

# **RailTel Corporation of India Ltd**

***(A Navratna PSU under Ministry of Railways)***

## **NOTICE INVITING EXPRESSION OF INTEREST (EOI)**

**EOI No.: RCIL/NR/RO/EOI/MKTG/TNDR/AIR HQ/2025-26 dated 30-08-2025**

Expression of Interest (EOI) for RailTel empaneled Business Associates for exclusive PRE-BID TEAMING ARRANGEMENT for “Procurement IACCS Port Mout Node Infrastructure, New OPS Complexes, Communication Lines/ Recording and Secure Network Gateway With Accessories For IACCS Integration (LTE Basis Under Two Bid System) for Customer of RailTel (COR) on back-to-back basis”.



**Issued by:**

**RailTel Corporation of India Ltd**  
**(A Navratna PSU under Ministry of Railways)Northern Region**

RailTel Corporation of India Limited,Northern Region,  
6<sup>th</sup> Floor, 3<sup>rd</sup> Block, Delhi IT Park, Shastri Park, New Delhi-110053

Tel No.: +91-11-22185933/22185934

Email: - [ednr@railtelindia.com](mailto:ednr@railtelindia.com)

<https://www.railtelindia.com>

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## Disclaimer

RailTel Corporation of India Ltd. (herein after called the RailTel) has prepared this Expression of Interest (EOI) document solely to assist prospective bidders in making their decision of whether to bid or not to bid.

While the RailTel has taken due care in the preparation of information contained herein and believes it to be accurate, neither the RailTel or any of its Authorities or Agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it. This information is not intended to be exhaustive and interested parties are required to make their own inquiries and do site visits that it may require in order to submit the EOI. The information is provided on the basis that it is non-binding on RailTel, any of its authorities or agencies or any of their respective officers, employees, agents or advisors. The RailTel reserves the right not to proceed with the bidding/EOI process at any stage without assigning any reasons thereof, or to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the EOI further with any party submitting an EOI. No reimbursement of cost of any type will be paid to persons or entities submitting the EOI.

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## EOI NOTICE

RailTel Corporation of India Limited, Northern Region, 6<sup>th</sup> Floor, 3<sup>rd</sup> Block, Delhi IT Park, Shastri Park, New Delhi-110053

EOI Notice No: RCIL/NR/RO/EOI/MKTG/TNDR/AIR HQ/2025-26 dated 30-08-2025

RailTel Corporation of India Ltd., (here after referred to as “RailTel”) invites EOIs from RailTel’s Empaneled Partners for Selection of Implementation Partner for exclusive PRE-BID TEAMING ARRANGEMENT for Procurement IACCS Port Mout Node Infrastructure, New OPS Complexes, Communication Lines/ Recording and Secure Network Gateway With Accessories For IACCS Integration (LTE Basis Under Two Bid System) for Customer of RailTel (COR) on back to back basis”. Details are as under:

### SCHEDULE OF EVENTS

1	Date of EOI Floating	30-08-2025
2	Last date for submission of Bids against EOI	03-09-2025 at 12:00 Hours
3	Opening of Bids received against EOI	03-09-2025 at 12:30 Hours
4	Mode of Bid Submission	Single Stage (Two Packet System)
5	EOI processing fee inclusive tax (non-refundable)	As per E-nivida portal fees
6	Bid Validity Period	210 Days from the Last Date of Bid Submission.
7	Delivery Period	12 Months (from the date of issue of LOA/PO)
8	EMD for Pre-Bid Arrangement	Rs. 2,40,00,000/- (Two Crore Forty Lacs Rupees only).
8a	Token EMD	Rs. 5,00,000/- (Rs. Five Lacs only) to be paid online on e-Nivida portal along with the EOI.
8b	Balance EMD	Rs. 2,35,00,000/- (Rs. Two Crore Thirty-Five Lacs Rupees Only) to be paid by selected bidder/partner before final bid submission by RailTel to CoR. Non-Submission of balance EMD will lead to summarily rejection of Bid and forfeiture of token EMD.
9	Bid Submission Mode	Online on <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>

**Note: RailTel reserves the right to change the above dates at its discretion.**

Initially while participating in EOI the bidder needs to submit EMD i.e., Token EMD for an amount of Rs. 5,00,000/- (Rs. Five Lakhs only) along with the EOI. **Balance EMD amount: Rs. 2.35,00,000/- (Rs. Two Crore Thirty-Five Lacs Rupees Only) to be submitted by the successful L1 bidder only before final bid proposal submission by RailTel against CoR RFP / tender. Balance EMD can be paid in form of a Bank Guarantee / Online Bank Transfer / Fixed Deposit. Non-Submission of Balance EMD as applicable will lead to forfeiture of Token EMD. Balance EMD if paid in form of BG then it needs to be valid for 5 years beyond bid validity period.**

Bank Guarantee has to be confirmed with SFMS confirmation from the issuing bank in favor of RailTel. In case of Fixed Deposit, lien in favor of RailTel is to be ensured. In case of online payment bidder needs to share the online payment transfer details like UTR No. date and Bank along with the proposal. **The validity of EMD must be maintained till the finalization of end customer RFP / tender i.e. award of order and till submission of performance guarantee of requisite value required by end customer on back-to-back basis.**

RailTel Bank Details for Submission of EMD Online:

- Bank Name: Union Bank of India
- Branch Name: Connaught Place, New Delhi Branch
- Account Number: 307801010917906
- IFSC Code: UBIN0530786
- MICR Code: 110026006

RailTel Bank Details for Submission of EMD in form of bank Guarantee:

RailTel SFMS details –

- BG advising message – IFN 760COV/ IFN 767COV via SFMS
- IFSC Code

Eligible Business Associates are required to direct all communications related to this Invitation for EOI document, through the following Nominated Point of Contact persons:

**Contact Details for this EOI:**

1: Sh. Akash Barha, AGM/Marketing.

Email: [akash@railtelindia.com](mailto:akash@railtelindia.com) Contact: +91-9717644170

2: Name: Sh. Rahul Joshi, GM/Marketing.

Email: [rahul@railtelindia.com](mailto:rahul@railtelindia.com) Contact: +91- 9717644200

**//\* CoR stands for Customer of RailTel**

**Note:**

1. The EOI response is invited from eligible Empaneled Partners of RailTel only.
2. All the documents must be submitted with proper indexing and page number.
3. This is an exclusive pre-RFP partnership arrangement with empaneled business associate of RailTel for participating in the end customer RFP. Selected partner's authorized signatory has to give an undertaking they will not submit directly or indirectly their bids and techno-commercial solution/association with any other Organization once selected in this EOI for pre-bid teaming arrangement (before and after submission of bid to prospective customer Organization by RailTel). **This undertaking has to be given with this EOI Response, Non-Compliance of this will result in blacklisting of bidder.**

4. Transfer and Sub-letting: The Business Associate has no right to give, bargain, sell, assign or sublet or otherwise dispose-off the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.
5. Bidder must agree to comply with all OEM technical & financial documentation including **MAF, Make & Model** and **HSN Code** of each component offered in Proposed Solution / Technical certificates/others as per end-to-end requirement mentioned in the end customer's RFP. (details must be provided as per Appendix-A of EOI)
6. **Bidder also undertakes to submit MAF of major items of the proposed solution and other documents required in the end Customer Organization's tender in favour of RailTel against the proposed products.** The selected BA has to provide MAF from the OEM in the name of RailTel for bidding in the concerned tender of CoR, if their proposed solution is quoted to the customer.
7. The selected bidder will have to accept all Terms & Conditions of CoR RFP on back-to-back basis.
8. Any corrigendum(s) issued by CoR against pertinent tender/RFP shall be the part and scope of this EOI document on back-to-back basis.
9. No exemption/relaxation is applicable to MSME/Startups.
10. Only, the eligibility clause/criteria and marks scoring criteria for SI/BA (Prospective BA/SI) as mentioned in CoR's RFP is not applicable on the bidder/BA applying against this EOI. Rest all Terms & Conditions of RFP floated for pertinent tender will be complied by SI/BA/bidders.
11. However, OEM considered by SI for this project have to mandatorily comply all the eligibility & technical criteria/compliance on back-to-back basis in line with COR RFP and corrigendum(s) issued thereof.
12. Please refer CoR RFP Payment terms as this will remain applicable on back-to-back basis on successful bidders.
13. Bidder may check the price/commercial bid as per BOQ and match the same with FORMATS FOR SUBMISSION OF THE COMMERCIAL BID of CoR's RFP and if found any discrepancy, may be brought in the notice of RailTel immediately and may modify their financial bid format as per CoR RFP financial bid document.
14. This is a customer centric bid on back-to-back basis. The benefits of MSME shall not be applicable on this EOI & Work Order issued basis this EOI.
15. All terms and conditions including SLA/Payment/Penalties will be applicable back-to-back to the bidder.
16. No advance payment is applicable in the EOI and payment will be released on receipt from the COR.
17. Bidders are also required to provide the following documents as per CoR's requirement duly addressing RailTel.

## 1. About RailTel

RailTel Corporation of India Ltd (RailTel) is one of the largest neutral telecom infrastructure providers in the country owning a Pan-India optic fiber network on exclusive Right of Way (ROW) along Railway track. The OFC network presently reaches over 4500 towns & cities of the country including several rural areas. With its Pan India high-capacity network, RailTel is working towards creating a knowledge society at various fronts. The portfolio of services provided by RailTel includes Data Centre & DR services, Tele-presence as a service, NLD services, IP-1 services, and Internet and Broadband services on a pan-India basis.

Equipped with an ISO 9001, 20000-1:2011 & 27000 certification, RailTel offers a wide gamut of managed telecom services to Indian Telecom market including Managed lease lines, Tower colocation, MPLS based IP-VPN, Internet, Data Centre services, NGN based voice carriage services to Telecom Operators, Dark fiber leasing to MSOs/LCOs. The major customer segment for RailTel comprises of Enterprises, Banks, Government Institutions/Department, Educational Institutions/Universities, Telecom Service Providers, Internet Service Providers, MSOs, etc. RailTel being a “Navratna (Category-I)” PSU is steaming ahead in the enterprise segment with the launch of various services coupled with capacity augmentation in its Core network.

## 2. Background of EOI

RailTel Corporation of India Ltd (hereafter referred to as ‘RailTel’) an ICT arm of Indian Railways has been in the forefront of building innovative platforms and solutions and vision to build range of Information and Communication Technology (ICT) Services for its customers.

In this regard, RailTel intends to participate in the tender floated by Air HQ VB Delhi (hereafter referred to as ‘CoR’) and accordingly seeks to select a suitable partner for pre-bid arrangement.

RailTel intends to participate in RFP floated by MoD (End Customer Organization) for **Procurement IACCS Port Mout Node Infrastructure, New OPS Complexes, Communication Lines/ Recording and Secure Network Gateway with Accessories for IACCS Integration (LTE Basis under Two Bid System) for Customer of RailTel (COR) on back-to-back basis”**.

**Bidder must agree to comply with all OEMs technical & financial documentation including MAF, Technical certificates/others as per end-to-end requirement mentioned in the end customer’s RFP. Bidder also undertake to submit MAF of CoR RFP BOQ/BOM items of the proposed solution and other documents required in the end Customer Organization tender in favour of RailTel against the proposed products. The selected BA has to provide MAF from the OEMs in the name of RailTel for bidding in the concerned tender of CoR, if their proposed solution is quoted to the customer.**

System Integrator (SI) shall quote for only single OEM/ make and model for each item description. The make and model shall be clearly mentioned in the proposal. Series of make and model will not be accepted, and bid shall be summarily rejected.

## 3. Scope of Work and Partner Selection

The scope of work is mentioned in the end Customer organization’s RFP with all the amendment/ Corrigendum/ clarifications issued before the date of Bid Submission. The prospective bidder / partner is supposed to read all the T&C of CoR RFP in detail before submission of this EOI response to RailTel.

*“Bidders shall quote only those products (Part of Service delivery) in the bid which are not obsolete in the market and has at least 5 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period”.*

**Special Note:** RailTel may retain some portion of the work mentioned in the end organization RFP, where RailTel has competence so that overall proposal becomes most winnable proposal.

- 3.1 Purpose of EOI: The intent of this RFP is to invite proposals from the prospective bidders for work/ services to be catered as stated in end customer RFP with all the amendment/ Corrigendum/ Clarifications issued till date of bidding by RailTel.
- 3.2 The present proposal seeks the turnkey solution for carrying out CoR needs. It is proposed to provide and maintain services with as mentioned in RFP floated by CoR.
- 3.3 Solution providers need to offer solution with no single point of failure in hardware and without any downtime in operations of CoR. SLA shall be applied as per CoR's tender document and corrigendum released, if any on back-to-back basis.
- 3.4 Bidders may submit their response in form of duly signed and stamped and submit techno-commercial bid at the E-nvida portal through online mode, within the stipulated date and time, as mentioned in this EOI document.
- 3.5 Interested partners may note that this is a Single Stage & Two Packet Bid.
- 3.6 Only those bids shall be opened, which have been submitted within the stipulated time as mentioned in this EOI document

**3.7 Stage-I : Technical Bid contains following**

**i. Eligibility Criteria -Mandatory.**

S. No.	Type	Description	Document Required
1	Existence/ Origin	The company must be registered in India.	Certificate of Incorporation
2	General	The company must have: I. A valid PAN card. II. Been registered with GST.	I. Copy of PAN Card. II. Copy of GST registration certificate.
3	Turnover	The bidder must have cumulative turnover at least 150% i.e (Rs.180 Cr.) in the last three financial year ending 31st Mar, 2025 and up to the date of inviting of EOI.	Audited Balance Sheet/ CA certificate
4	Net Worth	The bidder must have positive net worth in last 3 FY i.e (FY 22-23, FY23-24 and FY24-25) ending 31st March 2025.	Audited Balance Sheet/ CA certificate
5	Experience	The bidder must have executed similar work in last 3 years ending last day of month previous to the one in which EOI is invited.  1. One similar work of at least 35 % (Rs.42,00,00,000/-) of estimated value of EOI. OR 2. Two similar works of at least 20% (Rs.24,00,00,000/-) of estimated value of EOI.	Copy of Purchase/ Work Order and completion/ satisfactory performance certificate issued by client. The bidder must provide details of a personnel for verification purpose at PO/ certificate issuing organization clearly mentioning name of client, designation, contact number and mail ID on bidder's letter head.



S. No.	Type	Description	Document Required
		<p>OR</p> <p>3. Three similar works of at least 15% (Rs.18,00,00,000/-) of estimated value of EOI</p> <p>Definition of similar work: Similar work means SITC of a project in the field of IT / ITes / ICT / Telecom for any Government department/ Public Sector units in last 3 FYs.</p>	For ongoing works: Ongoing works will be considered for value of executed work (minimum 70% work executed) certified by PO issuing authority / customer mentioning completed work value on the certificate along with satisfactory completion certificate for work completed so far.
6	Empanelment	Bidder must be empaneled with RailTel as business associate.	Copy of Empanelment letter and Empanelment PBG submitted, if any. Confirmation of renewal of empanelment also to be attached if any.
7	Technical Compliance of the Scope of Work	The Technical Compliance of the Scope of Work must be submitted. However, format may be modified by bidder as per their choice, but item must be marked with OEM Name, MAF provided or not and Data Sheet attached	Bidder has to submit the technical compliance of the scope of work
8	Make and Model	Technical Compliance sheet with make and model	Bidder has to provide the Make and Model for the proposed solution, bid shall be Summarily rejected.
10	Unconditional Acceptance of	Undertaking on letterhead duly signed and stamped by authorized signatory for unconditional Acceptance of the Scope of work and any Other/General Document of CoR Tender RFP along with all the corrigendum and addendum.	Bidder has to submit Undertaking on letterhead duly signed and stamped by authorized signatory for unconditional Acceptance of the Scope of work and any Other/General Document of CoR Tender RFP along with all the corrigendum and addendum.
11	Unconditional acceptance of EOI terms	EOI's unconditional acceptance on company's letter head	Bidder has to submit EOI's unconditional acceptance on company's letter head
12	POA	The bid should be duly signed and submitted by Authorized Signatory. The bidder has to submit notarized non-judicial stamp paper of appropriate value Power of Attorney having authorized signatory's nomination along with board resolution in favor of power of attorney	Bidder has to submit the Power of Attorney for the authorized person.
13	Annexure – 01	EOI COVER LETTER	Bidder has to submit the EOI Cover letter
14	Annexure – 02	Local Content Compliance	Bidder has to submit the Local Content Compliance
15	Annexure – 03	CHECKLIST OF DOCUMENTS FOR BID SUBMISSION	Bidder has to checklist of document submitted along with the bid
16	Annexure – 04	Commercial Bid	Un price Bid sheet to be provided along with the technical bid
17	Annexure – 05	PROFORMA FOR PERFORMANCE BANK GUARANTEE	Bidder has to submit undertaking to accept.
17	Annexure-06	Non-Disclosure Agreement	Bidder has to submit the signed copy of NDA along with bid.
18	Annexure – 07	Technical Compliance	Bidder has to submit the technical compliance of the scope of work.
19	Annexure-08	Pre Bid Team Arrangement	Bidder has to submit the signed copy of NDA along with bid.

