executive users are one who need features of boss-secretary, Video call / Conference, Busy Lamp Field (BLF), and Consultative Call Forwarding as part of telephony.

(ab) **Regular Users.** Regular office users with basic SIP functionalities.

(ii) **Local survivability.** Local survivability for minimum duration of 06 months with no additional license requirements other than user licenses

(iii) **High-availability and resiliency.** Entire unified IPPBX network supports atleast 10 clustered call management servers across India to provide required high availability and resiliency.

(iv) **Call management server.** It should support following.

(aa) deployment modes of software virtualisation, virtual appliance and special purpose hardware appliance

(ab) should support minimum of 10 clustered instances of call management servers across geographical locations to provide high resiliency and optimization of WAN bandwidth

- (v) **Softphone.** Softphone should be available for all users. Softphone should support centralised telephone directory search, initiate call and seamless transfer of active call to user desk-phone
- (vi) **Central telephone directory.** Solution should support centralised telephone directory. It should support various roles responsible for update, delete, view and support decentralized administration
- (vii) **Open Standards and Open Architectures.** System to support industry open standards and open architectures for better integration with other software applications and hardware
- (viii) **Right fax facility.** System to integrate fax facility with desktop, email, document management applications. Fax from MS Office to be integrated
- (ix) Detailed technical specification and sizing as per **Appendix-'A'** of RFP.

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-'D'** along with **Appendix - 'C'**.
- (b) Tender Fee - NA.
- (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-'F'** format. Individual taxes need to be added as separate columns. **L1 shall be decided on overall cost of complete package (excluding taxes) consists of all bill of material and at base cost.**
- (e) Bid should be uploaded with covering letter as per **Appendix-'B'** along with checklist in **Annexure-1 of Appendix-'B'**.

**Note:** (i) Signed & scanned copy of Technical Bids should be uploaded by Bidder under their original memo / letter pad.  
(ii) Failure to submit any of above documents will render the bid invalid

- (iii) Buyers reserve the right to cancel any bid without assigning any reason.
- (iv) EMD to be submitted manually on or before bid submission end date.

4. **Delivery Period** –The job is to be completed within **06 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)}**  
                                           **Purana Quilla Road**  
                                           **New Delhi-110 001**

**The Commander**

**RHQ(W)/RHQ(E)/RHQ(NW)/RHQ(NE)/  
 RHQ (A&N)**

**The Officer-in-Charge**  
**BUVIK**

**The Commander**  
**CG DHQ-1 to CG DHQ-16**

**The Commanding Officer**  
**ICGS Hutbay/ Mayabandar/  
 Minicoy**

### **PART III – STANDARD CONDITIONS OF RFP**

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

1. **Law:** The Contract shall be considered and made in accordance with the laws of the Republic of India. The contract shall be governed by and interpreted in accordance with the laws of the Republic of India.
2. **Effective Date of the Contract:** The contract shall come into effect on the date of signatures of both the parties on the contract (Effective Date) and shall remain valid until the completion of the obligations of the parties under the contract. The deliveries and supplies and performance of the services shall commence from the effective date of the contract.
3. **Arbitration:** All disputes or differences arising out of or in connection with the contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the contract or relating to construction or performance, which cannot be settled amicably, may be resolved through arbitration. The standard clause of arbitration is as per Forms DPM-7, DPM-8 and DPM-9.
4. **Penalty for use of Undue influence:** The seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the buyer or otherwise in procuring the contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present contract or any other contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present contract or any other contract with the Government of India. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the seller) or the commission of any offers by the seller or anyone employed by him or acting on his behalf, as defined in chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the buyer to cancel the contract and all or any other contracts with the seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the seller. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer/employee of the buyer or to any other person in a position to influence any officer/employee of the buyer for showing any favour in relation to this or any other contract, shall render the seller to such liability/ penalty as the buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the buyer.
5. **Agents / Agency Commission:** -The Seller confirms and declares to the Buyer that the Seller is the original manufacturer of the stores/provider of the services referred to in this Contract and has not engaged any individual or firm, whether Indian

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

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

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

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

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

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

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

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

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

(e) As per decision of the Arbitration Tribunal.

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

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

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

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

14. **Taxes and Duties:**

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

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

**(i) General**

1. If 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.

2. 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.

3. 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.



4. 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:** - NA.

**(iv) GST:-** As applicable.

**(v) Octroi Duty & Local Taxes:** -

1. Normally, materials to be supplied to Government Departments against Government Contracts are exempted from levy of town duty, Octroi Duty, Terminal Tax and other levies of local bodies. The local Town/Municipal Body regulations at times, however, provide for such Exemption only on production of such exemption certificate from any authorised officer. Seller should ensure that stores ordered against contracts placed by this office are exempted from levy of Town Duty/Octroi Duty, Terminal Tax or other local taxes and duties. Wherever required, they should obtain the exemption certificate from the Buyer, to avoid payment of such local taxes or duties.

2. 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

(a) The payments towards items mentioned at para 1 (a) Sl A-01 to B-05 and D-01 to D-02 of Part II will be made 100% on delivery of items on Consignee wise.

(b) The payments towards items mentioned at para 1 (a) Sl C-01 will be made post installation, commissioning and go-live of project.

(c) The payment towards SI C-02 and C-03 of Part II will be made on quarterly basis on completion of each quarter post project go-live.

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

7. **Advance Payments:** No advance payment(s) will be made.

8. **Paying Authority:** CDA(^IN/ CG), 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 along with 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:** - NA
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 **01 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 Criteria** - The broad guidelines for evaluation of Bids will be as follows:

(a). Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the RFP, both technically and commercially.

(b). The Lowest Bid will be decided upon the lowest price quoted by the particular bidder as per the Price Format given at Para 2 below. The consideration of taxes and duties in evaluation process will be as follows:

i. In cases where only indigenous Bidders are competing, L1 shall be decided on overall cost of complete package consists of all bill of material and at base cost.

(c). The Lowest Bid will be decided upon the lowest price quoted by the particular Bidder as per the Price Format given at Para 2 below. 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 –

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

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

3. 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 entertained 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). 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.