S. No.	Type	Description	Document Required
20	Annexure 09	EMD BANK GUARANTEE FORMAT	Bidder has to submit the EMD payment in the format attached if EMD payment is made through BG.
21	Annexure 10	Power of Attorney	Bidder has to submit the Power of Attorney
22	Annexure 11	AFFIDAVIT form	Bidder has to submit a notarized affidavit as per the format enclosed along with the bid. If bidder has not submitted the Annexur-11, bid shall be <b>Summarily rejected</b> .
23	Annexure 12	Integrity Pact	Bidder has to submit as per the format enclosed along with the bid.
24	End Customer Tender Documents	End Customer Tender Documents	
25	EMD payment	EMD payment	Bidder has to submit proof of EMD payment
26	EOI document cost	EOI document cost	Bidder has to submit the EOI Document fee
27	Land border sharing	Compliance to insertion of Rule 144(xi) in the GFR, 2017 vide office OM no. 6/18/2019-PPD dated 23-July-2020 issued by Ministry of Finance, Government of India, including revisions	Bidder has to submit undertaking.
28	Non- Black Listing	Bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI	Bidder has to submit and undertaking on letterhead duly signed and stamped by authorized signatory for non-black listing.
29	No- arbitration with RailTel	There should not be any ongoing or past, arbitration case(s) between 'RailTel or Organizations under Indian Railways' and 'Interested Bidder' on the last date of submission of EOI	Bidder has to submit and undertaking on letterhead duly signed and stamped by authorized signatory for no ongoing or past, arbitration case(s) between RailTel and bidder

- ii. Technical Compliance of the Scope of Work. However, format may be modified by bidder as per their choice, but item must be marked with OEM Name, MAF provided or not and Data Sheet attached.
- iii. The Technical Compliance sheet with make and model.
- iv. BOM without Price quote (Not Applicable).
- v. Compliance of OEM with their MAF's with Make and Model (if required in CoR tender) and all mandatory documents asked by CoR from OEM. {Details must be provided as per Appendix-A of EOI.}
- vi. **Undertaking on letterhead duly signed and stamped by authorized signatory** for unconditional Acceptance of the Tender document of CoR and any Other/General Document of CoR Tender RFP along with all the corrigendum and addendum. During Technical Evaluation if found that bidder is not complying with the technical requirement(s) as per CoR tender document and corrigendum's, then the bid will be technically disqualified.
- vii. This EOI's unconditional acceptance on company's letter head.
- viii. **The Bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI. This should be provided on a letterhead duly signed and stamped by authorized signatory.**

- ix. All Annexure filled as per formats given in this EOI.
- x. Undertaking for no deviation to Delivery Period as per duration specified in End Customer's RFP.
- xi. The bid should be duly signed and submitted by Authorized Signatory. The bidder has to submit Power of Attorney having authorized signatory's nomination on notarized non-judicial stamp paper of appropriate value along with board resolution in favour of power of attorney.
- xii. **The bidder has to mandatorily submit notarized affidavit (Annexure-10) and Integrity Pact (Annexure-11), if applicable on non-judicial stamp paper of Rs. 100, if notarized affidavit is not submitted then bid shall be summarily rejected.**

- 3.8 The prospective bidder's bid evaluation will be done based on above mentioned documents. Bids of those Bidders **shall be summarily rejected** who submit Technical Documents without OEM authorization (i.e. MAF in the name of RailTel Corporation of India Ltd., MAF Make & Model and HSN Code as per **Appendix-A of EOI** (if required in CoR RFP), technical Compliance, and unconditional acceptance of the CoR hard Copies and this EOI.
- 3.9 Based on evaluation of outcome against 3.7, Whoever may qualify as per criteria mentioned under clause 3.7.i and further complying technical requirement with supporting documents of OEM MAF (if required in CoR RFP), datasheets (if required in CoR RFP), BOQ/BOM may be treated as Technically qualified partner for Stage-1.
- 3.10 Bidders selected as per Para 3.9 above will be treated as eligible for financial bid opening.
- 3.11 **Stage-II: Financial Bid:**
- i. The Annexure - 4 of EOI for financial quote.
- 3.12 For the opened bid as per outcome of Clause 3.10 above, the bidder will be selected on the lowest quote (L-1) basis for complete 'Scope of Work' as mentioned in the EOI document and Physical documents of technical specifications of CoR, subject to the respective overall bid is in compliance to the requirements of this EOI. The selected partner will be termed as '**Commercially Suitable Partner (hereafter referred to as 'CSP')**'. It is re-mentioned that the final selection of CSP will be on the L-1 basis only. Further, RailTel reserves the right to have negotiation with the CSP.
- 3.13 As of now, Eoi response from interested partners is invited considering that the selected partner will be responsible for delivering of complete 'Scope of Work' as mentioned in the CoR's tender document and subsequent corrigendum. However, RailTel at its discretion, may take- up a certain portion / percentage of 'Scope of Work' by communicating to the CSP at any point of time during the engagement period (*The day at which 'CSP' is declared, will mark the start of engagement period. The period will be valid till final outcome of this tender is announced by CoR. In case, RailTel comes out to be winner of the CoR tender, then the engagement period will get auto-extended to the period RailTel serves CoR for the concerned tender, unless terminated earlier by RailTel as per terms and conditions mentioned in this Eoi document*). In this scenario, commercial engagement with the CSP will be for that portion / percentage only, which has not been taken by RailTel. Accordingly, resultant value of work will be derived on the basis of negotiated (in case) commercial bid of the CSP.
- 3.14 RailTel on the basis of inputs / factors available to it from various resources, past experiences of its ICT projects and on the basis of negotiated (in case) commercial bid of the CSP, will endeavor

to place best techno-commercial bid in response to the pertinent CoR's tender. Further relationship with CSP will be based on the outcome pertinent CoR's tender.

4. Compliance Requirements and Eligibility Criteria for Interested Bidders

- 4.1 The interested bidder should be an Empaneled Partner with RailTel on the last date of bid submission of EOI & has to provide relevant documents to qualify as per Clause 3.10 of this EOI.
- 4.2 The interested bidder should submit Earnest Money Deposit (EMD) in the format as mentioned in this EOI document along with the bid.
- 4.3 The interested bidder should be in compliance to insertion of Rule 144(xi) in the GFR, 2017 vide office OM no. 6/18/2019-PPD dated 23-July-2020 issued by Ministry of Finance, Government of India, including revisions.
- 4.4 The interested bidder may submit an undertaking for maintaining of '**Local Content Compliance**' and shall submit a certificate mentioning the 'Local Content Percentage' duly signed and stamped by statutory auditor or cost auditor or authorized signatory of the interested partner. This will not be a binding clause in cases where end customer has not asked Local Content Clause/Make in India Clause in their Current RFP. Mandatory in case required in pertinent tender.
- 4.5 **The bidder has to mandatorily provide all Annexures of CoR's RFP in name of RailTel addressing the tender issuing authority and corrigendum(s) thereof, in the name of RailTel Corporation of India Limited addressing the tender issuing authority.**
- 4.6 The interested bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI. This should be provided on letter head duly signed and stamped by authorized signatory.
- 4.7 There should not be any ongoing or past, arbitration case(s) between 'RailTel or Organizations under Indian Railways' and 'Interested Bidder' on the last date of submission of EOI. This should be provided on letter head duly signed and stamped by authorized signatory.
- 4.8 The interested bidder shall not have a conflict of interest with one or more bidding parties. Participation of an interested bidder(s) with a conflict-of-interest situation will result in the disqualification of all bids in which it is involved. A bidder may be in a conflict of interest with one or more parties if including but not limited to:
  - a) Have controlling shareholders as his/her family members viz. spouse, son, daughter, father, mother or brother etc. in common or;
  - b) Have a relationship with each other directly or through common third parties that puts them in a position to have access to information about or influence on the bid of another interested partner.
- 4.9 The interested bidder should not be seeking / extending / exploring similar arrangements / engagements with any other organization except RailTel, for the CoR tender.
- 4.10 The interested partner should have a valid Goods and Service Tax Identification Number (GSTIN), as on the last date of submission of EOI.
- 4.11 In addition to above clauses, bid of interested bidder should be in compliance to terms and conditions and technical requirements of the pertinent CoR tender as referred above.

**Note:** The interested bidder should submit duly signed and stamped EOI cover letter as per the format mentioned at Annexure-01 of this EOI document, as unconditional submission of meeting the clauses mentioned above, from Clause 4.1. to Clause 4.11.

5. **Proposal Preparation and Submission Cost**

The interested partner is responsible for all costs incurred in connection with participation in this EOI process, including, but not limited to, cost incurred in conduct of informative and other diligence activities, participation in meetings/ discussions/ presentations, preparation of proposal, in providing any additional information required by RailTel to facilitate the evaluation process or all such activities related to the bid process. RailTel will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process. This EOI document does not commit to award a contract or to engage in negotiations.

6. **Amendment to EOI Document**

At any time prior to the deadline for submission of bids, RailTel, may, for any reason can modify the EOI document by an amendment. All the amendments made in the document would be informed by displaying on RailTel's ([www.railtelindia.com](http://www.railtelindia.com)) website only. The interested bidders are advised to visit the RailTel website on regular basis for checking necessary updates. RailTel also reserves the rights to amend the dates mentioned in this EOI for bid process. RailTel may, at its discretion, extend the last date for receipt of EOI response.

7. **Bid Validity**

7.1. Bid of Interested partners shall remain valid for the period of 210 days from the last date of submission of this EOI.

7.2. RailTel may request for an extension of the period of validity. The validity of the 'EMD', should also be suitably extended if called upon to do so by RailTel. The request and the responses thereto shall be made in writing through e-mail communication only. Further, whenever the bid validity extension is submitted by the interested partner, it should be ensured by interested partner that their PBG related to the empanelment should have minimum validity of 90 days from the last date of extended bid validity period.

8. **Right to Terminate the Process**

RailTel may terminate the EOI process at any time without assigning any reason. RailTel makes no commitments, express or implied, that this process will result in a business transaction with anyone. This EOI does not constitute an offer by RailTel. **The interested bidder's participation in this process may result in RailTel selecting the CSP to engage in further discussions and negotiations toward execution of a contract and a contract agreement will be signed with the CSP if the work is awarded.** The commencement of such negotiations does not, however, signify a commitment by RailTel to execute a contract or to continue negotiations. RailTel may terminate negotiations at any time without assigning any reason.

9. **Language of Bid**

The bid prepared by the interested partner and all correspondence and documents relating to the bids exchanged by the bidder and RailTel, shall be written in English Language, provided that any printed literature furnished by the Bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern. If any supporting documents submitted are in any language other than English,

translation of the same in English language is to be duly attested by the Authorized Signatory of the interested partner.

10. Submission of Bid

- 10.1 The interested bidder should take into account any Corrigendum to this EOI document that may have been published before submitting their EOI response. The bid is to be submitted in the mode as mentioned in this EOI document. EOI response submitted in any other mode will not be entertained.
- 10.2 Interested bidders in their own interest are advised to submit the EOI response well in time before the last date and hence to avoid any inconvenience at the last moment.
- 10.3 An Organization / Interested Bidder can submit only 'One EOI Response'. Submission of multiple EOI Response by interested bidder(s) may lead to rejection of all of its bid.

11. Rights to Accept / Reject any or all EOI Response

RailTel reserves the right to accept or reject any EOI Response, and to annul the bidding process and reject all Bids at any time prior to award of the Contract, without thereby incurring any liability to the affected interested bidder(s), or any obligation to inform the affected Bidders of the ground for RailTel's action.

12. Payment Terms

- 12.1 Payment will be on '**back-to-back**' basis and as per the payment terms mentioned in the pertinent CoR's RFP. Bidder's/CSP's invoice shall become due upon receipt of payment by RailTel from CoR.
- 12.2 Payment will be released within 45 days from date of receiving the invoice for the work / services and after RailTel has received the payment from CoR for the same work / services. Any deduction /Penalties/Liquidation Damage (LD) levied by CoR on invoices of RailTel will be carried as it is back-to-back and will be deducted from CSP's invoices, subject to the cause to deduction / penalty is due to deviation in terms and conditions of service standards by the CSP.
- 12.3 Documents list required at the time of payment/invoice submission by selected bidder shall be:
  - 
  - i. PO copy issued to selected vendor.
  - ii. Payment Proof that the end customer has paid to RailTel for the period claimed by selected bidder/vendor against invoices raised by RailTel for such services.
  - iii. Submission/Declaration of applicable BG
  - iv. Amount against PO issued to selected bidder/vendor.
  - v. Original Invoice for the period claimed.
  - vi. Installation and Commissioning certificate issued by CoR.

13. Performance Bank Guarantee (PBG)/ Performance Security

- 13.1 In case of successful participation by RailTel in the pertinent CoR's tender and subsequent engagements with CSP, The CSP shall at its own expense, deposit with department, within 21 days of the notification of award (done through issuance of the Purchase Order / Work Order etc.) and communicated through email, an unconditional and irrevocable Performance Bank Guarantee (PBG) from a Nationalized/ Commercial Scheduled Indian Bank as per the format

enclosed in this EOI, payable on demand, for the due performance and fulfilment of the contract by the CSP. **This PBG will be for an amount of 5% of the total contract value.** The quantum of this 'percentage (%)' will be equal to the PBG % as asked by CoR from RailTel at any time. All charges whatsoever such as premium, commission, etc. with respect to the PBG shall be borne by the CSP. Besides, if the total BG amount comes upto ₹05 Lakhs, then same may be deposited through DD/RTGS/NEFT. Along with submission of PBG, CSP needs to submit PBG issuing bank's SFMS report. The SFMS report is also to be submitted in case of renewal / extension of PBG.

13.2 The PBG should have validity for a period of 3 month beyond all contractual obligations as per CoR tender terms and conditions.

13.3 The PBG may be discharged / returned by RailTel upon being satisfied that there has been due performance of the obligations of the CSP under the contract. However, no interest shall be payable on the PBG. In the event, CSP being unable to service the contract for whatsoever reason, RailTel would invoke the PBG at its discern. Notwithstanding and without prejudice to any rights whatsoever of RailTel under the contract in the matter, the proceeds of the PBG shall be payable to RailTel as compensation for any loss resulting from the CSP's failure to complete its obligations under the contract. RailTel shall notify the CSP in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the CSP is in default.

13.4 RailTel shall also be entitled to make recoveries from the CSP's bills, PBG or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

13.5 If the service period gets extended by virtue of extension of same by CoR, PBG should also be extended accordingly.

13.6 During the contract period, RailTel may issue Purchase Order(s) for the additional services ordered by CoR (in case) to RailTel. In such scenario(s) also, Clause No. 13.1. to Clause No. 13.4. are to be followed by the CSP.

13.7 In case the CoR has sought PBG of the contract in the terms of Indemnity Bond from RailTel, the selected bidder has to provide the equivalent value PBG from scheduled Bank to RailTel. No Indemnity Bond from Selected Bidder will be accepted in lieu of PBG from Scheduled Bank.

13.8 In case CoR has sought any other types of PBG in this contract at present or in future or else Integrity Pact PBG (presently or in future), same remain applicable on selected Bidder. The Said PBG will be issued by Selected Bidder from Scheduled Bank favoring RailTel Corporation of India Limited. No Indemnity Bond in lieu of such PBG will be accepted by RailTel.

13.9 **If the PBG is not submitted within the stipulated timeframe it shall attract a penal interest at the rate of 15% per annum.**

#### 14. Details of Commercial Bid / Financial Bid

14.1 Interested partner should submit commercial bid as per format given in the EOI.

14.2 The commercial bid should clearly bring out the cost of the goods/ services with detailed break-up of taxes.

14.3 The rates mentioned in the commercial bid of the CSP will form basis of commercial transaction between RailTel and bidder.

14.4 The quantity of 'Line Items' may vary at the time of placing of Purchase Order or during the Contract Period, as communicated by CoR (in case) to RailTel. In such scenarios, the 'Per Unit' cost will be considered to arrive on contractual amount between RailTel and CSP.

- 14.5 It is also possible that CoR may surrender/ increase, some or all of the quantities of service items ordered to RailTel during the contract period and accordingly the contractual amount between RailTel and CSP shall be considered, at sole discern of RailTel.
- 14.6 It is also possible that during the contract period, CoR may raise Purchase Order to RailTel for the line items (and respective quantities) which are not mentioned in the pertinent tender of CoR. In such scenario, RailTel at its sole discretion may extend the scope of the contract with CSP by placing order to CoR, on back-to-back basis.
- 14.7 In addition to the Payment Terms, all other Contractual Terms will also be on 'back-to-back' basis between RailTel and CSP, as mentioned in the pertinent CoR's tender. MAF (Manufacturer's Authorization Form) in the name of RailTel from the OEMs, whose product is mentioned in commercial bid format, should also be ensured by the partner. The MAF format and required content should be in-line with CoR's tender, if specifically asked by CoR in a particular format.
- 14.8 As per CoR tender, This EoI involves Reverse auction. Therefore, selected L1-bidder is required to comply this and RailTel will consult L-1 bidder during e-Reverse auction on GeM portal to quote winning price. For this, bidder has to attend RailTel office on receipt of communication in this regard.
15. **Duration of the Contract Period**  
The contract duration shall be same as of CoR's contract duration with RailTel until otherwise terminated earlier. (Including warranty & support) **plus** as per the CoR document from Date of Commencement of award of PO, unless otherwise terminated earlier, as mentioned in this EOI document and subject to successful participation of RailTel in the pertinent CoR's tender. The contract duration can be renewed / extended by RailTel at its discretion, in case CoR extends / renews services with RailTel by virtue of extending / renewing / new issuance of one or more Purchase Order(s) placed by CoR to RailTel.
16. **Restrictions on 'Transfer of Agreement'**  
The CSP shall not assign or transfer its right in any manner whatsoever under the contract / agreement to a third party or enter into any agreement for sub-contracting and/or partnership relating to any subject matter of the contract / agreement to any third party either in whole or in any part i.e., no sub-contracting / partnership / third party interest shall be created.
17. **Suspension, Revocation or Termination of Contract / Agreement**
- 17.1 RailTel reserves the right to suspend the operation of the contract / agreement, at any time, due to change in its own license conditions or upon directions from the competent government authorities, in such a situation, RailTel shall not be responsible for any damage or loss caused or arisen out of aforesaid action. Further, the suspension of the contract / agreement will not be a cause or ground for extension of the period of the contract / agreement and suspension period will be taken as period spent. During this period, no charges for the use of the facility of the CSP shall be payable by RailTel.
- 17.2 RailTel may, without prejudice to any other remedy available for the breach of any conditions of agreements, by a written notice of Three (03) month or as per CoR tender condition whichever is earlier issued to the CSP, terminate/or suspend the contract / agreement under any of the following circumstances:



- i. The CSP failing to perform any obligation(s) under the contract / agreement.
- ii. The CSP failing to rectify, within the time prescribed, any defect as may be pointed out by RailTel.
- iii. Non adherence to Service Level Agreements (SLA) which RailTel has committed to CoR for the pertinent tender.
- iv. The CSP going into liquidation or ordered to be wound up by competent authority.
- v. If the CSP is wound up or goes into liquidation, it shall immediately (and not more than a week) inform about occurrence of such event to RailTel in writing. In that case, the written notice can be modified by RailTel as deemed fit under the circumstances. RailTel may either decide to issue a termination notice or to continue the agreement by suitably modifying the conditions, as deemed fit under the circumstances.
- vi. It shall be the responsibility of the CSP to maintain the agreed Quality of Service, even during the period when the notice for surrender/termination of contract / agreement is pending and if the Quality of Performance of Solution is not maintained, during the said notice period, it shall be treated as material breach liable for termination at risk and consequent of which CSP's PBG related to contract / agreement along with PBG related to the Empanelment Agreement with RailTel shall be forfeited, without any further notice.
- vii. Breach of non-fulfillment of contract / agreement conditions may come to the notice of RailTel through complaints or as a result of the regular monitoring. Wherever considered appropriate RailTel may conduct an inquiry either Suo- moto or on complaint to determine whether there has been any breach in compliance of the terms and conditions of the agreement by the successful bidder or not. The CSP shall extend all reasonable facilities and shall endeavor to remove the hindrance of every type upon such inquiry. In case of default by the CSP in successful implementation and thereafter maintenance of services / works as per the conditions mentioned in this EOI document, the PBG(s) of CSP available with RailTel can be forfeited.

## **18. Dispute Settlement**

- 18.1 In case of any dispute concerning the contract / agreement, both the CSP and RailTel shall try to settle the same amicably through mutual discussion / negotiations. Any unsettled dispute shall be settled in terms of Indian Act of Arbitration and Conciliation 1996 or any amendment thereof. Place of Arbitration shall be New Delhi.
- 18.2 The arbitral tribunal shall consist of the Sole Arbitrator. The arbitrator shall be appointed by the Chairman & Managing Director (CMD) of RailTel Corporation of India Ltd.
- 18.3 All arbitration proceedings shall be conducted in English.

## **19. Governing Laws**

The contract shall be interpreted in accordance with the laws of India. The courts at New Delhi shall have exclusive jurisdiction to entertain and try all matters arising out of this contract.

**20. Statutory Compliance**

- 20.1 During the tenure of this Contract nothing shall be done by CSP in contravention of any law, act and/ or rules/regulations, there under or any amendment thereof and shall keep RailTel indemnified in this regard.
- 20.2 The Bidder shall comply and ensure strict compliance by his/her employees and agents of all applicable Central, State, Municipal and Local laws and Regulations and undertake to indemnify RailTel, from and against all levies, damages, penalties and payments whatsoever as may be imposed by reason of any breach or violation of any law, rule, including but not limited to the claims against RailTel or its Customer under Employees Compensation Act, 1923, The Employees Provident Fund and Miscellaneous Provisions Act, 1952, The Contract Labor (Abolition and Regulation) Act 1970, Factories Act, 1948, Minimum Wages Act and Regulations, Shop and Establishment Act and Labor Laws which would be amended/modified or any new act if it comes in force whatsoever, and all actions claim and demand arising therefrom and/or related thereto.

**21. Intellectual Property Rights**

- 21.1 Each party i.e., RailTel and CSP, acknowledges and agree that the other party retains exclusive ownership and rights in its trade secrets, inventions, copyrights, and other intellectual property and any hardware provided by such party in relation to this contract / agreement.
- 21.2 Neither party shall remove or misuse or modify any copyright, trademark or any other proprietary right of the other party which is known by virtue of this EOI and subsequent contract in any circumstances.

**22. Severability**

In the event any provision of this EOI and subsequent contract with CSP is held invalid or not enforceable by a court of competent jurisdiction, such provision shall be considered separately and such determination shall not invalidate the other provisions of the contract and Annexure/s which will be in full force and effect.

**23. Force Majeure**

- 23.1 If during the contract period, the performance in whole or in part, by other party, of any obligation under this is prevented or delayed by reason beyond the control of the parties including war, hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (as are not limited to the establishments and facilities of the parties), fire, floods, earthquakes, natural calamities or any act of GOD (hereinafter referred to as EVENT) , provided notice of happenings of any such event is given by the affected party to the other, within twenty one (21) days from the date of occurrence thereof, neither party shall have any such claims for damages against the other, in respect of such non-performance or delay in performance. Provided service under this contract shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist.
- 23.2 In the event of a Force Majeure, the affected party will be excused from performance during the existence of the force Majeure. When a Force Majeure occurs, the affected party after notifying the other party will attempt to mitigate the effect of the Force Majeure as much as possible. If such delaying cause shall continue for more than sixty (60) days from the date of the notice stated

above, the party injured by the inability of the other to perform shall have the right, upon written notice of thirty (30) days to the other party, to terminate this contract. Neither party shall be liable for any breach, claims, and damages against the other, in respect of non-performance or delay in performance as a result of Force Majeure leading to such termination.

## **24. Indemnity**

- 24.1 The CSP agrees to indemnify and hold harmless RailTel, its officers, employees and agents (each an "Indemnified Party") promptly upon demand at any time and from time to time, from and against any and all losses, claims, damages, liabilities, costs (including reasonable attorney's fees and disbursements) and expenses (collectively, "Losses") to which the Indemnified party may become subject, in so far as such losses directly arise out of, in any way relate to, or result from:
- a)** Any misstatement or any breach of any representation or warranty made by CSP or
  - b)** The failure by the CSP to fulfill any covenant or condition contained in this contract by any employee or agent of the Bidder. Against all losses or damages arising from claims by third Parties that any Deliverables (or the access, use or other rights thereto), created by CSP pursuant to this contract, or any equipment, software, information, methods of operation or other intellectual property created by CSP pursuant to this contract, or the SLAs (i) infringes a copyright, trade mark, trade design enforceable in India, (ii) infringes a patent issues in India, or (iii) constitutes misappropriation or unlawful disclosure or used of another Party's trade secrets under the laws of India (collectively, "Infringement Claims"); or
  - c)** Any compensation / claim or proceeding by any third party against RailTel arising out of any act, deed or omission by the CSP or
  - d)** Claim filed by a workman or employee engaged by the CSP for carrying out work related to this agreement. For the avoidance of doubt, indemnification of Losses pursuant to this section shall be made in an amount or amounts sufficient to restore each of the Indemnified Party to the financial position it would have been in had the losses not occurred.
- 24.2 Any payment made under this contract to an indemnity or claim for breach of any provision of this contract shall include applicable taxes.

## **25. Limitation of Liability towards RailTel**

- 25.1 The CSP liability under the contract shall be determined as per the Law in force for the time being. The CSP shall be liable to RailTel for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the CSP and its employees (direct or indirect), including loss caused to RailTel on account of defect in goods or deficiency in services on the part of CSP or his agents or any person / persons claiming through under said CSP, However, such liability of the CSP shall not exceed the total value of the contract.
- 25.2 This limit shall not apply to damages for bodily injury (including death) and damage to real estate property and tangible personal property for which the CSP is legally liable.

**26. Confidentiality cum non-disclosure**

- 26.1 The Receiving Party agrees that it will not disclose to third party/parties any information belonging to the Disclosing Party which is provided to it by the Disclosing Party before, during and after the execution of this contract. All such information belonging to the Disclosing Party and provided to the Receiving Party shall be considered Confidential Information. Confidential Information includes prices, quotations, negotiated issues made before the execution of the contract, design and other related information. All information provided by Disclosing Party to the Receiving Party shall be considered confidential even if it is not conspicuously marked as confidential.
- 26.2 Notwithstanding the foregoing, neither Party shall have any obligations regarding non-use or non-disclosure of any confidential information which:
- a) Is already known to the receiving Party at the time of disclosure:
  - b) Is or becomes part of the public domain without violation of the terms hereof;
  - c) Is shown by conclusive documentary evidence to have been developed independently by the Receiving Party without violation of the terms hereof:
  - d) Is received from a third party without similar restrictions and without violation of this or a similar contract.
- 26.3 The terms and conditions of this contract, and all annexes, attachments and amendments hereto and thereto shall be considered Confidential Information. No news release, public announcement, advertisement or publicity concerning this contract and/or its contents herein shall be made by either Party without the prior written approval of the other Party unless such disclosure or public announcement is required by applicable law.
- 26.4 Notwithstanding the above, information may be transmitted to governmental, judicial, regulatory authorities, if so, required by law. In such an event, the Disclosing Party shall inform the other party about the same within 30 (thirty) Days of such disclosure.
- 26.5 This Confidentiality and Non- Disclosure clause shall survive even after the expiry or termination of this contract.

**27. Assignment**

Neither this contract nor any of the rights, interests or obligations under this contract shall be assigned, in whole or in part, by operation of law or otherwise by any of the Parties without the prior written consent of each of the other Parties. Any purported assignment without such consent shall be void. Subject to the preceding sentences, this contract will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

**28. Insurance**

The selected partner has to mandatorily submit Contractor's All Risk Policy (CAR Policy) of CoR's contract value for the entire contract period plus 120 days. The CSP agrees to take insurances to cover all the elements of the project under this EOI including but not limited to Manpower, Hardware, Software etc. if applicable as per terms and conditions of customer of RailTel.

## 29. Exit Management

### 29.1 Exit Management Purpose

- a) This clause sets out the provision which will apply during Exit Management period. The parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Clause.
- b) The exit management period starts, in case of expiry of contract, at least 03 months prior to the date when the contract comes to an end or in case of termination contract, on the date when the notice of termination is sent to the CSP. The exit management period ends on the date agreed upon by RailTel or Three (03) months after the beginning of the exit management period, whichever is earlier.

### 29.2 Confidential Information, Security and Data: CSP will promptly, on the commencement of the exit management period, supply to RailTel or its nominated agencies the following (if asked by RailTel in writing):

- a) Information relating to the current services rendered and performance data relating to the performance of the services; documentation relating to the project, project's customized source code (if any); any other data and confidential information created as part of or is related to this contract;
- b) All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable RailTel and its nominated agencies, or its replacing vendor to carry out due diligence in order to transition the provision of the services to RailTel or its nominated agencies, or its replacing vendor (as the case may be).

### 29.3 Employees : Promptly on reasonable request at any time during the exit management period, the CSP shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide RailTel a list of all employees (with job titles and communication address), dedicated to providing the services at the commencement of the exit management period; To the extent that any Transfer Regulation does not apply to any employee of the CSP, RailTel or the replacing vendor may make an offer of contract for services to such employees of the CSP and the CSP shall not enforce or impose any contractual provision that would prevent any such employee from being hired by RailTel or any replacing vendor.

### 29.4 Rights of Access to Information: Besides during the contract period, during the exit management period also, if asked by RailTel in writing, the CSP shall be obliged to provide an access of information to RailTel and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / software / active / passive), documentations, manuals, catalogues, archive data, Live data, policy documents or any other related material.

**Note:** RailTel at its sole discern may not enforce any or all clauses / sub-clauses under the 'Exit Management' clause due to administrative convenience or any other reasons as deemed fit.

## 30. Waiver

Except as otherwise specifically provided in the contract, no failure to exercise or delay in exercising, any right, power or privilege set forth in the contract will operate as a waiver of any right, power or privilege.

31. **Changes in Contract Agreement**  
No modification of the terms and conditions of the Contract Agreement shall be made except by written amendments signed.
32. **Liquidation Damages (LD)**  
Liquidation Damages (LD) shall be governed by the end customer RFP / tender terms and shall be applicable on bidder as per actual on back-to-back basis. Any deduction in payment on grounds of LD shall be carried to bidder as per figures actually charged by end customer on back-to-back basis.
33. **Variation Clause:**  
Variation in quantity will be governed as per the contract between RailTel and CoR.
34. **Negotiation Clause:**  
RCIL reserves the right to negotiate with the successful BA/SI in order to make the bid competitive.
35. **Reverse Auction:**  
EOI is subject to Reverse Auction if applicable as per terms and conditions of customer of RailTel.

**EOI COVER LETTER**  
(On Organization Letter Head)

Eol Ref No.: \_\_\_\_\_

Dated: XX-XX-XXXX

To,  
General Manager (Mktg),  
RailTel Corporation of India Limited, Northern Region,  
6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi-110053

End Customer Bid No. : Air HQ/S 19452/58/DMMI Dated 20 Aug 25.

Dear Sir,

1. I, the undersigned, on behalf of M/s ....., having carefully examined the referred EOI offer to participate in the same, in full conformity with the said EOI and all the terms and conditions thereof, including corrigendum issued till last date of submission of EOI. It is also undertaken and submitted that we are in abidance of Clause 4 (from Clause 4.1 to Clause 4.11) of EOI.
2. I agree to abide by this Proposal, consisting of this letter, our Pre-qualification, Technical and Commercial Proposals, for a period of 210 days from the date fixed for submission of Proposals as stipulated in the EOI and modifications resulting from contract negotiations, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.
3. I acknowledge that the Authority will be relying on the information provided in the Proposal and the documents accompanying the Proposal for selection of the Commercially Suitable Partner (CSP) for the aforesaid Service, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Proposal are true copies of their respective originals.
4. I undertake, if our Bid is accepted, to commence our services as per scope of work as specified in the contract document.
5. Until a formal Purchase Order or Contract is prepared and executed, this Bid and supplement / additional documents submitted (if any), together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.
6. I hereby undertake and give unconditional acceptance for compliance of all terms & conditions of CoR RFP issued vide End Customer Bid No. Air HQ/S 19452/58/DMMI Dated 20 Aug 25, against this EOI based customer's requirement.
7. I hereby undertake that there will be no deviation from the Terms and Conditions of EOI and CoR's RFP issued vide End Customer Bid No. Air HQ/S 19452/58/DMMI Dated 20 Aug 25.

**Signature of Authorized Signatory**

**Name:**

**Designation:**

Local Content Compliance  
(On OEM letter head)

Eol Ref No.: \_\_\_\_\_

Date: XX-XX-XXXX

To,  
General Manager (Mktg),  
RailTel Corporation of India Limited, Northern Region,  
6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi-110053

Dear Sir,

I, the undersigned, on behalf of M/s , hereby submits that our technical solution for the 'Scope of Work' mentioned under the Eol document is in compliance of local content requirement and makes us equivalent to 'Class-I local supplier' / 'Class-II local supplier' (mention whichever is applicable) for the Eol under reference, as defined under the order No. P-45021/2/2017-PP(BE-II) dt. 04-June-2020 issued by Ministry of Commerce and Industry, Govt. of India.

I hereby certify that M/s \_\_\_\_\_ fulfills all requirements in this regard and is eligible to be considered and for the submitted bid Local Content Percentage is \_\_\_\_\_ % (write in figures as well as in words).

I hereby acknowledge that in the event of acceptance of bid of M/s \_\_\_\_\_ on above certificate and if the certificate is found to be false at any stage, the false certificate would be a ground for immediate termination of contract and further legal action in accordance with the Law, including but not limited to the encashment of Bank Guarantee related to Empanelment and Performance Bank Guarantee (PBG), as available with RailTel, related to this Eol.

Signature of Authorized Signatory

Name:

Designation:



## CHECKLIST OF DOCUMENTS FOR BID SUBMISSION

S. No.	Type	Description	Page No.
1	Existence/ Origin	The company must be registered in India.	
2	General	The company must have: i) A valid PAN card. ii) Been registered with GST.	i) Copy of PAN Card. ii) Copy of GST registration certificate.
3	Turnover	The bidder must have cumulative turnover at least 150% i.e Rs.180Cr. in the last three financial year ending 31st Mar, 2025 and up to the date of inviting of EOI.	
4	Net Worth	The bidder must have positive net worth in last 3 FY i.e (FY 22-23, FY 23-24 and FY 24-25) ending 31st March 2025.	
5	Experience	The bidder must have executed similar work in last 3 years ending last day of month previous to the one in which EOI is invited.  1. One similar work of at least 35 % (Rs.42,00,00,000/-) of estimated value of EOI. OR 2. Two similar works of at least 20% (Rs.24,00,00,000/-) of estimated value of EOI. OR 3. Three similar works of at least 15% (Rs.18,00,00,000/-) of estimated value of EOI  Definition of similar work: Similar work means SITC of a project in the field of IT / ITeS / ICT / Telecom for any Government department/ Public Sector units in last 3 FYs.	
6	Empanelment	Bidder must be empaneled with RailTel as business associate.	
7	Technical Compliance of the Scope of Work	The Technical Compliance of the Scope of Work must be submitted. However, format may be modified by bidder as per their choice, but item must be marked with OEM Name, MAF provided or not and Data Sheet attached	
8	Make and Model	Technical Compliance sheet with make and model	
10	Unconditional Acceptance of	Undertaking on letterhead duly signed and stamped by authorized signatory for unconditional Acceptance of the Scope of work and any Other/General Document of CoR Tender RFP along with all the corrigendum and addendum.	
11	Unconditional acceptance of EOI terms	EOI's unconditional acceptance on company's letter head	
12	POA	The bid should be duly signed and submitted by Authorized Signatory. The bidder has to submit notarized non-judicial stamp paper of appropriate value Power of Attorney having authorized signatory's nomination along with board resolution in favor of power of attorney	
13	Annexure-01	EOI COVER LETTER	

S. No.	Type	Description	Page No.
14	Annexure-02	Local Content Compliance	
15	Annexure-03	CHECKLIST OF DOCUMENTS FOR BID SUBMISSION	
16	Annexure -04	Commercial Bid	
17	Annexure-05	PROFORMA FOR PERFORMANCE BANK GUARANTEE	
17	Annexure-06	Non-Disclosure Agreement	
18	Annexure-07	Technical Compliance	
19	Annexure-08	Pre Bid Team Arrangement	
20	Annexure-09	EMD BANK GUARANTEE FORMAT	
21	Annexure-10	Power of Attorney	
22	Annexure-11	AFFIDAVIT form	
23	Annexure-12	Integrity Pact	
24	End Customer Tender Documents	End Customer Tender Documents	
25	EMD payment	EMD payment	
26	EOI document cost	EOI document cost	
27	Land border sharing	Compliance to insertion of Rule 144(xi) in the GFR, 2017 vide office OM no. 6/18/2019-PPD dated 23-July-2020 issued by Ministry of Finance, Government of India, including revisions	
28	Non- Black Listing	Bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI	
29	No- arbitration with RailTel	There should not be any ongoing or past, arbitration case(s) between 'RailTel or Organizations under Indian Railways' and 'Interested Bidder' on the last date of submission of EOI	

**Note:**

1. The technical bid should have a 'Index' at the starting and all pages of bid should be serially numbered and should be traceable as per the 'Index'.
2. All the submitted documents should be duly stamped and signed by the Authorized Signatory at each page.
3. The above checklist is indicative only. RailTel may ask for additional documents from the bidders, as per the requirement.