(f). 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.

2. 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-'F'** 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.

**DETAILED TECHNICAL SPECIFICATIONS FOR IP TELEPHONY SYSTEM AND ZERO-TOUCH ROBO DATARACK**Table of Contents

Part-I: IT Infrastructure Minimum Required Sizing

Part-II: IT Infrastructure - Detailed Specifications

**PART-I: IT INFRASTRUCTURE MINIMUM REQUIRED SIZING**

<b>Sl.</b>	<b>IT Infrastructure Type</b>	<b>Sizing Requirement</b>	<b>Detailed Specifications</b>	<b>Complied (Yes/ No)</b>
1.	Zero-Touch ROBO Rack	(a) 02 kW, scalable upto 03 kW with additional racks  (b) Qty.-03 Nos.  (c) Usable RU Space: Minimum of 16U	Section-A of Annexure-1 of Appendix-B	
2.	Edge Cloud Infrastructure with SD-WAN ( <i>HA with 02 Servers</i> )	(a) Per site configuration  (i) Hyper Converged Appliance Server - 02 Nos  (ii) CPU Sockets per Rack/ Node - 02 Nos  (iii) CPU loaded per Rack/ Node - 01 No.  (iv) Minimum of 16 Cores, 2.4 GHz  (iv) Minimum of 64GB Memory RAM expandable upto 1TB for each server/node  (e) Qty.-03 Set	Section-B of Annexure-1 of Appendix-B	

<b>Sl.</b>	<b>IT Infrastructure Type</b>	<b>Sizing Requirement</b>	<b>Detailed Specifications</b>	<b>Complied (Yes/ No)</b>
3.	Enterprise Virtualisation (for HA with 02 Servers)	(a) 01 Socket x 02 Nodes each (b) Qty.-03 Set	Section-C of Annexure-1 of Appendix-B	
4.	Software Defined WAN	(a) 32 Mbps throughput (b) Qty.-03 Nos.	Section-D of Annexure-1 of Appendix-B	
5.	Virtual Next Generation Firewall	(a) 1 Gbps throughput (b) Qty.-03 Nos.	Section-E of Annexure-1 of Appendix-B	
6.	Backup Software	(a) 01 Socket x 02 Nodes each (b) Qty.-03 Set.	Section-F of Annexure-1 of Appendix-B	
7.	Basic IP Phone with User licenses	(a) Qty.-1112 Nos.	Section-G of Annexure-1 of Appendix-B	
8.	Executive IP Phone with User licenses	Qty.-122 Nos.	Section-H of Annexure-1 of Appendix-B	
9.	PRI Gateway	Qty.-07 Nos.	Section-J of Annexure-1 of Appendix-B	
10.	OEM Qualification, Warranty & Implementation support	Warranty 03 Years from GoLive	Section-K of Annexure-1 of Appendix-B	

**PART-II: IT INFRASTRUCTURE – DETAILED SPECIFICATIONS**

**Index of Sections**

	<b>IT Infrastructure Type</b>	<b>Complied (Yes/No)</b>
Section-A	: Zero-Touch ROBO Rack	
Section-B	: Edge Cloud Infrastructure with SD-WAN ( <i>HA with 02 Servers</i> )	
Section-C	: Enterprise Virtualisation ( <i>HA with 02 Servers</i> )	
Section-D	: Software Defined WAN	
Section-E	: Virtual Next Generation Firewall	
Section-F	: Backup Software	
Section-G	: Basic IP Phone	
Section-H	: Executive IP Phone	
Section-J	: PRI Gateway	
Section-K	: OEM Qualification, Warranty & Implementation support	

## 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>	Integrated Modular Data Rack in High-Availability configuration. Rack should be intelligent and should facility of inbuilt UPS, Precision cooling units and Remote Monitoring.	
<b>1.2.0</b>	<b>Zero Touch Monitoring/Management</b>	Zero-touch monitoring, management of all parameters including Cooling and Power along with PDU, Access control	
<b>1.3.0</b>	<b>Usable IT load to support</b>	02 kW, scalable upto 03 kW with additional racks	
<b>1.5.0</b>	<b>Design</b>	(i) Modular and Scalable design for power and cooling (ii) Single Rack solution	
<b>1.6.0</b>	<b>RU space for IT load</b>	Minimum usable space 16U (PRI Gateway-2x1U, TOR Switch-2x2U, Servers-2x2U, Spare-06U)	
<b>1.7.0</b>	<b>UPS</b>	(a) Rack mountable, N+1 configuration for rack mountable internal SMF battery modules, Minimum backup of 10 minutes in full load.  (b) PDU with strip level monitoring to be provided and connected to integrated monitoring system	
<b>1.8.0</b>	<b>PAC Unit</b>	(a) Rack mounted, Cooling unit within Data Rack in High-Availability configuration (b) Cooling unit to ensure UPS & Battery cooling positioned inside rack (c) Split indoor & Outdoor unit design (d) Cooling Unit integrated in rack, rack mountable not more than 6U (e) High reliable Scroll compressor (f) Electronically Commutated centrifugal evaporator fan for high energy efficiency (g) Air flow suitable to rack equipment in vertical direction (h) Cooling unit must have safety protections - Under voltage and Overvoltage, High Pressure & Low Pressure for safe operation	

SL	Parameters	Technical Specification-Zero Touch ROBO Cloud Edge Data Rack	Compliance (Yes/No)
		(j) For easy maintenance, washable filter 80% efficiency to 20 micron and HDPE media (k) Flare type Thermostatic Expansion Valve for easy serviceability (l) Anticorrosive Condenser coil for coastal area environmental application (m) Individual breakers at indoor and outdoor unit for protection (n) ON/OFF switch at indoor unit for emergency purpose	
1.8.1	<b>Scalability for PAC Unit</b>	Provision for additional datarack Precision cooling unit for future upgradation, if required	
1.9.0	<b>Safety &amp; security features</b>	(a) Smoke/ Fire detection and fire suppression, Access control, Rodent Repellent. (b) Environment monitoring like water-leak detection, Temperature and Humidity sensor, Door sensor etc. (c) Emergency automatic door opening for both front & back doors based on temperature	
1.10.0	<b>Single Pane of Glass of Monitoring and Management</b>	(a) All ROBO units across geographical locations should be centrally monitored and manageable through web based <b>single window integrated monitoring of ROBO data racks</b> for vital parameters such as UPS, Cooling, temperature, door position, humidity, etc. (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 (c) Should be able to generate system status/alert.	
1.11.0	<b>Protocol support</b>	SNMP supported. Required interface units need to be provisioned. Should support ready integration with NMS & EMS for 3 <sup>rd</sup> party	