Signature of Authorised Signatory

Name:

Designation:

Commercial Bid  
(On Organization Letter Head)  
(TO BE UPLOADED AS BOQ SHEET)

Eol Ref No.: \_\_\_\_\_

Date: XX-XX-XXXX

To,  
General Manager (Mktg),  
RailTel Corporation of India Limited, Northern Region,  
6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi-110053

S.No.	Denomination of Items / Services	Unit	Qty	Unit price	Total of Basic price
1	<b>IACCS Port Mout Infrastructure (Turnkey Execution) Network connectivity and other critical equipment with necessary Infrastructure</b>				
a	EMI/EMC and Fire Protection Shell fitted with following :-	Ea	1		
b	Precision Air Conditioning	Ea	3		
c	Earthing, Lightening Arrestors, Cabling & Cable Trays	Set	1		
d	42U 19' Racks with PDU	Ea	7		
e	Fire Detection and Supression System	Set	1		
f	Surge Protection	Set	1		
g	CCTV Monitoring with min 06 Cameras	Set	1		
h	Raised Flooring	Set	1		
j	UPS with Battery Bank & Distribution Box - 15 KVA	Ea	2		
k	DC Power Supply N+1 Redundancy (16 KW SMPS without Bateery Bank)	Ea	4		
l	SMPS Battery Bank	Ea	4		
m	Electrical Cabling, PDP, AMF Panel	Set	1		
n	FDF, HD-FDF, RJ-45 Jack Panel, OFC Raceway, Tray, Fiber Patch Cords, UTP Patch Cords etc.	Set	1		
o	OFC Laying	Km	10		
p	DG Sets 125 KVA	Ea	2		
2	<b>Secure Network Gateways &amp; Accessories</b>				
a	Secure Network Gateway Appliance	Ea	500		
b	CMS for Secure Network Gateway	Ea	2		
c	Analyser for Secure Network Gateway	Set	1		
3	<b>Accessories for Network Connectivity</b>				
a	19" 15U Wall Mountable Rack	Ea	500		

b	1KVA UPS with Battery	Ea	500		
c	Fiber Distribution Frame (12 Port)	Ea	500		
d	LC-LC Fiber Patch Cords	Ea	500		
e	RJ-45 Patch Panel with UTP Patch Cord	Ea	500		
f	Console Server (8 Serial Port)	Ea	120		
g	Console Server (32 Serial Port)	Ea	40		
<b>4</b>	<b>Phones and Recording Solution</b>				
a	CU IP Phone 2 Line	Ea	495		
b	CU IP Phone 5/6 Line	Ea	495		
c	IP Phone (15 Line)	Ea	385		
a	Call Recording Solution Licenses (1500)	Ea	1		
	<b>Total Amount</b>				

**#Note: This Annexure should be submitted as separate in Financial Bid section, NO price / cost details should be mentioned along with Technical Bid documents.**

Signature of Authorized Signatory

Name:

Designation:

Place:

**PROFORMA FOR PERFORMANCE BANK GUARANTEE**  
(On Stamp Paper of ₹ One Hundred)

To,  
General Manager (Mktg),  
RailTel Corporation of India Limited, Northern Region,  
6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi-110053

EOI No : .....

1. In consideration of the RailTel Corporation of India Limited (CIN: L64202DL2000GOI107905), having its registered office at Plate-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi – 110023 (herein after called “RailTel”) having agreed to exempt (CIN: ..... ) having its registered office at ..... (hereinafter called “the said Contractor”) from the demand, under the terms and conditions of Purchase Order No. dated..... made between RailTel and ..... for (hereinafter called “the said Agreement”) of security deposit for the due fulfilment by the said Contractor of the terms and condition contained in the said Agreement, or production of a Bank Guarantee for Rs. .... (Rs..... Only). We ..... (indicate the name and address and other particulars of the Bank) (hereinafter referred to as ‘the Bank’) at the request of contractor do hereby undertake to pay RailTel an amount not exceeding Rs. .... (Rs ..... Only) against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor of any of the terms or conditions contained in the said Agreement.
2. We, ..... the Bank do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage by the said Contractor of any of terms or conditions contained in the said Agreement by reason of the Contractor’s failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs ..... (Rs \_\_\_\_\_ Only).
3. We, ..... the Bank undertake to pay the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
4. We, ..... the Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and

Page **29** of **69**

properly carried out by the said contractor and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before ..... We shall be discharged from all liability under this Guarantee thereafter.

5. We, ..... the Bank further agree with the RailTel that the RailTel shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This Guarantee will not be discharge due to the change in the constitution of the Bank or the Contractor. (Indicate the name of Bank ..... ) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of RailTel in writing.

Dated the ..... Day of ..... 2024 for (Name of Bank)

In the presence of Witnesses:

Signature With Date	Signature With Date
Name:	Name:
Designation:	Designation:

**Encl: SFMS PBG Report**

## NON-DISCLOSURE AGREEMENT

*(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/-.  
The stamp paper has to be in the name of the BA)*

This Non-Disclosure Agreement (this "Agreement") is made and entered into on this \_\_\_\_\_ day of \_\_\_\_\_, 20XX (the "Effective Date") at \_\_\_\_\_.

By and between

RailTel Corporation of India Limited, (CIN: L64202DL2000GOI107905), a Public Sector Undertaking under Ministry of Railways, Govt. of India, having its registered and corporate office at Plate-A, 6th Floor, Office Block, Tower -2, East Kidwai Nagar, New Delhi-110023 & Northern Region office at 6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi - 110053, (hereinafter referred to as 'RailTel'), which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of the ONE PART,

And

(\_\_\_\_\_) (CIN: \_\_\_\_\_), a company duly incorporated under the provisions of Companies Act \_\_\_\_\_, having its registered office at \_\_\_\_\_, (hereinafter referred to as '\_\_\_\_\_'), which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of OTHER PART

RailTel and \_\_\_\_\_ shall be individually referred to as "Party" and jointly as "Parties"

WHEREAS, RailTel and \_\_\_\_\_, each possesses confidential and proprietary information related to its business activities, including, but not limited to, that information designated as confidential or proprietary under Section 2 of this Agreement, as well as technical and non- technical information, patents, copyrights, trade secrets, know-how, financial data, design details and specifications, engineering, business and marketing strategies and plans, forecasts or plans, pricing strategies, formulas, procurement requirements, vendor and customer lists, inventions, techniques, sketches, drawings, models, processes, apparatus, equipment, algorithms, software programs, software source documents, product designs and the like, and third party confidential information (collectively, the "Information");

WHEREAS, the Parties have initiated discussions regarding a possible business relationship for \_\_\_\_\_

WHEREAS, each Party accordingly desires to disclose certain Information (each Party, in such disclosing capacity, the "Disclosing Party") to the other Party (each Party, in such receiving capacity, the "Receiving Party") subject to the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the receipt of certain Information, and the mutual promises made in this Agreement, the Parties, intending to be legally bound, hereby agree as follows:

## **1. Permitted Use.**

- a)** Receiving Party shall:
  - i. hold all Information received from Disclosing Party in confidence;
  - ii. use such Information for the purpose of evaluating the possibility of entering into a commercial arrangement between the Parties concerning such Information; and
  - iii. restrict disclosure of such Information to those of Receiving Party's officers, directors, employees, affiliates, advisors, agents and consultants (collectively, the "Representatives") who the Receiving Party, in its reasonable discretion, deems need to know such Information, and are bound by the terms and conditions of (1) this Agreement, or (2) an agreement with terms and conditions substantially similar to those set forth in this Agreement.
- b)** The restrictions on Receiving Party's use and disclosure of Information as set forth above shall not apply to any Information that Receiving Party can demonstrate:
  - i. is wholly and independently developed by Receiving Party without the use of Information of Disclosing Party;
  - ii. at the time of disclosure to Receiving Party, was either (A) in the public domain, or (B) known to Receiving Party;
  - iii. is approved for release by written authorization of Disclosing Party; or
  - iv. is disclosed in response to a valid order of a court or other governmental body in the India or any political subdivision thereof, but only to the extent of, and for the purposes set forth in, such order; provided, however, that Receiving Party shall first and immediately notify Disclosing Party in writing of the order and permit Disclosing Party to seek an appropriate protective order.
- c)** Both parties further agree to exercise the same degree of care that it exercises to protect its own Confidential Information of a like nature from unauthorized disclosure, but in no event shall a less than reasonable degree of care be exercised by either party.

## **2. Designation.**

- a)** Information shall be deemed confidential and proprietary and subject to the restrictions of this Agreement if, when provided in:
    - i. written or other tangible form, such Information is clearly marked as proprietary or confidential when disclosed to Receiving Party; or
    - ii. oral or other intangible form, such Information is identified as confidential or proprietary at the time of disclosure.
3. Cooperation. Receiving Party will immediately give notice to Disclosing Party of any unauthorized use or disclosure of the Information of Disclosing Party.
4. Ownership of Information. All Information remains the property of Disclosing Party and no license or other rights to such Information is granted or implied hereby.

Notwithstanding the foregoing, Disclosing Party understands that Receiving Party may currently or in the future be developing information internally, or receiving information from



other parties that may be similar to Information of the Disclosing Party. Notwithstanding anything to the contrary, nothing in this Agreement will be construed as a representation or inference that Receiving Party will not develop products, or have products developed for it, that, without violation of this Agreement, compete with the products or systems contemplated by Disclosing Party's Information.

5. No Obligation. Neither this Agreement nor the disclosure or receipt of Information hereunder shall be construed as creating any obligation of a Party to furnish Information to the other Party or to enter into any agreement, venture or relationship with the other Party.
6. Return or Destruction of Information.
  - a) All Information shall remain the sole property of Disclosing Party and all materials containing any such Information (including all copies made by Receiving Party) and its Representatives shall be returned or destroyed by Receiving Party immediately upon the earlier of:
    - i. termination of this Agreement;
    - ii. expiration of this Agreement; or
    - iii. Receiving Party's determination that it no longer has a need for such Information.
  - b) Upon request of Disclosing Party, Receiving Party shall certify in writing that all Information received by Receiving Party (including all copies thereof) and all materials containing such Information (including all copies thereof) have been destroyed.
7. Injunctive Relief: Without prejudice to any other rights or remedies that a party may have, each party acknowledges and agrees that damages alone may not be an adequate remedy for any breach of this Agreement, and that a party shall be entitled to seek the remedies of injunction, specific performance and/or any other equitable relief for any threatened or actual breach of this Agreement
8. Notice.
  - a) Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated:
    - i. by personal delivery, when delivered personally;
    - ii. by overnight courier, upon written verification of receipt; or
    - iii. by certified or registered mail with return receipt requested, upon verification of receipt.
  - b) Notice shall be sent to the following addresses or such other address as either Party specifies in writing.

RailTel Corporation of India limited:

Attn:	Attn:
Address:	Address:
Phone:	Phone:
Email:	Email:

9. Term, Termination and Survivability.

- a) Unless terminated earlier in accordance with the provisions of this agreement, this Agreement shall be in full force and effect for a period of        years from the effective date hereof.
- b) Each party reserves the right in its sole and absolute discretion to terminate this Agreement by giving the other party not less than 30 days' written notice of such termination.
- c) Notwithstanding the foregoing clause 9(a) and 9 (b), Receiving Party agrees that its obligations, shall:
  - i. In respect to Information provided to it during the Term of this agreement, shall survive and continue even after the expiry of the term or termination of this agreement; and
  - ii. not apply to any materials or information disclosed to it thereafter.

10. Governing Law and Jurisdiction. This Agreement shall be governed in all respects solely and exclusively by the laws of India without regard to its conflicts of law principles. The Parties hereto expressly consent and submit themselves to the jurisdiction of the courts of New Delhi.

11. Counterparts. This agreement is executed in duplicate, each of which shall be deemed to be the original and both when taken together shall be deemed to form a single agreement

12. No Definitive Transaction. The Parties hereto understand and agree that no contract or agreement with respect to any aspect of a potential transaction between the Parties shall be deemed to exist unless and until a definitive written agreement providing for such aspect of the transaction has been executed by a duly authorized representative of each Party and duly delivered to the other Party (a "Final Agreement"), and the Parties hereby waive, in advance, any claims in connection with a possible transaction unless and until the Parties have entered into a Final Agreement.

13. Settlement of Disputes:

- a) The parties shall, at the first instance, attempt to resolve through good faith negotiation and consultation, any difference, conflict or question arising between the parties hereto relating to or concerning or arising out of or in connection with this agreement, and such negotiation or
- b) Consultation shall begin promptly after a Party has delivered to another Party a written request for such consultation.
- c) In the event of any dispute, difference, conflict or question arising between the parties hereto, relating to or concerning or arising out of or in connection with this agreement, is not settled through good faith negotiation or consultation, the same shall be referred to arbitration by a sole arbitrator.

14. The sole arbitrator shall be appointed by CMD/RailTel out of the panel of independent arbitrators maintained by RailTel, having expertise in their respective domains. The seat and the venue of arbitration shall be New Delhi. The arbitration proceedings shall be in accordance with the provision of the Arbitration and Conciliation Act 1996 and any other statutory amendments or modifications thereof. The decision of arbitrator shall be final and binding on both parties. The arbitration proceedings shall be conducted in English Language. The fees and cost of arbitration shall be borne equally between the part

15. CONFIDENTIALITY OF NEGOTIATIONS

Without the Disclosing Party's prior written consent, the Receiving Party shall not disclose to any Person who is not a Representative of the Receiving Party the fact that Confidential Information has been made available to the Receiving Party or that it has inspected any portion of the Confidential Information or that discussions between the Parties may be taking place.

16. REPRESENTATION

The Receiving Party acknowledges that the Disclosing Party makes no representation or warranty as to the accuracy or completeness of any of the Confidential Information furnished by or on its behalf. Nothing in this clause operates to limit or exclude any liability for fraudulent misrepresentation.

17. ASSIGNMENT

Neither this Agreement nor any of the rights, interests or obligations under this Agreement shall be assigned, in whole or in part, by operation of law or otherwise by any of the Parties without the prior written consent of each of the other Parties. Any purported assignment without such consent shall be void. Subject to the preceding sentences, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

18. EMPLOYEES AND OTHERS

Each Party shall advise its Representatives, contractors, subcontractors and licensees, and shall require its Affiliates to advise their Representatives, contractors, subcontractors and licensees, of the obligations of confidentiality and non-use under this Agreement, and shall be responsible for ensuring compliance by its and its Affiliates' Representatives, contractors, subcontractors and licensees with such obligations. In addition, each Party shall require all persons and entities who are not employees of a Party and who are provided access to the Confidential Information, to execute confidentiality or non-disclosure agreements containing provisions no less stringent than those set forth in this Agreement. Each Party shall promptly notify the other Party in writing upon learning of any unauthorized disclosure or use of the Confidential Information by such persons or entities.

19. NO LICENSE

Nothing in this Agreement is intended to grant any rights to under any patent, copyright, or

other intellectual property right of the Disclosing Party, nor will this Agreement grant the Receiving Party any rights in or to the Confidential Information of the Disclosing Party, except as expressly set forth in this Agreement.

**20. RELATIONSHIP BETWEEN PARTIES:**

Nothing in this Agreement or in any matter or any arrangement contemplated by it is intended to constitute a partnership, association, joint venture, fiduciary relationship or other cooperative entity between the parties for any purpose whatsoever. Neither party has any power or authority to bind the other party or impose any obligations on it and neither party shall purport to do so or hold itself out as capable of doing so.

**21. UNPUBLISHED PRICE SENSITIVE INFORMATION (UPSI)** agrees and acknowledges that\_\_\_\_\_, its Partners, employees, representatives etc., by virtue of being associated with RailTel and being in frequent communication with RailTel and its employees, shall be deemed to be “Connected Persons” within the meaning of SEBI (Prohibition of Insider Trading) Regulations, 2015 and shall be bound by the said regulations while dealing with any confidential and/ or price sensitive information of RailTel. \_\_\_\_\_shall always and at all times comply with the obligations and restrictions contained in the said regulations. In terms of the said regulations, \_\_\_\_\_ shall abide by the restriction on communication, providing or allowing access to any Unpublished Price Sensitive Information (UPSI) relating to RailTel as well as restriction on trading of its stock while holding such Unpublished Price Sensitive Information relating to RailTel

**22. MISCELLANEOUS.**

This Agreement constitutes the entire understanding among the Parties as to the Information and supersedes all prior discussions between them relating thereto. No amendment or modification of this Agreement shall be valid or binding on the Parties unless made in writing and signed on behalf of each Party by its authorized representative. The failure or delay of any Party to enforce at any time any provision of this Agreement shall not constitute a waiver of such Party’s right thereafter to enforce each and every provision of this Agreement. In the event that any of the terms, conditions or provisions of this Agreement are held to be illegal, unenforceable or invalid by any court of competent jurisdiction, the remaining terms, conditions or provisions hereof shall remain in full force and effect. The rights, remedies and obligations set forth herein are in addition to, and not in substitution of, any rights, remedies or obligations which may be granted or imposed under law or in equity.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date set forth above.

By: _____	RailTel Corporation of India Limited
Name:	By:
Title:	Name:
	Title:

Witnesses:

## Technical Compliance

Eol Ref. No.: \_\_\_\_\_ Date: XX-XX-XXXX

End Customer Bid No. RCIL/NR/RO/EOI/MKTG/TNDR/AIR HQ/2025-26 dated 01-09-2025.

Business Associates are requested to mention the details of compliance of technical solution proposed.

S.No.	Scope Item	Specification as per technical Document	Proposed OEM Name	MAF Provided (Yes/No)	Compliance sheet
A	B	C	D	E	F
1	To be filled by Bidder  As per Technical Document Copy of CoR	To be filled by Bidder  As per Technical Document Copy of CoR	To be filled by Bidder	To be filled by Bidder	To be filled by Bidder
2	To be filled by Bidder	To be filled by Bidder	To be filled by Bidder	To be filled by Bidder	To be filled by Bidder

Signature of Authorised Signatory

Name:

Designation:

**Pre-Bid Agreement**  
(On Stamp Paper of ₹ One Hundred)

This Pre-Bid Agreement (the "Agreement") is made at New Delhi on this \_\_\_\_\_ Day of \_\_\_\_\_(month) 2022.

**BETWEEN**

M/s. RailTel Corporation Of India Limited, (CIN: L64202DL2000GOI107905) a company registered under the Companies Act 1956, having its registered and corporate office at Plate-A, 6th Floor, Office Block, Tower-2, East Kidwai Nagar, New Delhi India – 110 023 and Northern Regional office at 6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi - 110053 (hereinafter referred to as "RailTel" which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the FIRST PART.

**AND**

M/s. \_\_\_\_\_, (CIN: \_\_\_\_\_) a company registered under the Companies Act 1956, having its registered office at \_\_\_\_\_ and its Corporate Office located at \_\_\_\_\_, (hereinafter referred to as "\_XXXX\_" which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the SECOND PART.

RailTel and \_\_\_\_\_ shall be hereinafter individually referred to as "Party" and collectively as "Parties."

**WHEREAS,**

- A. RailTel is a "Navratna " CPSU of Ministry of Railways, having exclusive right of way along Indian Railways and has created an OFC backbone and associated transport and network infrastructure to provide carrier class telecom services. RailTel has Unified License issued by DoT to provide a range of telecom services. RailTel also has two tier III certified data Centre's at Secunderabad and Gurugram. RailTel has created a slew of digital services like cloud, hosting, hosted Video Conferencing service, Aadhar Services, Content delivery platform, Wi-Fi as a service etc. RailTel has strong capabilities in managing telecom infrastructure, MPLS network infrastructure, data centre services like IaaS (Infrastructure as a Service) and PaaS (Platform as a Service).
- B. (DETAILS OF SECOND PART)
- C. RailTel had floated an EOI No: \_\_\_\_\_ dated \_\_\_\_\_ pursuant to the RFP floated by End Customer for " \_\_\_\_\_ " for End Customer Organization for agreed Scope of Work"(hereinafter referred as "The said work/project/tender"), and subsequently, based on the offer submitted by M/s \_\_\_\_\_ towards the RailTel's EOI, M/s \_\_\_\_\_ has been selected by RailTel as Business Associate for the said Project.
- D. RailTel is in the process of participating in the tender issued by end customer, complete details of which have deliberately not been shared with XXXX and XXXX has waived its right to get the RFP document of end customer owing to confidentiality concern raised by the end customer. However, a limited scope of work on 'need to know Basis' and as detailed in clause

1.7 below, which will be carried out by XXXX has been shared with XXXX and based on the representation of "XXXX" that "XXXX" has read the said limited Scope of Work and has understood the contents thereof and that "XXXX" has sufficient experience to execute the said limited and defined scope of work, the Parties have mutually decided to form a "Business association" wherein RailTel shall act as the "Bidder" and "XXXX" shall act as the "business associate" in terms of the said Tender and in accordance to the terms agreed hereunder;

- E. RailTel shall submit Rupees YYYY as BG against pre integrity pact at the time of submission of bid as an Integrity Pact bank guarantee to end customer and accordingly "XXXX" shall submit Rupees ZZZZ as BG of pre integrity pact on back-to-back basis to RailTel before final submission of the said bid to end customer. (This is applicable on cases to case basis as per CoR requirement. May please read in conjunction of the current RFP.)
- F. Party hereby acknowledges that RailTel has received Rs. \_\_\_\_\_ (Rs. In words) from M/s \_\_\_\_\_ as per the Terms and conditions of EOI no. \_\_\_\_\_ dated \_\_\_\_\_.

- G. The Parties are thus entering into this Agreement to record the terms and conditions of their understanding and the matters connected therewith.

RailTel has agreed to extend all the necessary and required support to "XXXX" during the entire contract period.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein it is hereby agreed by and between the Parties hereto as under:

1. SCOPE OF CO-OPERATION

1.1 Parties have agreed to form a "business association" to co-operate with each other on an exclusive basis with respect to execution of the said Project.

1.2 It has been further agreed between the Parties that Parties shall not bid individually for the said Project nor shall they enter into any arrangement with other parties for the purpose of bidding for the said Project during the validity of this Agreement.

1.3 The Parties also agree that the terms of the said EOI for limited and defined scope of work along with the Corrigendum's issued thereafter shall apply mutatis-mutandis to this Agreement.

1.4 The Parties further agree that they shall, enter into a 'Definitive Agreement' containing elaborate terms and conditions, role and responsibilities and respective scope of work of this Agreement after declaration of RailTel as the successful bidder of the said Project.

1.5 RailTel shall submit the PBG amounting Rs. \_\_\_\_\_, earnest money deposit/ EMD declaration (whichever is applicable) and performance bank guarantee to End customer and accordingly "\_\_\_\_\_" shall submit to RailTel, BG amounting to Rs. as the earnest money deposit. Further, \_\_\_\_\_ shall also pay the performance bank guarantee in proportionate to the extent of its defined scope of work.

1.6 RailTel may further retain some portion of the work mentioned in the end organization's RFP, where RailTel has competence so that overall proposal becomes most winnable proposal. \_\_\_\_\_ agrees, undertakes and acknowledges that following shall be Scope of Work of \_\_\_\_\_ out of the total project work.:

2. Technical Terms – As per CoR document

3. TERM AND TERMINATION

3.1 This Agreement shall come into force as of the date of signing and shall continue to be in

full force and effect till the complete discharge of all obligations, concerning the carrying out of the said Project, except terminated earlier by the Parties in terms of this Agreement or in terms of the said project, whichever is applicable.

3.2 This Agreement can be terminated by either Parties forthwith in the event of happening of the following events:

- a) End customer announces or notifies the cancellation of the said Project and / or withdrawing the said RFP.
- b) The receipt of an official communication that End customer chooses not to proceed with RailTel for the said Project or RailTel is not short listed by End customer.
- c) Material breach of any of the terms and conditions of this Agreement by either of the Parties and the same is not rectified by the defaulting Party beyond 15 (fifteen) days (or a reasonable time period as mentioned under the notice issued by the other Party) from the date of receipt of notice from the other Party to cure the said breach.

3.3 Parties agree and understand that as of the execution of this Agreement they are contractually bound and obligated to perform the services, obligations and the scope of work entrusted, should RailTel be declared as the successful bidder of the said Project. Any Party shall not withdraw its participation subsequent to execution of this Agreement, at any point in time except in case of material breach of any of the terms of the Agreement.

3.4 In case "XXXX" breach the terms of Agreement i.e. defaulting party in such case the balance unsupplied quantity or service shall be completed by RailTel i.e. non-defaulting party and cost for completion of that balance unsupplied quantity or service of such defaulting party shall be executed by RailTel at the risk and cost of such defaulting party.

4. Liability:

It is understood that the parties are entering into this pre-bid teaming agreement for requirement of submission of bid against the RFP floated by end customer for Implementation of Network Security System and Integration for end Customer Organization. Parties acknowledge and agree that "XXXX" shall be completely liable for the successful execution of this project, in relation to its defined scope of work (as detailed in clause 1.7 above), fully complying the end customer requirements. Accordingly, it is agreed that notwithstanding anything contained in the RFP document, "XXXX" shall be liable to RailTel with regard to its obligations and liability to complete the agreed and defined scope of work as detailed in clause 1.7 above.

5. EXCLUSIVITY

Parties agree to co-operate with each other for the purpose of the said Project on an exclusive basis with respect to applying for, submitting and execution of the said Project including providing of technical demo, proof of concept for the agreed and defined scope of work.

6. PAYMENT TERMS

The payment terms between the parties shall be only on receipt of payment from end customer.

7. TAXES

Parties agrees that they will comply with the Indian Income Tax Act in force from time to time and pay Indian Income Tax, as may be imposed / levied on them by the Indian Income Tax Authorities, for the payments received by them for the Project under this agreement and any



other taxes, cess, surcharge, etc. for their respective scope of works.

## 8. INDEMNIFICATION

8.1 Parties agree to and undertake to indemnify and hold each other, its officers, directors, agents and employees harmless, from and against any and all claims, demands, causes of action, losses, damages, costs and expenses (including attorney's reasonable fees, costs of investigation and defense) arising out of or resulting from any claim, action or other proceeding (including any proceeding by any of the indemnifying party's employees, agents or contractors) based upon:

- i. any breach or contravention of any of the terms, conditions, covenants of this Agreement by the Party;
- ii. Unethical business practices;
- iii. any acts or omission of the Party and/ or any of its employees, agents or contractors, and the liability for damages to property arising from or out of party operations in connection with the performance of this agreement;
- iv. any claim for taxes that might arise or be imposed due to this performance of Services hereunder;
- v. any representation or warranty or information furnished by the Party being found to be false;
- vi. Parties' failure to pay all applicable compensation to its respective personnel;
- vii. death or personal injury to any person;
- viii. destruction or damage to any property by acts or omissions of either Party, its representatives or personnel;
- ix. any violation/non-compliance by the Party with any applicable laws' governmental regulations or orders;
- x. any third-party liability;
- xi. improper handling or misuse of the Confidential Information of the Party(ies) by the Party

8.2 \_\_\_\_\_ shall be liable to all risks and consequences (including the risk of payments) suffered in the performance of services under the Project and undertakes to indemnify RailTel from and against any non-payments (of RailTel's share payable to RailTel), recoveries and claim from End Customer or any other cost or losses incurred due to default/nonperformance on part of XXXX.

## 9. COMPLIANCES TO STATUTORY OBLIGATIONS

9.1 Parties shall also obtain and keep in place necessary insurance policies, Mediclaim policies, group insurance schemes of adequate value to cover their workmen, supervisors, etc. with regard to any accidents, injury or the liability under the Employee Compensation Act.

9.2 Parties shall observe and be responsible for the compliance of all labour laws (including labour Cess) as per government notifications and shall maintain necessary records for the same and shall submit the same to RailTel when so required.

9.3 Parties shall duly maintain all records / registers required to be maintained by them under various labour laws mentioned above and shall produce the same before the concerned Statutory Authorities whenever required and called upon to do so.

## 10. LEGAL STATUS

This Agreement constitutes a contractual relationship and shall relate solely to the Project and shall not extend to other activities or be construed to create a corporation, body corporate, partnership or any other form of legal entity.

## 11. REPRESENTATIONS AND COVENANTS

11.1 Each Party represents and warrants to the other Party as follows:

11.1.1 That it has full capacity, power and authority and has obtained all requisite consents and approvals to, enter into and to observe and perform this Agreement and to consummate the transactions contemplated hereunder. Each of the Persons / personnel executing this Agreement on behalf of the each of the Parties have full capacity and authority to sign and execute this Agreement on behalf of the respective Parties;

11.1.2 The execution, delivery and consummation of, and the performance by it, of this Agreement shall not conflict with, violate, result in or constitute a breach of or a default under, (a) any contract by which it or any of its assets or properties, are bound or affected, and/or (b) its constitutional documents;

11.1.3 This Agreement constitutes its legal, valid and binding obligations, enforceable against it, in accordance with their terms under Applicable Statutory Law(s);

11.1.4 It has the right, authority and title to execute this Agreement;

## 12. SUBCONTRACTING BETWEEN PARTIES

If a Party subcontracts certain supplies or services pertaining to its scope of work to the other party, then the resulting relationship between such parties shall be governed by a separate subcontract. This Agreement shall not in any way be affected thereby except as stated otherwise in this Agreement

## 13. GOVERNING LAW AND JURISDICTION

The construction, validity and performance of this Agreement shall be governed in all respects by the Laws of India. The Parties hereby submit to the exclusive jurisdiction of the Indian courts at Delhi only.

## 14. GOOD FAITH NEGOTIATION AND DISPUTE RESOLUTION

The parties shall, at the first instance, attempt to resolve through good faith negotiation and consultation, any difference, conflict or question arising between the parties hereto relating to or concerning or arising out of or in connection with this agreement, and such negotiation or consultation shall begin promptly after a Party has delivered to another Party a written request for such consultation.

In the event of any dispute, difference, conflict or question arising between the parties hereto, relating to or concerning or arising out of or in connection with this agreement, is not settled through good faith negotiation or consultation, the same shall be referred to arbitration by a sole arbitrator.

The sole arbitrator shall be appointed by CMD/RailTel out of the panel of independent arbitrators maintained by RailTel, having expertise in their respective domains. The seat and the venue of arbitration shall be New Delhi. The arbitration proceedings shall be in accordance with the provision of the Arbitration and Conciliation Act 1996 and any other statutory amendments or modifications thereof. The decision of arbitrator shall be final and binding on both parties. The arbitration proceedings shall be conducted in English Language. The fees and cost of arbitration shall be borne equally between the parties.

#### 15. FORCE MAJEURE

“Force Majeure Event” shall mean any event beyond the reasonable control of the affected Party including acts of God, fires, earthquakes, strikes, pandemic, epidemics, lock down, and labor disputes, acts of war or terrorism, civil unrest, economic and financial sanctions, or acts or omissions of any Governmental Authority occurring on or after the Signature Date.

No Party shall be liable to the other if, and to the extent, that the performance or delay in performance of any of its obligations under this Agreement is prevented, restricted, delayed or interfered with, due to a Force Majeure Event.

The Party affected by Force Majeure Event shall promptly inform the other Party in writing and shall furnish within 30 (thirty) days thereafter, sufficient proof of the occurrence and expected duration of such Force Majeure Event. The Party affected by Force Majeure Event shall also use all reasonable endeavor to mitigate the negative effects of such Force Majeure Event on such Party’s ability to perform its contractual obligations. In the event of a Force Majeure Event, the Parties shall immediately consult with each other in order to find an equitable solution and shall use all reasonable endeavors to minimize the consequences of such Force Majeure Event.

The occurrence of a Force Majeure Event shall however, not relieve a Party of any obligation to pay any sum due under this Agreement prior to the occurrence of the Force Majeure Event. If the Force Majeure lasts for more than 6 (six) months, the Parties may mutually decide in writing on the future course of action with respect to this Agreement.

#### 16. INTELLECTUAL PROPERTY RIGHTS

16.1 Each Party shall remain the sole owner of all industrial or intellectual property rights, Technical Data, Know-How, designs, specifications and the like, generated or acquired before the signature, or beyond the scope of this agreement.

16.2 Each Party shall remain the sole owner of all industrial or intellectual property rights, technical data, know-how, design specifications and the like generated solely by that Party during the course of the performance of this agreement and shall not be free to use it by the other party and if the other party uses that intellectual property rights prior permission shall be taken with paying necessary fees for such rights.

16.3 In case of joint development, the work-share and associated ownership of intellectual property of each Party shall be mutually agreed upon and defined in advance in the definitive agreement for the specific program. However, should any invention be jointly made by the Parties in the performance of this agreement, without neither Party being

in a position to reasonably claim the ownership of said intellectual property right, the said right shall be jointly owned by the Parties and the corresponding measures of protection for both Parties of the said right as may be practicable shall be mutually agreed by both Parties and cost for such registration of such right shall be borne by the parties proportionately as per the ownership of the rights.

- 16.4 As on date, Parties confirms that there are no infringements of any Intellectual Property Rights of the products contemplated under this agreement, in accordance with the laws prevailing in the country.
- 16.5 The Parties undertake and confirm that the Technology / Knowhow / Design owned by each of them and intended to be put into use for execution of various Projects pursuant to this agreement has been originally developed by each of such Parties. The Parties are entitled to all the Intellectual Property Rights in Technology / Knowhow / Design intended to be put into use for execution of various Projects and no third-party Intellectual Property Rights have been put into use either in their original or modified form without proper authorisation of such third party. The Parties further vouchsafes that the foregoing undertaking is actuated by truth and accuracy and no misrepresentation is being put into use for inducing each other to enter into this agreement.