SL	Parameters	Technical Specification-Zero Touch ROBO Cloud Edge Data Rack	Compliance (Yes/No)
		IBMS/ITOM software monitoring & management.	
1.13.0	Other	(a) Project specific design should be certified for mentioned features by CDCP certified engineer from OEM  (b) Installation to include laying of appropriate power cabling from Main panel to rack along with Chemical earthing.	
1.14.0	Centralized monitoring software	(a) Centrally monitor & manage all ROBO units over WAN  (b) Should be deployed in virtual form factor	
1.14.1	Real-time monitoring	(a) All parameters of power, cooling and PDU should be available for remote monitoring.  (b) Smoke & Fire Detection system should also integrate with PFC contacts for status of health with main monitoring system.  (c) Cooling monitoring should include parameters like compressor and fan running hours, UPS monitoring should include battery health, environmental monitoring, raw incoming power parameters such as frequency /amperes /voltage, UPS outgoing power parameters, PDU socket level power, access control operational status, remote viewing of camera.  (d) Alerts for abnormalities on power consumption pattern at PDU strip level, abnormalities in Compressor health pattern.  (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.  (f) Software should have open architecture, open protocols to support wide variety of integration for different OEMs	
1.14.2	Central Management Software	(a) Group ROBO data racks into logical, hierarchical for management flexibility and deploy policies centrally to be used in	



SL	Parameters	Technical Specification-Zero Touch ROBO Cloud Edge Data Rack	Compliance (Yes/No)
	Requirement for Central location	<p>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	
<b>1.15.0</b>	<b>Site work</b>	<p>(a) Provide Chemical earthing, electrical 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>	
<b>1.16.0</b>	<b>ROBO OEM</b>	ROBO components of data-rack including, Cooling, UPS, IP PDU and centralised monitoring software similar to DCIM should be of same single OEM to have seamless integration and management support	

Section-B – **Edge Cloud Infrastructure with SD-WAN** (*High-Availability with 02 Servers Configuration*)

Srl.	Parameters	Technical Specification- Edge Cloud Infrastructure with SD-WAN ( <i>HA with 02 Server Configuration</i> )	Complied (Yes/No)
<b>General</b>			
1.0	<b>Key requirements</b>	(a) Should provide Software Defined following: - <ul style="list-style-type: none"> <li>(i) Compute</li> <li>(ii) WAN</li> </ul> (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	<b>Bandwidth throughput</b>	WAN bandwidth of 32 Mbps at ROBO site	
3.0	<b>Hardware specification</b>	(a) Hyper Converged Appliance (b) Should integrate with ICG central Cloud monitoring console to provide 'Single-Pane-of-Glass-Monitoring' (c) VMware vSAN Ready	
4.0	<b>Form Factor</b>	Rack mounted	
5.0	<b>HCI compliant</b>	Cloud virtualization software should provide Enterprise Virtualisation and SD-WAN to build Hyperconverged Infrastructure (HCI)	
6.0	<b>OEM</b>	(a) Zero-Touch ROBO OEM components of Cloud virtualization software, Virtual NGFW, Backup software of latest Gartner Report on	

Srl.	Parameters	Technical Specification- Edge Cloud Infrastructure with SD-WAN <i>(HA with 02 Server Configuration)</i>	Complied (Yes/No)
		<p>Magic Quadrant for Hyper Converged Servers for Software/ Appliance.</p> <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>	
7.0	<b>OEM implementation</b>	Design plan, implementation and validation for enterprise compute virtualisation and SD-WAN to be done by OEM authorised partner. Undertaking for the same to be mentioned on the MAF certificate.	
<b>Centralised Management</b>			
8.0	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>			
9.0	<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>	

Srl.	Parameters	Technical Specification- Edge Cloud Infrastructure with SD-WAN <i>(HA with 02 Server Configuration)</i>	Complied (Yes/No)
10.0	<b>Backup, Recovery &amp; Replication Software</b>	As per Backup software specifications in <b>Section-F of Annexure-1 of Appendix-B</b>	
<b>Networking</b>			
11.0	L3 Switch	Should provide L3 physical switch with 48 ports	
12.0	Ports	10G Ports/ 1G Ports as required	
13.0	Network Patch Panel	Network patch panels external/ internal should be provided	
<b>Software Defined Data Center (SDDC) characteristics</b>			
14.0	<b>Software Defined Compute</b>	As per Enterprise Virtualisation software specifications in <b>Section-C of Annexure-1 of Appendix-B</b>	
15.0	<b>Software Defined WAN</b>	As per SD-WAN software specifications in <b>Section-D of Annexure-1 of Appendix-B</b>	
16.0	<b>Software Defined Security</b>	As per SD-WAN software specifications in <b>Section-E of Annexure-1 of Appendix-B</b>	
17.0	<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	