## 17. CONFIDENTIALITY

- 17.1 During the term of this agreement, either party may receive or have access to technical information, as well as information about product plans and strategies, promotions, customers and related non-technical business information which the disclosing party considers to be confidential ("Confidential Information as per RFP tender document"). In the event Confidential Information is to be disclosed, the Confidential Information must be marked as confidential at the time of disclosure, or if disclosed orally but stated to be confidential, and be designated as confidential in writing by the disclosing party summarizing the Confidential Information disclosed and sent to the receiving party within thirty (30) days after such oral disclosure.
- 17.2 Confidential Information may be used by the receiving party only with respect to the performance of its obligations under this Agreement, and only by those employees of the receiving party and its subcontractors who have a need to know such information for purposes related to this Agreement, provided that such subcontractors have signed separate agreements containing substantially similar confidentiality provisions. The receiving party must protect the Confidential Information of the disclosing party by using the same degree of care to prevent the unauthorized use, dissemination or publication of such Confidential Information, as the receiving party uses to protect its own confidential information of like nature.
- 17.3 The obligations are not applicable to any information which is:
- 17.3.1 Already known by the receiving party prior to disclosure;
  - 17.3.2 Publicly available through no fault of the receiving party;
  - 17.3.3 Rightfully received from a third party without being responsible for its confidentiality;
  - 17.3.4 Disclosed by the disclosing party to a third party without being responsible for

- its Confidentiality on such third party;
- 17.3.5 Independently developed by the receiving party prior to or independent of the disclosure;
- 17.3.6 Disclosed under operation of law;
- 17.3.7 Disclosed by the receiving party with the disclosing party's prior written approval.
- 17.4 \_\_\_\_\_ agrees and acknowledges that \_\_\_\_\_, its Partners, employees, representatives etc., by virtue of being associated with RailTel and being in frequent communication with RailTel and its employees, shall be deemed to be "Connected Persons" within the meaning of SEBI (Prohibition of Insider Trading) Regulations, 2015 and shall be bound by the said regulations while dealing with any confidential and/ or price sensitive information of RailTel. \_\_\_\_\_ shall always and at all times comply with the obligations and restrictions contained in the said regulations. In terms of the said regulations, \_\_\_\_\_ shall abide by the restriction on communication, providing or allowing access to any Unpublished Price Sensitive Information (UPSI) relating to RailTel as well as restriction on trading of its stock while holding such Unpublished Price Sensitive Information relating to RailTel
- 17.5 Notwithstanding anything contained in this agreement, \_\_\_\_\_ undertakes, agrees and acknowledges that being RailTel's Business Associate, \_\_\_\_\_ shall maintain utmost confidentiality in relation to said Project. \_\_\_\_\_ further, undertakes that any information relating to said Project which is or will be disclosed/ divulged by RailTel on need-to-know basis, will be received and treated by \_\_\_\_\_ strictly confidential and \_\_\_\_\_ shall not, without the prior written consent of the RailTel or as expressly permitted herein, disclose or make available to any other person such information.

## 18. NOTICES

Notices, writings and other communications under this Agreement may be delivered by hand, by registered mail, by courier services or facsimile to the addresses as set out below:

To: RailTel Corporation of India Ltd., Kind Attn: Executive Director / Northern Region  
Address: 6th Floor, 3rd Block, Delhi IT Park, New Delhi - 110053 Tel No.: +91-11-22185933/22185934, Email: [ednr@railtelindia.com](mailto:ednr@railtelindia.com)

To \_\_\_\_\_

To: \_\_\_\_\_

Kind Attn: \_\_\_\_\_ Address: \_\_\_\_\_

Mob. No.: \_\_\_\_\_ Email: \_\_\_\_\_

## 19. AMENDMENT

No amendment or modification or waiver of any provision of these presents, nor consent to any departure from the performance of any obligations contained herein, by any of the Parties hereto, shall in any event be valid and effective unless the same is in writing and signed by the Parties or their duly authorized representative especially empowered in this behalf

and the same shall be effective only in respect of the specific instance and for the specific purpose for which it is given.

## 20. PRIOR UNDERSTANDING

This Agreement contains the entire Agreement between the Parties to this Agreement with respect to the subject matter of the Agreement, is intended as a final expression of such Parties' agreement with respect to such terms as are included in this Agreement is intended as a complete and exclusive statement of the terms of such agreement, and supersedes all negotiations, stipulations, understanding, Agreements, representations and warranties if any, with respect to such subject matter, which precede or accompany the execution of this Agreement.

## 21. GENERAL

- 21.1 Binding Effect: This Agreement shall be binding upon and inure to the benefit of the Parties here to and their respective legal successors.
- 21.2 Counterparts: This Agreement may be executed simultaneously in 2 (two) counterparts, each of which shall be deemed to be original and all of which together shall constitute the same Agreement.
- 21.3 Non-Partnership:
  - 21.3.1 This Agreement shall be on a principal-to-principal basis and shall not create any principal-agent relationship between the Parties.
  - 21.3.2 Nothing in this Agreement shall be deemed to constitute a partnership or joint venture between the Parties or otherwise entitle either Party to have an authority to bind the other Party for any purpose.
- 21.4 Severability: In the event any provision of this agreement is held invalid or unenforceable by a court of competent jurisdiction, such provision shall be considered separately, and such determination shall not invalidate the other provisions of this agreement and annexure/s which will be in full force and effect.
- 21.5 Waiver: A failure by any Party to exercise or enforce any rights conferred upon it by this Agreement shall not be deemed to be a waiver of any such rights or operate so as to bar the exercise or enforcement thereof at any subsequent time.
- 21.6 Time is of essence: Time is the essence of this agreement and the Parties herein agree and acknowledge to abide by the same.

## 22. Miscellaneous

- 22.1 No Party to this agreement will have any rights or obligations arising from or in relation to this agreement in excess of those rights and obligations expressly declared herein.
- 22.2 No Party to this agreement is entitled to sell, assign or otherwise transfer any of its rights and/or obligations arising from or in relation to this agreement to any third party, without the prior written consent of the other Party of this agreement.
- 22.3 Each Party shall be solely responsible for its own actions or failures to act and for its own commitments and undertakings. Neither Party shall present itself as the representative or agent of the other Party, nor shall it have the power or the authority to commit the other Party, unless it receives the other Party's prior written consent.

- 22.4 No release shall be made by any Party to the news media or the general public relating to this agreement and/or the subject matter thereof without prior written approval of the other Party.
- 22.5 During the term of this agreement, each party shall refrain from taking any action or attempt to take any action with the intent of impairing or causing prejudice to the business relationship, whether existing or prospective that subsists between the other party and its customers and business partners. Each party shall also desist from inducing or influencing or attempting to induce or influence any customer or business partner, whether existing or prospective of the other party, resulting into prejudice or detriment to business prospects of the other party.

Furthermore, Parties shall not compete with or cause detriment to the business prospects of each other by making use of confidential information, whether in its embodied or disembodied form, shared pursuant to this agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

For RailTel Corporation Of India Limited  
Authorised Signatory  
Name:  
Designation:  
In Presence of witness:

Signature:  
Name:  
Address:

For \_\_\_\_\_  
Authorised Signatory  
Name:  
Designation:

Signature:  
Name:  
Address:

## EMD BANK GUARANTEE FORMAT

EOI Ref No: \_\_\_\_\_

Date: XX-XX-XXXX

**BID SECURITY (BANK GUARANTEE)**

WHEREAS, [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated [date] Selection of Implementation Partner from RailTel Empaneled Business Associate for exclusive PRE-BID TEAMING ARRANGEMENT for the work of SELECTION OF SYSTEM INTEGRATOR For "\_\_\_\_\_ " (hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that We [name of bank] of [name of country] having our registered office at \_\_\_\_\_ (Hereinafter called "the Bank") are bound unto RailTel Corporation of India Limited., 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi-110053 [name of Employer] (hereinafter called "the Employer") in the sum of Rs. \_\_\_\_\_ (Rupees in words only) for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 20XX. THE CONDITIONS of this obligation are:

1. If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;
- OR
2. If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid validity:
  - a. Fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required;
  - or
  - b. fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders;
  - or
  - c. does not accept the correction of the Bid Price;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date \_\_\_\_\_, \_\_\_\_\_ days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

Date: \_\_\_\_\_

Signature of the bank: \_\_\_\_\_

Seal of Bank: \_\_\_\_\_

[Signature, name, and address]

\* \_\_\_\_\_ days after the end of the validity period of the Bid.



**POWER OF ATTORNEY**

Know all men by these presents We ..... having its registered office at ..... and .....do hereby irrevocably constitute, nominate, appoint and authorize Mr. ...., who is presently employed with us and holding the position of ....., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our proposal..... is response to the EoI No..... including but not limited to signing and submission of all applications, proposals and other documents and writings, and providing information/ responses in all matters before the department, signing and execution of all contracts and undertakings/declarations consequent to acceptance of our proposal and generally dealing with the department in all matters in connection with or relating to or arising out of our proposal for the said assignment and/ or upon award thereof to us till the execution of appropriate Agreement/s with the department.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Authorized Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorized Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ....., THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ....DAY OF....., 2024

**For Bidder**

**Accepted by: -**

Person identified by me/ personally appeared before me/Attested/ Authenticated

**FORMAT FOR AFFIDAVIT TO BE UPLOADED BY BA ALONGWITH THE EOI DOCUMENTS**

*(To be executed in presence of Public Notary on non-judicial stamp paper of the value of Rs. 100/-.  
The paper has to be in the name of the BA) \*\**

I \_\_\_\_\_ (Name and designation)\*\* appointed as the attorney/ authorized signatory of the BA (including its constituents), M/s \_\_\_\_\_ (hereinafter called the BA) for the purpose of the EOI documents for the work of \_\_\_\_\_ as per the EOI No. \_\_\_\_\_ of (RailTel Corporation of India Limited), do hereby solemnly affirm and state on the behalf of the BA including its constituents as under:

1. I/we the BA (s), am/are signing this document after carefully reading the contents.
2. I/we the BA(s) also accept all the conditions of the EOI and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the EOI documents from RailTel website [www.railtelindia.com](http://www.railtelindia.com). I/we have verified the content of the document from the website and there is no addition, no deletion or no alternation to be content of the EOI document. In case of any discrepancy noticed at any stage i.e., evaluation of EOI, execution of work or final payment of the contract, the master copy available with the RailTel Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/we also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/we declare that the information and documents submitted along with the EOI by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/we undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of EOI, it shall lead to forfeiture of the EOI EMD besides banning of business for five years on entire RailTel. Further, I/we (insert name of the BA) \*\* and all my/our constituents understand that my/our constituents

understand that my/our offer shall be summarily rejected.

8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for five years on entire RailTel.

DEPONENT

SEAL AND SIGNATURE OF THE BA

VERIFICATION

I/We above named EOI do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT

SEAL AND SIGNATURE OF THE BA

Place:

Dated:

*NOTE: \*\*The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by BA. Attestation before Magistrate/Notary Public.*

## Integrity Pact

RailTel Corporation of India Limited, here in after referred to as “The Principal”.

and

.....,here in after referred to as “The Bidder/Contractor”

### 1. Preamble

The Principal intends toward, under laid down organizational procedures, contract/s for

.....The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s)and/or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

### 2. Section1-CommitmentsofthePrincipal

- a. The Principal commits itself to take all measures necessary to prevent corruptionand to observe the following principles:-
- b. No employee of the Principal, personally or through family members, willin connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- c. The Principal will during the tender process treat all Bidder(s) with equityand reason. The Principal will in particular, before and during the tenderprocess, provide to all Bidder(s) the same information and will notprovide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the processor the contract execution.
- d. The Principal will exclude from the process all known prejudiced persons.

If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

### 3. Section2-Commitments of the Bidder(s) /Contractor(s)

1The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a. The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contractor to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage during tender process or during the execution of the contract.
- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, sub mission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. TheBidder(s)/Contractor(s)willnotcommitanyoffenceundertherelevantIPC/ PCAct; further the Bidder(s)/ Contractors will not use improperly, forpurposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines
- e. On Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/ Contra ctor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers' as annexed and marked as Annexure-A.
- f. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

1. The Bidder(s)/Contractor(s) will not instigate third persons to commit offencesoutlined above or be an accessory to such offences.

#### **4. Section3: Disqualification from tender processand exclusion from future contracts**

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process & exclude him from future business dealingsas per the existing provisions of GFR,2017,PC ACT 1988) or take action as per the procedurementioned in the "Guidelines on Banning of business dealings" and any other Financial Rules/Guidelines applicable to the Principal. Copy of the "Guidelines on Banning of businessdealings" is annexed and marked as Annex-"B".

#### **Section 4: Compensation for Damages**

1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to be terminated the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

#### **5. Section 5: Previous Transgression**

1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anticorruption approach with any other public sector enterprise in India that could justify his exclusion from the tender process.
2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process for action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

#### **6. Section 6: Equal treatment of all Bidders / Contractors/ Subcontractors.**

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors assigned commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
2. The Principal Contractor shall take the responsibility of the adoption of IP by the subcontractors. It is to be ensured that all sub-contractors also sign the IP.
3. In case of a Joint Venture, all the partners of the Joint Venture should sign the Integrity pact.
4. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

#### **7. Section 7: Criminal charges against violation by Bidder(s) / Contractor(s) / Subcontractor(s)**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

#### **8. Section 8: Independent External Monitor/Monitors**

1. The Principal appoints competent & credible Independent External Monitors for this pact as nominated by the Central Vigilance Commission (CVC) Government of India, from the panel of IEMs maintained by it. The task of the Monitors is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, RailTel.
3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without

restriction to all project documentation of the Principal including that provided by the Contractor.

4. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
5. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

Note: However, the documents / records / information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.

6. For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process during execution of contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

The advice of the IEM panel is restricted to resolving issues raised by a bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders.

7. The panel of IEMs are expected to submit a joint written report to the CMD, RailTel within 30 days from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

8. Monitor shall be entitled to compensation on the same terms as being extended to/ provided to Independent Directors on the RailTel Board.

9. The IEMs would examine all complaints received by them and give their recommendations/views to the CMD, RailTel at the earliest. They may also send their report directly to the CVO in case of suspicion of serious irregularities requiring legal / administrative action. Only in case of very serious issue having a specific, verifiable vigilance angle, the matter should be reported directly to the Chief Vigilance Commission.

10. The word 'Monitor' would include both singular and plural.

11. In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms & conditions of the contract. However, not more than five meetings shall be held for a particular dispute resolution. The fees / expenses on dispute resolution shall be equally shared by both the parties.

## **9. Section 9: Pact Duration**

Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the completion of contract. After award of work, the IEMs shall look into any issue relating to execution of contract, if specifically raised before them. However, the IEMs may suggest systemic improvements to the

management of the organization concerned, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.

In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the contract has been awarded.

If any claim is made / lodged by either party during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by CMD of RailTel.

## 10. Section 10: Other Provisions

1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices need to be made in writing.
3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
4. Should one or several provisions of this agreement turnout to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. The parties signing the IP shall not approach the Courts while representing the matters to the IEMs and he/she will await the decision in the matter.
6. Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor
7. The Integrity pact shall be deemed to form a part of contract and parties shall be bound by it's provision.
8. Issues like warranty / guarantee etc. should be outside the purview of IEMs.

(For & on behalf of the Principal)  
Bidder/Contractor)(Office Seal)

(For & On behalf of  
(Office Seal)

Place—————

Date—————

Witness 1:

(Name & Address) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness 2:

(Name & Address) \_\_\_\_\_  
\_\_\_\_\_



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## **Annexure-A**

### **GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS**

- 1.0** There shall be compulsory registration of agents for all global (Open) Tender and Limited Tender. An agent who is not registered with RailTel Units shall apply for registration in the prescribed Application -Form.
- 1.1** Registered agents will file an authenticated Photo stat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/ retainer-ship being paid by the principal to the agent before the placement of order by RailTel.
- 1.2** Wherever the Indian representatives have communicated on behalf of the principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

**2.0 DISCLOSURE OF PARTICULARS OF AGENTS/REPRESENTATIVES IN INDIA, IF ANY.**

- 2.1** Tenderers of Foreign nationality shall furnish the following details in their offer:
- 2.1.1** The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
- 2.1.2** The amount of commission/ remuneration included in the quoted price(s) for such agents/representatives in India.
- 2.1.3** Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/representatives in India, may be paid by RAILTEL in Indian Rupees only.

- 2.2** Tenderers of Indian Nationality shall furnish the following details in their offers:

The name and address of the foreign principals indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.

- 2.2.1 The amount of commission /remuneration included in the price(s) quoted by the tenderer for himself.
- 2.2.2 ConfirmationoftheforeignprincipalsoftheTendererthatthecommission/remuneration, if any, reserved for the Tenderer in the quoted price(s), may be paid by RAILTEL in India in equivalent Indian Rupees on satisfactory completion of the Projector suppliesof Stores and Spares in case of operation items.
- 2.3 In either case,in the event of contract materializing, the terms of payment will provide for payment of the commission/ remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 Failuretofurnishcorrectanddetailedinformationascalledforinparagraph2.0above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by RAILTEL. Besides this there would be a penalty of banning business dealings with RAILTEL or damage or payment ofanamedsum.

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**GUIDELINES ON BANNING OF BUSINESS DEALINGS****CONTENTS**

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**1. Introduction**

1.1 RailTel Corporation of India Ltd (RAILTEL), being a Public Sector Enterprise, under the administrative control of the Ministry of Railways and therefore being an authority deemed to be 'the state' within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. RAILTEL has also to safeguard its commercial interests. RAILTEL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of RAILTEL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on RAILTEL to observe principles of natural justice before banning the business dealings with any Agency.

1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

**2. Scope**

2.1 The General Conditions of Contract (GCC) of RAILTEL generally provide that RAILTEL reserves its rights to remove from list of approved suppliers/ contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.

2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies/customers/ buyers, who indulge in lifting of material in unauthorized manner. If such a stipulation does not exist in any Sale Order, the same may be incorporated.

2.3 However, absence of such a clause does not in any way restrict the right of Company(RAILTEL) to take action/decision under these guidelines in appropriate cases.

2.4 The procedure of (i) Removal of Agency from the List of approved suppliers/contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.

2.5 These guidelines apply to Corporate Office, all Regions and Subsidiaries of RAILTEL.

2.6 It is clarified that these guidelines do not deal with the decision of the Management to avoid entertaining any particular Agency due to its poor / inadequate performance or for any other reason.

2.7 The banning shall be with prospective effect, i.e., future business dealings.

### **3. Definitions**

In these Guidelines, unless the context otherwise requires:

- i) 'Party/Contractor/Supplier/Purchaser/Customer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Party /Contractor / Supplier / Purchaser / Customer' in the context of these guidelines is indicated as 'Agency'.
- ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
  - a) If one is a subsidiary of the other;
  - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
  - c) If management is common;
  - d) If one owns or controls the other in any manner;
- iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
  - a) For Company (entire RAILTEL) wide Banning: The Director shall be the 'Competent Authority' for the purpose of these guidelines. CMD, RAILTEL shall be the

‘Appellate Authority’ in respect of such cases except banning of business dealings with Foreign Suppliers of imported items.

- b) For banning of business dealings with Foreign Suppliers of imported items, RAILTEL Directors Committee (RDC) shall be the ‘Competent Authority’. The Appeal against the Order passed by RDC, shall lie with CMD, as First Appellate Authority.
  - c) In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach Railway Board as Second Appellate Authority.
  - d) For RailTel Regions only: Any officer not below the rank of General Manager appointed or nominated by the Executive Director of concerned Region shall be the ‘Competent Authority’ for the purpose of these guidelines. The Executive Director of the concerned Region shall be the ‘Appellate Authority’ in all such cases.
  - e) For Corporate Office only: For procurement of items / award of contracts, to meet the requirement of Corporate Office only, Concerned Group General Manager / General Manager shall be the ‘Competent Authority’ and concerned Director shall be the ‘Appellate Authority’.
  - f) CMD, RAILTEL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- iv) ‘Investigating Department’ shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- v) ‘List of approved Agencies - Parties / Contractors / Suppliers/ Purchaser/Customers’ shall mean and include list of approved /registered Agencies -Parties/Contractors/Suppliers/Purchasers /Customers, etc.

#### **4. Initiation of Banning/Suspension**

Action for banning / suspension of business dealings with any Agency should be initiated by the department having business dealings with them after noticing their regularities or misconduct on their part. Besides the concerned department, Vigilance Department of each Region / Unit / Corporate Office may also be competent to initiate such action.

#### **5. Suspension of Business Dealings**

5.1 If the conduct of any Agency dealing with RAILTEL is under investigation by any department (except Foreign Suppliers of imported items), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after

consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.

5.2 The order of suspension shall be communicated to all the departmental heads within the unit/region/Corporate Office as the case may be. During the period of suspension, no business dealing may be held with the agency.

As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.

5.3 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of RAILTEL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may send his recommendation to Chief Vigilance Officer (CVO), RAILTEL Corporate Office along with the material available. If Corporate Office considers that depending upon the gravity of the misconduct, it would not be desirable for all the units/ regions of RAILTEL to have any dealings with the Agency concerned, an order suspending business dealings may be issued to all the units/ Regions / Corporate Office by the Competent Authority of the Corporate Office, copy of which may be endorsed to the Agency and all concerned. Such an order would operate for a period of six months from the date of issue.

5.4 For suspension of business dealings with Foreign Suppliers of imported items, following shall be the procedure:

- i) Suspension of the foreign suppliers shall apply throughout the Company/Regions including Subsidiaries.
- ii) Based on the complaint forwarded by ED / GGM / GM or received directly by Corporate Vigilance, if gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of RAILTEL to continue to deal with such agency, pending investigation, Corporate Vigilance may send such recommendation on the matter to Executive Director / GGM / GM, to place it before a Committee consisting of the following:
  1. ED/GGM/GM (viz. Representative of Corporate Finance).
  2. ED/GGM/GM (viz. Representative of Department concerned with procurement of imported items)-Convener of the Committee.
  3. ED/GGM/GM (to be nominated on case to case basis).
  4. ED/GGM/GM (viz. Representative of Corporate Law).

The committee shall expeditiously examine the report and give its comments /recommendations within twenty one days of receipt of the reference by ED/GGM/GM.

iii) The comments / recommendations of the Committee shall then be placed by ED/GGM/GM, before RAILTEL Directors' Committee (RDC) constituted for import of items. If RDC opines that it is a fit case for suspension, RDC may pass necessary orders which shall be communicated to the foreign supplier by the ED/GGM/GM.

5.5 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.

5.6 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

## **6. Ground on which Banning of Business Dealings can be initiated**

6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;

6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or RAILTEL, during the last five years;

6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;

6.4 If the Agency continuously refuses to return / refund the dues of RAILTEL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;

6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;

6.6 If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;

6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts;

6.8 If the Agency uses intimidation/ threatening or brings undue outside pressure on the Company (RAILTEL) or its official in acceptance/ performances of the job under the contract;

6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;

6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by Company(RAILTEL) or not;

Based on the findings of title investigation report of CBI / Police against the Agency for malafide / unlawful acts or improper conduct on his part in matters relating to the Company (RAILTEL) or even otherwise;

6.11 Established litigant nature of the Agency to derive undue benefit;

6.12 Continued poor performance of the Agency in several contracts;

6.13 If the Agency misuses the premises or facilities of the Company (RAILTEL), forcefully occupies tampers or damages the Company's properties including land, water resources, etc.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

## **7. Banning of Business Dealings**

7.1 Normally, a decision to ban business dealings with any Agency should apply throughout the Company including subsidiaries. However, the Competent Authority of the Region/ Unit except Corporate Office can impose such ban Region-wise only if in the particular case banning of business dealings by respective Region/ Unit will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of themisconduct/default to beyond the Region/ Unit. Any ban imposed by Corporate Office shall be applicable across all Regions/Units of the Company including Subsidiaries.

7.2 For Company-wide banning, the proposal should be sent by ED of the Region/ Unit to the CVO/RailTel setting out the facts of the case and the justification of the action proposed along with all the relevant papers and documents except for banging of business dealings with Foreign Suppliers of imported items.

The Corporate Vigilance shall process the proposal of the concerned Region/ Unit foraprima- facie view in the matter by the Competent Authority nominated for Company-wide banning.

The CVO shall get feedback about that agency from all other Regions/ Units. Based on this feedback, a prima-facie decision for banning / or otherwise shall be taken by the Competent Authority.

If the prima-facie decision for Company-wide banning has been taken, the Corporate Vigilance shall issue a show-cause notice to the agency conveying why it should not be banned throughout RAILTEL.

After considering the reply of the Agency and other circumstances and facts of the case, a final decision for Company-wide banning shall be taken by the competent Authority.



7.3 There will be a Standing Committee in each Region/ Unit to be appointed by Chief Executive Officer for processing the cases of "Banning of Business Dealings" except for banning of business dealings with foreign suppliers. However, for procurement of items/ award of contracts, to meet the requirement of Corporate Office only, the committee shall be consisting of General Manager/ Dy. General Manager each from Operations, Finance, Law & Project. Member from Project shall be the convener of the committee. The functions of the committee shall, inter-alia include:

- i) To study the report of the investigating Agency and decide if a prima-facie case for Company-wide/Region wise banning exists, if not, send back the case to the Competent Authority.
- ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
- iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
- iv) To submit final recommendation to the Competent Authority for banning or otherwise.

7.4 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show- cause notice may be issued to the Agency and an enquiry held accordingly.

7.5 Procedure for Banning of Business Dealings with Foreign Suppliers of imported items.

- i) Banning of the agencies, shall apply throughout the Company including subsidiaries.
- ii) Based on the complaint forwarded by Executive Director or received directly by Corporate Vigilance, an investigation shall be carried out by Corporate Vigilance. After investigation, depending upon the gravity of the misconduct, Corporate Vigilance may send their report to Executive Director/ GGM/ GM, to be placed before a Committee consisting of the following:
  - 1. ED/GGM/GM (viz. Representative of Corporate Finance).
  - 2. ED/GGM/GM (viz. Representative of Department concerned with procurement of imported items) –Convener of the Committee.
  - 3. ED/GGM/GM (to be nominated on case to case basis).
  - 4. ED/GGM/GM (viz. Representative of Corporate Law).

The Committee shall examine the report and give its comments/ recommendations within 21 days of receipt of the reference by ED.

- iii) The comments/recommendations of the Committee shall be placed by ED/ GGM/GM before RAILTEL Directors' Committee (RDC) constituted for import of foreign items. If RDC opines that it is a fit case for initiating banning action, it will direct ED/GGM/GM to issue show-cause notice to the agency for replying within a reasonable

period.

- iv) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by ED to RDC for consideration & decision.
- v) The decision of the RDC shall be communicated to the agency by ED/GGM/GM concerned.

## **8. Removal from List of Approved Agencies–Suppliers/Contractors, etc.**

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies-Suppliers/Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE (Limited Tender Enquiry) may not be given to the Agency concerned.
- 8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

## **9. Show-cause Notice**

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of RAILTEL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass all appropriate speaking order:
  - a) For exonerating the Agency if the charges are not established.
  - b) For removing the Agency from the list of approved Suppliers/Contractors, etc.
  - c) For banning the business dealing with the Agency.
- 9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

## **10. Appeal against the Decision of the Competent Authority**

- 10.1 The agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.
- 10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

## **11. Review of the Decision by the Competent Authority**

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Chief Executive / Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Chief Executive / Competent Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

## **12. Circulation of the names of Agencies with whom Business Dealings have been banned**

- 12.1 Depending upon the gravity of misconduct established, the Competent Authority of the Corporate Office may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.
- 12.2 If Government Departments or a Public Sector Enterprise requests for more information about the Agency with whom business dealings have been banned, a copy of the report of the Inquiring authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.
- 12.3 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, RAILTEL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its interconnected Agencies.
- 12.4 Based on the above, Regions / Units may formulate their own procedure for implementation of the guidelines.

The following eminent personalities have been appointed as Independent External Monitors (IEMs) by RailTel for effective implementation & monitoring of Integrity Pact:

<b>Name</b>	<b>Contact</b>
Shri. Vinit Kumar Jayaswal	Add: E-34, Brahma Apartments, Plot-7, Sector-7, Dwarka, New Delhi-110075. E-Mail: <a href="mailto:gkvinit@gmail.com">gkvinit@gmail.com</a> M.No. +91-9871893484
Shri. Punati Sridhar	Add: 8C, Block 4, 14-C Cross, MCHS Colony, HSR 6th Sector, Bangaluru560102. E-Mail: <a href="mailto:poonatis@gmail.com">poonatis@gmail.com</a> M.No. +91-9448105097

Date:.....2025

**Tender Document of Customer is attached along with EOI**

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**QUOTES ARE TO BE DROPPED IN TENDER BOX / SENT BY POST**

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**Request for Proposal (RFP) No Air HQ/S 19452/58/DMMI Dated 20 Aug 25**

**INVITATION OF BIDS FOR PROCUREMENT IACCS PORT MOUT NODE  
INFRASTRUCTURE, NEW OPS COMPLEXES, COMMUNICATION LINES/  
RECORDING AND SECURE NETWORK GATEWAY WITH ACCESSORIES FOR  
IACCS INTEGRATION (LTE BASIS UNDER TWO BID SYSTEM)**

1. Offline Bids in sealed cover under ‘**LTE basis under two bid system**’ are invited by **Directorate of Procurement, Tender Enquiry Cell** and on behalf of the President of India for procurement of items listed in **Appendix ‘A’** of this RFP. The address and contact numbers for sending physical documents as explicitly asked for in this RFP are given below: -

- (a) Bids/queries to be addressed to: - Directorate of Procurement  
Tender Enquiry Cell  
Air HQ (Vayu Bhawan) Rafi Marg,  
New Delhi- 110106
- (b) Postal address for sending the Bids:- As per 1 (a) above
- (c) Name/designation of the contact personnel:
  - (i) **For Commercial Issues: -**  
Gp Capt Proc TE Cell (I&W)/Gp Capt Procurement TE Cell  
Contact Nos: 011-23060054, 011 -23010231, 23060231 Extn -5769  
Fax No: 011 -23017664. e-Mail: info.282@gov.in
  - (ii) **For Technical issues: -**  
Gp Capt Ops MMI, Contact No:- 011-25695632, Extn-6710  
Fax No: - 011-25684220, e-mail: - [sixth.eye@gov.in](mailto:sixth.eye@gov.in)

2. **General information about the bid:**

- (a) Tender Reference No. AIRHQ/S 19451/46/DMMI PC (1)
- (b) **Last date and time for receipt of tender** - **04 Sep 25 / 11.30 Hr**
- (c) **Time and date for opening of technical bid** - **04 Sep 25/ 11.30 Hr**
- (d) **Time and date for opening of Commercial bid-** Commercial bids will be opened after approval of technical bids, date and time of opening will be intimated later

- (e) **Place of opening of tenders:** Tender opening room (Near reception)  
Air Headquarters (Vayu Bhawan),  
Rafi Marg, New Delhi-110106.

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. This Tender shall comply with the “Public Procurement (Preference to Make in India) Order, 2017” Implementation of the revised Public Procurement (Preference to Make in India) order 2017 and amended **vide letter No P-45021/2/2017-PP(BE-II) dated 19 Jul 24** issued by DIPP; and “Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012” **as amended vide letter No. PP-7(4)/2007-Fin dated 14 Nov 2018** issued by MoSME and **amended vide S.O. 5745(E) dated 08 Dec 22** up to the hosting of the RFP.

6. This RFP shall be governed by the India laws, both substantive and procedural, for the time being in force and shall be subject to the exclusive jurisdiction of Delhi Courts in India.

7. All prices are to be quoted in Indian Rupees (INR) only. Bids received in any other currency shall be rejected. Any price variation clause based on currency fluctuation shall also be unacceptable and bid will be rejected.

8. Other standard terms and conditions applicable to this RFP are given in Part ‘I’ to ‘V’ of this RFP. These terms & conditions would be part of the contract, same are to be signed and uploaded along with the offer as having accepted the terms and conditions of the RFP (Non-acceptance of these terms and conditions would render your bids invalid). In case of violation against Pre-Integrity Pact, the buyer may penalize the defaulting firm by de-registration, removal from the list of approval firm, ban on dealing and finally backlisting in addition to action mentioned at Para 14 (g) of Part III of RFP.

9. Please acknowledge the receipt of this RFP to e-mail ID **info.282@gov.in and sixth.eye@gov.in** with agreement on Tender submission date.

10. **Please note that ToD would not be extended after lapse of bid submission end date.**

Yours faithfully,

Sd/-  
(B Biswas)  
Gp Capt  
Gp Capt Proc (I & W)  
For and on behalf of the President of India



## Part-I

### GENERAL INFORMATION

1. **Last date and time for depositing the Bid 04 Sep 25 / 11.30 Hr (IST).**

(Date to be mentioned in terms of DD MM YEAR) The sealed Bid should be deposited/reach by the due date and time. The responsibility to ensure this lies with the Bidder.

2. **Manner of depositing the Bid.** Quotations along with Ink-signed Pre Integrity Pact and EMD (if applicable) addressed to **ACAS Procurement** should be submitted as per the details given below: -

(a) Bids in separate envelopes, sealed and marked as **“TECHNICAL BID AND COMMERCIAL BID FOR PROCUREMENT OF IACCS PORT MOUT NODE INFRASTRUCTURE, NEW OPS COMPLEXES, COMMUNICATION LINES/ RECORDING AND SECURE NETWORK GATEWAY (ie UTM) ON LTE BASIS UNDER TWO BID SYSTEM”** to be sealed in a larger envelope and marked as **“BIDS FOR PROCUREMENT OF IACCS PORT MOUT NODE INFRASTRUCTURE, NEW OPS COMPLEXES, COMMUNICATION LINES/ RECORDING AND SECURE NETWORK GATEWAY (ie UTM)”** and dropped in the **Tender Box No.-2, ACAS (Procurement), kept near reception at Air HQ (Vayu Bhawan) Rafi Marg, New Delhi -110106.**

(b) **Bids in sealed envelopes may also be forwarded by Speed post/ Registered post / Courier so as reach by due date and time.**

(c) **Late bids will not (R) will not be accepted.**

(d) It will be the sole responsibility of the bidder to ensure timely submission of bids. This HQs will not take responsibility of bids submitted late or received late due to postal delays.

(e) **Technical bid should contain the following: -**

(i) EMD in a separate envelope marked as EMD as per the details given in Para 13, Part I.

(ii) Cover containing PIP marked as, “PIP for Procurement of IACCS Port Mout Node Infrastructure, New Ops Complexes, Communication Lines/ Recording and Secure Network Gateway (ie UTM).

(iii) Cover containing technical documents and technical compliance matrix marked as, “Technical documents for Procurement of IACCS Port Mout Node Infrastructure, New Ops Complexes, Communication Lines/ Recording and Secure Network Gateway (ie UTM). Bidders are required to furnish clause by clause compliance of specification along with technical bid, bringing out clearly the deviations from specification, if any as per Technical Compliance Matrix placed at **Annexure ‘II’**.

(f) **Commercial bid should contain only commercial offer.**

(g) Complete RFP along with all Appendices are to be signed as "Accepted" and submitted along with the technical bid. In case of any deviation it should be indicated clearly.

(h) PAN No, GST/Registration (hard copy).

(j) Summary of standard terms and conditions. The bidder shall certify for acceptance of all the Technical and Commercial conditions of the RFP as per **Appendix 'A'**.

(k) **Location of the tender box.** **Tender Box marked as Tender Box No.-2, ACAS (Procurement) is kept near reception at Air HQ (Vayu Bhawan) Rafi Marg, New Delhi -110106.**

3. **Forwarding of Bid.** Bid should be forwarded by Bidders under their original memo / letter pad giving their complete current postal and e-mail address, contact and FAX numbers of their office. Bidder's in addition to stating in their offer the correct legal communication address on which the Supply Order / contract is to be placed and dispatched, are also to give the details of their Bankers with IFSC code and Account Number.

4. **Opening of Bids.** The Technical Bids would be opened on the time and date mentioned above. Date of opening of the Commercial Bid will be intimated after acceptance of the Technical Bids. Commercial Bids of only those firms will be opened, whose Technical Bids are found compliant/ suitable after Technical evaluation is done by the Buyer.