Section-C – **Enterprise Virtualisation (for Type-C ROBO with 02 Servers)**

<b>Sl.</b>	<b>Category</b>	<b>Technical Specification - Enterprise Virtualisation</b>
1.1	<b>General</b>	Virtualization software shall provide a Virtualization layer that sits directly on the bare metal server hardware with no dependence on a general-purpose OS for greater reliability and security
1.2		Virtualization software shall be Quadrant of Gartner Magic Quadrant for x86 Server Virtualization Infrastructure for continuous last 5 years
1.3		Virtualization software shall allow heterogeneous support for guest Operating systems like Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu, CentOS and Solaris x86)
2.0	<b>Storage management</b>	Virtualization software should be able to boot from iSCSI, FCoE, and Fibre Channel SAN
2.1		Virtualization software shall integrate with NAS, FC, FCoE and iSCSI SAN and infrastructure from leading vendors leveraging high performance shared storage to centralize virtual machine file storage for greater manageability, flexibility and availability
2.2		Virtualization software shall have the capability for creating virtual machine templates to provision new servers
2.3		Virtualization software shall allow taking point-in-time snapshots of the virtual machines to be able to revert back to an older state if required
2.4		Virtualization software should have the ability to thin provision disks to avoid allocating all storage space upfront. Full monitoring capabilities and alerts to prevent from accidentally running out of physical storage space should be there.
3.0	<b>High Availability &amp; VM Management</b>	Virtualization software should support connecting smart card readers to multiple virtual machines, which can then be used for smart card authentication to virtual Machines.
3.1		Virtualization software should support live Virtual Machine migration with enhanced CPU compatibility and without the need for shared storage option.
3.2		Virtualization software should have the ability to live migrate VM files from one storage array to another without

SI.	Category	Technical Specification - Enterprise Virtualisation
		any VM downtime. Support this migration from one storage protocol to another (ex. FC, iSCSI, DAS)
3.3		The solution should provide special integration with Storage API's providing integration with supported third-party data protection, multi-pathing and disk array solutions.
3.4		Virtualization software shall have High Availability capabilities for the virtual machines in the sense if in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software. The feature should be independent of Operating System Clustering and should work with FC/ iSCSI SAN and NAS shared storage. This high availability feature should also be extended to and aware of the applications running inside of the virtual machines.
3.5		Virtualization software should have the provision to provide zero downtime, zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions.
4.0	<b>Network &amp; Security</b>	Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, antimalware solutions without the need for agents inside the virtual machines.
4.1		Virtualization software should provide secure boot for protection for both the hypervisor and guest operating system by ensuring images have not been tampered with and preventing loading of unauthorized components
4.2		Virtualization software should provide software FCoE adaptor that can work with a network adaptor that support partial FCoE offload capabilities.
4.3		Virtualization software should allow configuring each virtual machine with one or more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address, must support NIC teaming for load sharing and redundancy.
4.4		Virtualization software shall allow creating virtual switches that connect virtual Machines

SI.	Category	Technical Specification - Enterprise Virtualisation
4.5		Virtualization software shall support configurations of 802.1q VLANs which are compatible with standard VLAN implementations from other vendors
5.0	<b>Resource management</b>	Virtualization software should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical network adapters
5.1		Virtualization software shall allow RAM over-commitment that allows configuring virtual machine memory in such a way that safely exceeds physical server memory.
5.2		Virtualization software should provide solution to automate and simplify the task of managing hypervisor installation, configuration and upgrade on multiple physical servers.
5.3		The virtualization software should provide in-built Replication capability which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This Replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 5 minutes.
5.4		It should provide the ability to set constraints that restrict placement of a virtual machine to a subset of hosts in a cluster and to keep virtual machines paired or separated.
5.5		The solution should support enforcing security for virtual machines at the Ethernet layer. Disallow promiscuous mode, sniffing of network traffic, MAC address changes, and forged source MAC transmits.
5.6		The solution should provide link aggregation feature in the virtual switch which will provide choice in hashing algorithms on which link aggregation is decided and this should also provide multiple link aggregation groups to be provided in a single host (64 groups per physical host)
5.7		It should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical adapters on a Virtual Switch
5.8		Hypervisor should have capability similar of Virtual Volumes which enables abstraction for external storage (SAN and NAS) devices making them Virtualization aware.



<b>Sl.</b>	<b>Category</b>	<b>Technical Specification - Enterprise Virtualisation</b>
6.0	<b>Monitoring &amp; support</b>	Virtualization software shall continuously monitor utilization across virtual machines and should intelligently allocate available resources among virtual machines
6.1		Virtualization software should provide enhanced visibility into storage throughput and latency of hosts and virtual machines that can help in troubleshooting storage performance issues.
6.2		OEM should provide direct support 24x7x365 with unlimited incident support and 30mins or less response time including the unlimited upgrades and updates.
7.0	<b>Support for SDDC upgradation</b>	Shall support Virtual Storage
7.1		Shall support virtual networking
7.2		Shall support automation and orchestration to provide self-service, provisioning/ deprovisioning of IT resources through scripting

Section-D – **Software Defined WAN**

Sl.	Category	Technical Requirement of SD-WAN	Complied (Yes/ No)
1.0	<b>Form factor</b>	The proposed branch solution should be available in both pre-packaged physical appliance and software virtual form factor.	
2.0	<b>Central orchestrator</b>	<p>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.</p> <p>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.</p>	
3.0	<b>Bandwidth aggregation</b>	The proposed hub/CPE devices should be able to aggregate the bandwidth across multiple links and should have zero-IT touch deployment capabilities.	
4.0	<b>Link steering</b>	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	

Sl.	Category	Technical Requirement of SD-WAN	Complied (Yes/ No)
		The solution should provide for on-demand link remediation in the event of packet loss, increase in latency and jitter	
5.0	<b>Transport agnostic</b>	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.	
6.0	<b>Application awareness</b>	<p>The solution should be able to detect, classify and control various applications running over WAN.</p> <p>The solution should provide historical and real time link usage and performance of applications.</p> <p>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.</p>	
7.0	<b>Multi-hypervisor support</b>	The branch device should be capable of running/supported over major hypervisors like VMware, Hyper-V, Xen and KVM	
8.0	<b>VPN Tunnels</b>	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.	
9.0	<b>Link fail-over</b>	The solution should be capable of detecting WAN failures and dynamically steering the traffic to available WAN links in a sub-second manner.	
10.0	<b>Quality of Service (QoS)</b>	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	

Sl.	Category	Technical Requirement of SD-WAN	Complied (Yes/ No)
		traffic seen in the network, including both optimized and non- optimized traffic flows, including TCP, UDP, and other non-TCP traffic types.	
10.1		<p>The solution must be able to apply inbound QoS by TCP/UDP rate limiting low priority traffic.</p> <p>QoS policies should be centrally defined and can be applied to classes of applications and individual applications</p>	
11.0	<b>Encryption</b>	<p>The encryption scheme used by SD-WAN solution should be FIPS 140-2 compliant.</p> <p>The solution should provide 128-bit AES or 256-bit AES encryption on the VPN.</p> <p>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.</p>	
12.0	<b>Bandwidth throughput</b>	WAN bandwidth of 8 Mbps at ROBO site and 40 Mbps at Central Data Center site	
13.0	<b>Single-pane-of-glass monitoring</b>	Should provide Enterprise level unified Dashboard 'Single-pane-of-glass-monitoring and management' from central site for all ICG DC/ DR/ ROBO sites. All sites backup servers' status should be available from single unified dashboard at central site. Should support single unified policy across all sites	

Section-E – **Virtual Next Generation Firewall**

<b>Sl.</b>	<b>Category</b>	<b>SD-Security Technical Requirements</b>	
1.0	<b>General</b>	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.	
2.0	<b>Virtual appliance</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	
3.0	<b>Single Policy Rule</b>	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.	
4.0	<b>Single-Pass Architecture</b>	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.	
5.0	<b>Native SIEM Integration</b>	The Firewall should be able to integrate on standard protocols with leading SIEM solutions and should natively support minimum of like ArcSight and, Splunk.	
6.0	<b>Security features</b>	The solution must support Routing, load sharing, Firewall, Application visibility and control, User ID, IPS, Anti-virus from day one.	
7.0	<b>Application Aware</b>	The solution must provide application identification natively, without requiring any license/subscription/blade, provide real time	

Sl.	Category	SD-Security Technical Requirements	
		<p>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</p>	
8.0	<b>Multi-Hypervisor Support</b>	<p>The firewall should support following hypervisor and orchestration environments</p> <p>VMware NSX, KVM with optional support for the OpenStack plugin, ESXi, Hyper-V, Citrix NetScaler SDX</p>	
9.0	<b>Zero-day threat detection using Sandbox</b>	<p>The proposed solution shall provide sandbox behavior based inspection and protection of unknown viruses and zero-day malware for any application and protocol (not limited to HTTP, SMTP, FTP) in future and the solution shall be able to provide automated signature generation for discovered zero-day malware and the solution should ensure the delivery of the signature in 5 mins from the time of detection. No file has to be shared and the analysis should be done on premise at the central location if required.</p>	
10.0	<b>Performance Requirement at DC &amp; DR</b>	<p>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.</p>	
10.1		<p>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.</p>	

Sl.	Category	SD-Security Technical Requirements	
10.2		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.	
10.3		The proposed solution must be in the Gartner Magic Quadrant of Enterprise Firewalls for the last 3 years- 2017, 2016 & 2015.	
11.0	<b>Central Management Software Requirement for Central location</b>	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.	
11.1		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.	
11.2		It should be possible to view a customizable graphical summary of security threats, applications, users and content.	
11.3		Should support XML based REST API and should have canned as well as option for customized reports for custom number of days, geographical based reports, top threats, applications etc.	
12.0	<b>Enterprise Integration</b>	Should provide RESTful API based integration with Enterprise systems	

Section-F – **Backup, Recovery & Replication for Business Continuity Software**

<b>Sl.</b>	<b>Category</b>	<b>Technical Requirements – Backup, Recovery &amp; Replication</b>	<b>Complied (Yes/No)</b>
1.0	<b>High Availability</b>	No Single-Point-of-Failure architecture and associated components should be provided	
1.1		The solution should support VM on HA configuration	
2.0	<b>Licensing</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 DC, DR DC & ROBO as required.	
3.0	<b>Application awareness</b>	Backup software should be totally agentless but should support application aware backups for MS SQL, Oracle, Exchange transaction logs with non-staged granular recovery of all these applications. It should support crash consistent VM level backup for all other workloads.	
4.0	<b>Hardware Agnostic</b>	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.	
5.0	<b>Granular recovery</b>	Backup software should support file level recovery from an image level backup of Windows/Linux guest file systems.	
5.1		Backup software should provide Recovery of Application Items, File, Folder and Complete VM recovery capabilities from the image level	



Sl.	Category	Technical Requirements – Backup, Recovery & Replication	Complied (Yes/No)
		backup (irrespective of the source size) within 15Mins RTO.	
6.0	<b>VM replication</b>	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.	
7.0	<b>Unified console operation</b>	Backup software should provide Backup and Replication capabilities in one console only.	
8.0	<b>Encryption, WAN optimization</b>	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.	
8.1		The proposed backup solution must support at least AES 256-bit encryption capabilities for Data-in-Rest, Data-in-Transfer support	
9.0	<b>Tape library</b>	Should support tape mirroring of the same job running concurrently with primary backup.	
9.1		Should allow creating tape clone facility after the backup process.	
10.0	<b>Recovery verification</b>	Backup software must have a feature of data validation, whereby a workload is powered-on in a sandbox environment and tested for its recoverability.	

Sl.	Category	Technical Requirements – Backup, Recovery & Replication	Complied (Yes/No)
10.1		Recovery verification should automatically boot the server from backup and verify the recoverability of VM image, Guest OS and Application Consistency.	
11.0	<b>API Integration</b>	Should provide RESTful API for integration with 3 <sup>rd</sup> party Enterprise applications	
12.0	<b>Unified management console</b>	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.	
13.0	<b>Replication on offline connectivity</b>	Should support auto ROBO replication with central site on restoration of network without any manual intervention	
13.1		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	

Section-G – **Basic IP Phone**

<b>Srl.</b>	<b>Parameters</b>	<b>Technical Specification-Basic IP Phone</b>	<b>Complied (Yes/No)</b>
1.0	<b>General</b>	IP Phone shall be able to register on the existing Call manager and EMS along with required license to be provided	
1.1		IP phone should have minimum 3.5" Screen	
1.2		Should support text based XML applications	
1.3		Should have minimum two 10/100 Ethernet ports with 1 connecting to Desktop and another for LAN	
1.4		Should support POE	
1.5		Should have Headset port and volume control toggle switch	
1.6		Switch should support two lines and support extension mobility	
2.0	<b>Basic Features</b>	(a) Call forward (b) Call forward notification (c) Call filter (d) Call history lists (e) Call park (f) Call pickup (g) Call timer (h) Call waiting Callback (j) Call forward (k) Call forward notification (l) Call filter (m) Call history lists (n) Call park (p) Call pickup (q) Call timer (r) Call waiting (s) Call back	
3.0	<b>Protocol Support</b>	Standards: SIP, G.729/G.729a, G.711/G.711a, TLS and SRTP	
4.0	<b>Security</b>	802.1x support and encrypted configuration files	



Section-H – **Executive IP Phone**

Srl.	Parameters	Technical Specification-Executive IP Phone	Complied (Yes/No)
1.0	<b>General Features</b>	IP Phone shall be able to register on the existing Call manager and EMS. Phone to be supplied with required license on existing Call manager and EMS	
1.1		IP phone should have minimum 5" Color VGA Screen	
1.2		Should support text based XML applications	
1.3		Should have minimum two 10/100/1000 Ethernet ports with 1 connecting to Desktop and another for LAN	
1.4		Should support POE	
1.5		Should have Headset port and volume control toggle switch	
1.6		Switch should support two lines and support mobility. Should have minimum 5 soft keys on the phone	
1.7		Should be provided with extension module having minimum 18 keys and separate display	
2.0	<b>Basic Features</b>	(a) Callback (b) Call forward (c) Call forward notification (d) Call filter (e) Call history lists (f) Call park (g) Call pickup (h) Call timer (j) Call waiting Callback (k) Call forward (l) Call forward notification (m) Call filter (n) Call history lists (p) Call park (q) Call pickup (r) Call timer (s) Call waiting	
3.0	<b>Advanced Features</b>	(a) Consultative Call Forwarding (b) Boss-Secretary Forwarding (c) Corporate and Personal Directory	
4.0	<b>Protocol Support</b>	Standards: SIP, G.729/G.729a, G.711/G.711a, TLS and SRTP	

<b>Srl.</b>	<b>Parameters</b>	<b>Technical Specification-Executive IP Phone</b>	<b>Complied (Yes/No)</b>
5.0	<b>Security</b>	802.1x support and encrypted configuration files	

Section-J **Voice/ PRI Gateway**

<b>Sl.</b>	<b>Category</b>	<b>Technical Requirements for Voice/ PRI Gateway</b>	<b>Complie d (Y/N)</b>
<b>1.0</b>	<b>General</b>	Should provide 2 x 10/100 interfaces	
1.1		Gateway should be modular with minimum 3 slots for voice interface	
1.2		Shall support variety of Voice interfaces like FXO, FXS, BRI, Channelized PRI (E1), Fast Ethernet, Gigabit Ethernet, ISDN BRI, CCS	
1.3		Should be provided with 2 x E1 ports Day 1 to terminate 2 PRI lines	
1.4		It should support embedded hardware encryption acceleration, voice- and video-capable digital signal processor (DSP) slots or equivalent	
1.5		The gateway should be able to support at least 50 IP Phones in survivability mode	
<b>2.0</b>	<b>Local Survivability</b>	Media gateway should be self-survivable in case of link failure with call management server	
2.1		Self-survivability should support indefinite period without need to connectivity to call management server	

Section-K – **OEM Qualification, Warranty & Implementation support**

Sl.	Category	OEM Qualification and Requirements	Complied (Yes/ No)
1.0	<b>OEM Qualification</b>	<p>(a) IP Telephony, Data Center, DR Data Center and Zero-Touch ROBO OEM components of Hardware, Hyper-Converged Appliances for ROBO, Virtual NGFW, Backup software, SDDC software, SD-WAN should have been mentioned in latest Gartner Magic Quadrant/ Forrester Wave Reports in respective product category.</p> <p>(b) Should be registered in India and present for minimum of 05 years</p> <p>(c) Should have minimum 03 deployments of hardware/ software in Central/State Govt. Organisations in India and 05 deployments in private sector of similar size in the past 03 years.</p>	
2.0	<b>OEM implementation</b>	Design plan, implementation and validation for compute, storage, network virtualisation and SD-WAN to be done by OEM authorised partners having implemented minimum 03 similar projects. Undertaking for the same to be mentioned on the MAF certificate/ OEM partners should obtain ICG project specific authorization from OEM	
3.0	<b>OEM Support</b>	<p>(a) 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> <p>(b) All products for ICG should have minimum of 03 years warranty post-GoLive/ 05 years warranty from the date of delivery</p>	



**Appendix-'B'**  
(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: SUPPLY, IMPLEMENTATION AND SUPPORT OF SECURED VOICE ACCESS MANAGEMENT FOR CGCs, RHQs, DHQs, BUVIK CGS HUTBAY, CGS MAYABHANDER AND CGS MINICOY**

1. Refer to your RFP No.CG HQ/IT/SIP/2018-19 dated Dec 2018.
2. This is to notify you that our company intends to submit a proposal for "Supply, Implementation and Support of Secured Voice access Management facility for CGCs, RHQs, DHQs, BUVIK,CGS Hutbay, CGS Mayabhander and Minicoy.
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-'B'** 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 2017

(Signature) (In the capacity of)

Duly authorized to sign

Sincerely,

[VENDOR'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-'B'***(Refer to Part-II, Para-3(e) of RFP, Para-4 of Appendix-B)***CHECKLIST & INDEX OF BID****1. RFP with enclosures**

<b>Sl.</b>	<b>Details</b>	<b>Bid Page No.</b>	<b>Check (Yes/No)</b>
(a)	Bid submission covering letter ( <i>Appendix-'B'</i> )		
(b)	Technical Bid with Covering letter. Covering letter &EMD to be placed inside sealed cover ( <i>Appendix-'C'</i> )		
(c)	RFP acknowledgement & compliance ( <i>Copy of RFP duly signed on each page</i> )		
(d)	Technical Compliance ( <i>Appendix-'D'</i> )		
(e)	OEM authorised partner certificate		
(f)	OEM authorised partner for implementation support undertaking		
(g)	MAF certificate for Data Rack, IP Telephone, Cisco Software		
(h)	Bill of Material & Sizing of Solution sheet ( <i>Annexure-II of Appendix-'D'</i> )		
(j)	Commercial Bid ( <i>Appendix-'F'</i> ) with Covering letter( <i>Appendix-'E'</i> ). Covering letter to be placed inside sealed cover along with bid.		

**2. Technical Brochures/ Data Sheets/ Manuals**

<b>Sl.</b>	<b>Technical Brochures/ Data Sheets/ Manuals</b>	<b>Bid Page No.</b>	<b>Check (Yes/No)</b>
(a)	Brochure & Datasheet of SIP Phone		
(b)	Data rack manual, 2D diagram		

Sl.	Technical Brochures/ Data Sheets/ Manuals	Bid Page No.	Check (Yes/No)
(c)	Hyper Converged Appliance (HCA), NGFW, Backup software, SD-WAN brochure		
(d)	<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 letterhead) [Date]

To

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

**SUB: SUPPLY, IMPLEMENTATION AND SUPPORT OF SECURED VOICE  
ACCESS MANAGEMENT FOR CGCs, RHQs, DHQs, BUVIK CGS HUTBAY, CGS  
MAYABHANDER AND CGS MINICOY**

1. Refer to your RFP No.CGHQ/IT/SIP/2018-19 dated Dec 2018.
2. Having examined the bid document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer for "**Supply, Implementation and Support of ICG IPPBX System - 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 here to 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.

6. The soft-copies of the proposal submitted by us and the related addendums and other documents including the changes made to the original tender documents issued by Indian Coast Guard, conform to and are identical with the hard-copies of aforesaid proposal submitted by us, in all respects.

7. It is hereby confirmed that I/ We are entitled to act on behalf of our corporation/ company/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this Day of **2019**

(Signature) (In the capacity of)

Duly authorized to sign the Bid Response for and on behalf of: (Name and Address of Company) Seal/ Stamp of SI

**CERTIFICATE AS TO AUTHORISED SIGNATORIES**

I, certify that I am ..... of the ..... and that ..... who signed the above Bid is authorized to bind the company, pursuant to the resolution passed in the meeting of Board of Directors of the company \_(date).

Date

**(Seal here)**

**Encl:**

- (a) Earned Money Deposit (EMD), if applicable.
- (b) Technical Bid as per **Appendix-'D'** of RFP
- (c) Copy of RFP duly ink-signed with company seal in each page

**Appendix-'D'**  
(Refer to Para-3 of Appendix-C)

**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. CGHQ/IT/SIP/2018-19 dated ___ Dec 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	

<b>Sl.</b>	<b>RFP Clause</b>	<b>RFP Requirement</b>	<b>Compliance (Yes/No), deviations if any</b>
(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	
(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	



<b>Sl.</b>	<b>RFP Clause</b>	<b>RFP Requirement</b>	<b>Compliance (Yes/No), deviations if any</b>
(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	

<b>Sl.</b>	<b>RFP Clause</b>	<b>RFP Requirement</b>	<b>Compliance (Yes/No), deviations if any</b>
(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	
(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-'D'**  
(Refer to Para-3(a)&(b) of Appendix-'D')

**SCHEDULE OF REQUIREMENT & TECHNICAL SPECIFICATION COMPLIANCE**

SL.	QR Requirement	QR Specification	Compliance (Yes/ No). Deviations, if any.
01.	Schedule of Requirements <i>(Para-1, Part-II of RFP)</i>	Supply of Enterprise SIP Phones	
02.	Vendor Requirement <i>(Para-2, Part-II of RFP)</i>	<p>(a) <u>Technical Specifications:</u> - Supply of Enterprise SIP Phones as per following:-</p> <p style="padding-left: 40px;">(i) Enterprise SIP Phones, technical specification as per <b>Appendix-'A'</b> of RFP.</p> <p style="padding-left: 40px;">(ii) Onsite installation and support for 01 year.</p> <p>(b) <u>Vendor qualification criteria:</u> -</p> <p style="padding-left: 40px;">(i) Authorised reseller of OEM.</p> <p style="padding-left: 40px;">(ii) Should have registered office at Delhi NCR.</p>	

**Appendix-'E'***(Para-1(f) Package-'B' (ix) of Part-II of RFP)*

**ICG DMS-DR – PRE-QUALIFICATION PROOF OF CONCEPT TESTS**  
**PACKAGE-B: Zero-Touch ROBO Edge Cloud Datarack**

Test ID	Category	POC Description	Qualified (Yes/No)
<b>General</b>			
01-00	<b>ROBO technical solution document</b> <i>(Should be submitted as part of Technical bid)</i>	As per Annexure-1 of Appendix-'E'	
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 <ul style="list-style-type: none"> <li>(a) 03 ROBO site instances simulating ROBO data-rack</li> <li>(b) Centralised DCIM to provide Enterprise level unified 'Single-pane-of-glass' dashboard at central site</li> </ul> (ii) Edge Cloud software <ul style="list-style-type: none"> <li>(a) Setup with 03 ROBO instances</li> <li>(b) Centralised edge cloud setup with 'Single-pane-of-glass' dashboard at central site</li> <li>(c) SD-WAN of 03 instances with central management console</li> </ul> (iii) Backup & Recovery <ul style="list-style-type: none"> <li>(a) Setup for 03 ROBO instances with backup software</li> <li>(b) Centralised Cloud Management console integrated with Backup software setup with 'Single-pane-of-glass' dashboard at central site</li> </ul>	

Test ID	Category	POC Description	Qualified (Yes/No)
		(iv) Virtual Next Generation Firewall (a) Setup for 03 ROBO instances with backup software (b) Centralised HCI/HCA with NGFW software setup with 'Single-pane-of-glass' dashboard at central site	
03-00	Presentation	Overall solution presentation to include layout diagram, sizing/bill of material and project plan	
04-00	Layout diagram	(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 (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.	
05-00	Sizing & Bill of Material list	(i) Sizing of entire solution including Zero-Touch ROBO Cloud Edge Data rack, Cloud virtualisation with SD-WAN/SD-NGFW/Backup & Recovery software (ii) Bill of Material with Make & Model, Quantity	
06-00	Project Plan	(i) Delivery timeline for Zero-Touch ROBO Cloud Edge Data rack (ii) Delivery timeline for software (iii) Gantt chart based project timeline	
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	

Test ID	Category	POC Description	Qualified (Yes/No)
		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	

<b>Test ID</b>	<b>Category</b>	<b>POC Description</b>	<b>Qualified (Yes/No)</b>
		central servers subject to custom WAN profile.	
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	

<b>Test ID</b>	<b>Category</b>	<b>POC Description</b>	<b>Qualified (Yes/No)</b>
		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-'E'**  
*(Para-01 of Appendix-'G')*

**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: Centralized data rack 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.

**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: SUPPLY, IMPLEMENTATION AND SUPPORT OF SECURED VOICE  
ACCESS MANAGEMENT FOR CGCs, RHQs, DHQs, BUVIK CGS HUTBAY, CGS  
MAYABHANDER AND CGS MINICOY**

1. Refer to your RFP No. CGHQ/IT/SIP/2018-19 dated \_\_\_ Dec 2018.
2. Having examined the bid document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer for "Supply, Implementation And Support Of Secured Integrated voice Access Management for CGCs, RHQs, DHQs, Buvik , CGS Hutbay, CGS Mayabhander and CGS Minicoy" 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 here to 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.

6. The soft-copies of the proposal submitted by us and the related addendums and other documents including the changes made to the original tender documents issued by Indian Coast Guard, conform to and are identical with the hard-copies of aforesaid proposal submitted by us, in all respects.

7. It is hereby confirmed that I/ We are entitled to act on behalf of our corporation/ company/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this Day of **Jan 2019**

(Signature) (In the capacity of)

Duly authorized to sign the Bid Response for and on behalf of: (Name and Address of Company) Seal/ Stamp of SI

**CERTIFICATE AS TO AUTHORISED SIGNATORIES**

I, certify that I am ..... of the ..... and that ..... who signed the above Bid is authorized to bind the company, pursuant to the resolution passed in the meeting of Board of Directors of the company \_(date).

Date

**(Seal here)**

**Encl:** Commercial Bid as per **Appendix-'F'** of RFP

**COMMERCIAL-BID FORMAT**  
(To be submitted in the form of BQQ)

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

Item ID	Description	Qty.	Unit	Unit Price(Rs)	GST	Total
<b>(A) SUPPLY HARDWARE, 03 YRS WARRANTY</b>						
A-01	Basic IP Phone	1112	No.			
A-02	Executive IP Phone with add-on key module and HD Video conference support	122	No.			
A-03	Operator console workstation	7	No.			
A-04	Gateway for PRI/ SIP, 01 Line each	7	Nos.			
A-05	Gateway for FXO, 08 lines each	16	No.			
<b>(B) SUPPLY OF SOFTWARE, 03 YRS WARRANTY</b>						
B-01	User licence for IP Phone, Softphone client, voicemail (for executive phone) & EMS	1234				
B-02	Operator console software	7	Set			
B-03	Session Mediation Enterprise (SME) software	2	No.			
B-04	RightFax (Fax over IP), 01 Channel	23	No.			
<b>(C) INSTALLATION, SUPPORT &amp; MAINTENANCE</b>						
C-01	Design, installation, integration, commissioning and maintenance, 01 year warranty	1	No.			
C-02	Onsite support engineer for RHQs	6	No.			
C-03	Central support for all ICG Units, 01 Onsite engineer on 24x7 basis at Data Center, New Delhi	1	Set			
<b>(D) SUPPLY &amp; DEPLOYMENT OF ZERO-TOUCH ROBO DATARACK, 03 YRS WARRANTY</b>						
D-01	Zero-touch ROBO datarack with Hyper-Converged Appliance, SDDC and NGFW Software	3	No.			
D-02	Installation, integration, commissioning and maintenance, 03 year warranty	3	No.			
<b>Total</b>						

**Note:**

- (a) **L1 shall be decided on overall basic cost (exclusive of taxes) of complete package consists of all bill of material.**
- (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.

**ABBREVIATIONS & TERMINOLOGIES**

AD	Active Directory
CGHQ	Coast Guard Headquarters, New Delhi
GPON	Gigabit Passive Optical Network
HA	High-Availability. A configuration to provide maximum availability of IT infrastructure & services.
HQ.	Headquarter
ICG	Indian Coast Guard
IP PBX	Internet Protocol Private Branch Exchange
OEM	Original Equipment Manufacturer
PCDA(N)	Principle Controller of Defence Accounts (Navy). Defence accounting office for Indian Navy & Indian Coast Guard located at Mumbai.
SIP	Session Initiation Protocol
UC	Unified Communication. Integration of all forms of voice, video and mail communications over IP network.
VoIP	Voice Over IP

**Instructions for Online Bid Submission:**

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

2. More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

3. **Registration**

(a) Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "**Online bidder Enrollment**" on the CPP Portal which is free of charge.

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

(c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

(d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

(e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

(f) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

4. **Searching for tender documents**

(a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.

(b) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP

Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

(c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

## 5. **Preparation of bids**

(a) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

(b) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

(c) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

(d) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## 6. **Submission of bids**

(a) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

(b) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

(c) Bidder has to select the payment option as "offline" to pay the EMD as applicable and enter details of the instrument.

(d) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument,



physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

(e) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

(f) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

(g) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

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

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

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

## 7. **Assistance to bidders**

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

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