(a) **Time and date for opening of technical bid** - **04 Sep 25/ 11:30 Hr**

(b) **Time and date for opening of Commercial bid-** **Commercial bids will be opened after approval of technical bids, date and time of opening will be intimated later.**

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

5. **Vendor Profile.** The Vendor is required to physically submit the documents in Tender box and also upload the same online along with Commercial bid (BoQ). **Submission of following documents along with bid online is mandatory: -**

(a) The vendor should not have been blacklisted by any of the offices of Central or State Govt. or any of its customers. **Self-attested certificate to be attached.**

(b) No legal action should have been taken against the vendor for any cause in any legal jurisdiction in the last five years. **Self-attested certificate to be attached.**

6. **Opening and Verification of Documents.** The physical verification of the specified documents as asked for in physical form in the RFP will be done at the reception of **Air HQ (Vayu Bhawan), Dte of Procurement, Rafi Marg, New Delhi -110106** on the day of on line opening of the technical bids. The Bidders may depute their representatives, duly authorized in writing, to attend the event on the due date and time.

7. **Opening of Two Bid System.**

(a) The Technical Bid shall be opened as per date mentioned in this tender document. The evaluation of Technical Bid along-with requisite documents received in physical form as well as documents uploaded online by the tenderer will be carried out off-line by the **Technical Evaluation Committee (TEC) Members**.

(b) The Commercial Bids of the firms which clear the technical evaluation would be opened.

8. **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 about the clarifications sought not later than **07 days** prior to the date of **opening** of the Bids. Copies of the query and clarification by the purchaser will be uploaded as corrigendum for all prospective bidders.

9. **Modification and Withdrawal of Bids.** A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Buyer **prior to deadline prescribed for submission of bids**. A withdrawal notice may be sent by FAX but it should be followed by an ink signed confirmation copy to be sent by post and such signed confirmation should reach the purchaser not later than the deadline for submission of bids. **No bid shall be modified** after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in forfeiture of bid security and / or ban on issuance of further RFPs as per the decision of Competent Authority.

10. **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.

11. **Validity of Bids.** The Bids should remain valid for **180 days** from the date of opening of tenders.

12. **Earnest Money Deposit.** Bidders are required to submit Earnest Money Deposit (EMD) for amount of **Rs. 2.40 Crs (Rupees Two Crores Forty Lakhs only)**/- along with their commercial bids. The EMD may be submitted 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 five years beyond the final bid validity period. EMD of unsuccessful bidders will be returned to them at the earliest after expiry of final bid validity and latest on or before the 30<sup>th</sup> day after the award of 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 Organisation (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 withdrawals or amends impairs or derogates from the tender in any respect within the validity period of their tender.

## PART-II

### ESSENTIAL DETAILS OF ITEMS/SERVICES REQUIRED

1. **Schedule of Requirements.** List of items/services required is appended below: -

Ser No.	Denomination of Items / Services	Unit	Qty
<b>1</b>	<b>IACCS Port Mout Infrastructure (Turnkey Execution) Network connectivity and other critical equipment with necessary Infrastructure</b>		
(a)	EMI/EMC and Fire Protection Shell fitted with following :-	Ea	1
(b)	Precision Air Conditioning	Ea	3
(c)	Earthing, Lightening Arrestors, Cabling & Cable Trays	Set	1
(d)	42U 19' Racks with PDU	Ea	7
(e)	Fire Detection and Supression System	Set	1
(f)	Surge Protection	Set	1
(g)	CCTV Monitoring with min 06 Cameras	Set	1
(h)	Raised Flooring	Set	1
(j)	UPS with Battery Bank & Distribution Box - 15 KVA	Ea	2
(k)	DC Power Supply N+1 Redundancy (16 KW SMPS without Bateery Bank)	Ea	4
(l)	SMPS Battery Bank	Ea	4
(m)	Electrical Cabling, PDP, AMF Panel	Set	1
(n)	FDF, HD-FDF, RJ-45 Jack Panel, OFC Raceway, Tray, Fiber Patch Cords, UTP Patch Cords etc.	Set	1
(o)	OFC Laying	Km	10
(p)	DG Sets 125 KVA	Ea	2
<b>2.</b>	<b>Secure Network Gateways &amp; Accessories</b>		
(a)	Secure Network Gateway Appliance	Ea	500
(b)	CMS for Secure Network Gateway	Ea	2
(c)	Analyser for Secure Network Gateway	Set	1
<b>3.</b>	<b>Accessories for Network Connectivity</b>		
(a)	19" 15U Wall Mountable Rack	Ea	500
(b)	1KVA UPS with Battery	Ea	500
(c)	Fiber Distribution Frame (12 Port)	Ea	500
(d)	LC-LC Fiber Patch Cords	Ea	500
(e)	RJ-45 Patch Panel with UTP Patch Cord	Ea	500
(f)	Console Server (8 Serial Port)	Ea	120
(g)	Console Server (32 Serial Port)	Ea	40
<b>4.</b>	<b>Phones and Recording Solution</b>		
(a)	CU IP Phone 2 Line	Ea	495
(b)	CU IP Phone 5/6 Line	Ea	495
(c)	IP Phone (15 Line)	Ea	385
(d)	Call Recording Solution Licenses (1500)	Ea	1

Signature of seller

Sd/-  
Signature of Buyer

## 2. **Scope of Work**

### (a) **General**

- (i) Position a Single Point of Contact (SPOC) for contract execution
- (ii) Bidder shall be responsible for meeting all technical specifications as per Annexure II
- (iii) Supply/Integration/Design of the equipment/system is to be undertaken by the OEM or its authorised channel partner. An authorisation letter from the OEM needs to be submitted in the Technical Proposal by the Bidder
- (iv) Bidder shall be responsible for coordination with the OEM for all matters related to the equipment supplied
- (v) Bidder shall submit design documents (HLD, LLD and other documents as per OEM process) to Buyer after vetting and approval by OEM. Design documents involving Buyer specific data shall be prepared at Buyer designated site in consultation with Buyer specified agency. Buyer specific data shall not leave Buyer premises
- (vi) Bidder shall provide OEM technical manuals accompanying the products supplied.
- (vii) Bidder shall submit a well-defined Acceptance Test Plans (ATPs) which shall be approved by the Buyer for conduct of Site Acceptance Test (SAT).
- (viii) Bidder shall provide support for verification, testing and commissioning as per the ATPs.
- (ix) Bidder shall provide training with appropriate training manuals and documents and submit the same documents to Buyer for future use.
- (x) All licenses/subscriptions shall be in the name of the Buyer. The licenses/subscriptions for all equipment/product shall remain valid for three years from the date of completion of SAT. Deployment period shall not be considered for the support purpose. Bidder has to take into account such delays while purchasing the warranty packs from the OEM.
- (xi) Bidder shall provide OEM Warranty documents of all products supplied. Options for warranty services like free product upgrades etc. that may be offered during the warranty period by the OEM shall also be made available to the Buyer

### (b) **TurnKey Component**

- (i) All materials required for the installation are to be supplied so that the installation process is smooth. Any component or assemblies, sub systems found defective during installation are to be replaced immediately without any delay.
- (ii) Supply, installation and commissioning of DG Sets with all necessary technical systems along with enclosures.

(c) **Secure Network Gateway**

(i) Bidder shall provide complete SOP (standard operating procedure) document before sign off of the complete project. SOP shall cover all steps for installation of the product and troubleshooting steps for maintain the product. SOP document shall include basic steps to create any policy/rules, to take backup, to restore, to configure reports etc. The SOPs shall be provided in hard bind copy (3 Nos) and soft copy.

(ii) Video tutorials for complex solutions/configurations as mutually identified by the BUYER and SELLER shall be provided

(d) **Hardware**

(i) Any storage disk/media in any of the solution will be retained by BUYER in case of un-serviceability of hardware or RMA or change of any device. In any case, no storage disk/media will be handed over back to OEM/ SELLER after it is delivered to BUYER once.

(ii) There must be unconditional warranty support for any disk/ drives/ item for two years after the start of warranty, which itself will start only after completion of comprehensive Acceptance Test.

(iii) All hardware / servers / appliances supplied as part of solution must be 19" rack mountable and must adhere to space conserving design. All required hardware sizing including OEM recommended compute and storage for optimal performance of solution is to be provided by SELLER.

(iv) In case any RFC or IEEE or standard mentioned in the document is superseded or declared obsolete, solution/equipment must support equivalent or better standard applicable at the time of tendering or project execution.

(e) **Software Management**

(i) The contract includes software of two types. One is the software that comes as part of solution and the second is the software that is part of deliverables which is required to be provided by the SELLER, to implement it in a manner in which it is desired. Both these types of software would be managed differently by the SELLER as per best industry practices.

(ii) For all software, the SELLER will provide any firmware/software upgradation free of cost for all device/applications/services provided under this contract, whenever new version is released for the devices/service/solution during support & service period. All essential patch/signature/ software will be provided by the SELLER for complete project life cycle including AMC i.e. active support & service period. SELLER will also provide a user account for OEM customer portal to have access to download latest firmware/signature update, to check the inventory status and access to knowledge/technology repository of the OEM. This account should also have the support to raise Technical Assistance cases with OEM by BUYER team. The details of the account will be shared to the successful bidder during the finalization of the ATP.

(iii) SELLER will be responsible for version management of each type of software on IT asset management application during the project implementation stage. Thereafter SELLER will gracefully integrate the version management software to the BUYER's IT Enterprise Management software.

(iv) User accounts will be created for BUYER, at central services portal of the OEMs, in case user account does not exist. All support services from OEM will directly transferred to BUYER and will be linked and visible to BUYER user account to ensure transparent online visibility iro all hardware inventory, software licensing, products support, type of service support and duration of support. SELLER will ensure all support & licenses from OEM are directly contracted in the name of BUYER and all supports, services, premium support services from OEM are directly provided to BUYER. **Licensing and support services will not (R) not be in the name of vendor or sub-vendor and will be directly delivered to BUYER. Prerequisite for issuing Acceptance Test certificate to SELLER will be capturing and listing of all hardware inventory, software licensing, products support, type of service support and duration of support as part of contract on BUYER account.**

(v) The project scope also envisages certain software which would be part of deliverables only. These software licenses should be directly handed over to the BUYER at the time of delivery of stores. These licenses would be deployed at the discretion of the BUYER. Some of these licenses may also be used as part of the project and in all cases the OEM through the SELLER would provide all support as envisaged as part of the product.

(vi) **All licenses provided as part of contract should be available for offline activation.**

(f) **Pre Installation Work**

(i) Installation, commissioning and migration process will start after the delivery date. The OEM team in consultation with the SELLER and the BUYER, will prepare the architecture and implementation plan for all software, services, solutions and infrastructures as in tendered documents. In order to achieve this, the SELLER will be responsible to arrange **Technical Support Cell (TSC)** onsite at BUYER's premises. The SELLER may include the OEM professional team as part of the TSC till completion of the project. The SELLER will commence installation of the infrastructures, software, services, and configuration as soon as the delivery is completed.

(ii) SELLER in consultation with BUYER and OEM will prepare a migration plan and implementation plan. Thereafter, OEM and SELLER shall create an effective system & solution implementation & migration plan for hardware/software as part of RFP, containing both concurrent and sequential plans, including proposed sample configurations, a strategy for migration to the new infrastructure & services and a comprehensive acceptance test plan. SELLER must understand that the BUYER may have to obtain approval of higher management functions during migration and implementation phase in which zero down at redundant infrastructure location and minimum acceptable disruptions in services only at non redundant infrastructure location. The SELLER and OEM must cater to time delays due to this. The plans should help in following: -

- (iii) Ensuring that implementation plan is as thorough as it needs to be.
- (iv) Meeting aggressive deployment schedules.
- (v) Minimizing disruption to the existing network & services.
- (vi) Reducing the need for expensive, time-consuming rework at a later date.
- (vii) Activities & Deliverables.
- (viii) Creation of proposed sample configurations.
- (ix) Team with OEM engineers to develop the Ready-For-Migrate plan
- (x) Team with OEM engineers to develop the Ops application infrastructure solution/services staging plan, which typically includes:
- (xi) Physical and logical configuration
- (xii) Migration Methodology.
- (xiii) Acceptance criteria.
- (xiv) Site-specific installation tasks and checklists
- (xv) Documentation of configuration and migration activities.
- (xvi) Site-specific configuration information.
- (xvii) Guidelines for the implementation.
- (xviii) Installation and site commissioning tests.
- (xix) The pre-installation work will be undertaken within BUYER's premises only. It will be the responsibility of the SELLER that no data specific to BUYERs location details vis-à-vis equipment distribution will be taken out of BUYER's premises as well as out of BUYERs communication network and transferred on the internet. BUYER will provide office space for SELLER and OEM representatives in its premises after signing of the contract.

(g) **Installation and Commissioning**

- (i) The SELLER is to ensure installation and commissioning of the procured hardware & software under the scope of contract. The software would be installed on the hardware to meet the intended functions requirements as outlined in the SoR and in compliance with Technical specifications.
- (ii) It is mandatory for the SELLER to adhere to the technical specifications while executing the scope of work. In the events of ambiguity in Scope of Work and SoR, Technical Specifications at **Annexure II** will always take precedence. Any variation in the specifications would be discussed with the BUYER and accordingly resolved as per the requirement provided by the BUYER.



(iii) **Adequacy** Any additional items, hardware, software, licenses and accessories part of equipment etc. not specifically asked by the BUYER but essential to achieve 100% functionality as given in this tender, shall be supplied by the OEM and SELLER at no additional cost. The software licenses provided as part of the Contract has to be perpetual licenses, in case if any OEM license model does not have perpetual and it supports only subscription based licenses the functionality of the application not to be affected for a period of 07 years of total support. The SELLER shall hence ensure that all items required to meet complete operational and functional requirements of the all services/ solutions of the project are included as part of the technical and commercial bid. In case, the same is discovered during implementation, the SELLER shall provide the same to the BUYER at no additional cost.

(h) **Pre-Requisites & Documentation**

(i) **Documentation.** At the end of the installation and commissioning stage, following list of documents must have been delivered by the SELLER:-

(aa) Three copies of all ATP, design architecture and Implementation Plan for each category of the solution delivered, to the Project Management Team.

(ab) Documentation of firmware/software/ version recommended for each device.

(ac) Suggested best operations and safety practices.

(ad) Details of the versions of all the software licenses along with their validity and procedure for offline activation.

(ii) The complete set of documentations including above listed one and technical documents of all the active and passive equipment shall be made available in softcopies and the same shall be hosted from central web based online access. Necessary system for the same shall be provisioned by the SELLER.

(j) **Sellers' Obligation**

(i) SELLER will arrange Technical Support Cell onsite at BUYER location during implementation, commissioning, and Acceptance test period.

(ii) The SELLER will be responsible for **delivery of hardware/software to consignee address and help in preparation of architecture, Installation, integration, migration (if any), commissioning.** SELLER will also be responsible for installation of all IT infrastructure with associated systems, licensed/supported software used in environment as part of contract.

(iii) The Seller will be responsible for engaging **Technical Support Cell (TSC)** for preparation implementation plan for all services, solutions and infrastructures in consultation with the Buyers Project Management Team. The architecture will cover configuration details, DC-DR plan, security policies planned to be deployed, seamless integration of software, services, solutions and infrastructures and other required information.

SELLER will commence installation, configuration and commissioning of the all software, services, solutions and infrastructures immediately on completion of deliveries.

(iv) The project will be implemented in multiple phases for **easy migration coupled with minimal risk and minimum downtime for existing services**. The details for each phase will be worked out by the TSC in coordination with the Project Management Team. All hardware and software will be first shipped directly to their respective installation locations of Buyer as per consignee list (To be shared post signing of Non-Disclosure Agreement (NDA) and Contract). For this shipment, SELLER will take care of insurance, freight and other associated charges. At the installation locations, these items will be inspected jointly by BUYER team and the SELLER. After inspection, software specific to each device as recommended by the OEM team will be undertaken by the SELLER and initial configuration will be undertaken by OEM professional team only.

(k) **Installation of Hardened and Secure Shell.** SELLER will be responsible for installation and commissioning of Harden and Secure Shell at Port Mout as a turnkey project which also includes interoperability and integration of newly installed AFNET network equipment with IACCS system at site. **Seller will also responsible for supply and installation of AFNET equipment with IACCS system inside network room and will be provision all Buyer Nominated Equipment (BNE) required and compatible with IACCS system and infrastructure installed at site. Necessary BNE items list along with scope of work for IACCS system and infrastructure shall be obtained by Seller from IACCS system OEM/ vendor.** All the integration requirements like sharing of required APIs and interaction with team of IACCS system OEM/vendor will be the responsibility of SELLER.

(i) SELLER will help in preparation of architecture, installation, integration, commissioning and support for the IT infrastructure solution/services. The details of individual solutions are as follows: -

(ii) SELLER will be responsible for supply, delivery, installation and commissioning of deliverables at earmarked sites along with associated systems and all required supporting software. The SELLER responsibility would also include implementation of these solution and other services as brought out in the scope of work finalized as per customer requirement worked out between the TSC and Project Management Team. In case any solution is deployed in High Availability Mode spread across two geographically separated Datacenter/ Sites then both sites will be considered as one e.g. Central Management solution, for OEM professional service team responsibility.

(iii) The Seller will commence installation of these solutions at BUYER premises. No (R) No design document will be shared between OEM, SELLER and BUYER over internet email however products datasheet and other documents can be shared over email or internet which are available in public domain over internet.

(iv) **Media and Environment.** SELLER will carry out necessary structured optical and copper wiring as per the TIA standards to extend trunks from the DDF/FDF to these devices. The environmental infrastructure required for installation of these devices would be provisioned by the

BUYER.

(v) The SELLER will assist BUYER for operation & management for these solutions during the first year of warranty period. During this period, OEM professional services team will be made available by the SELLER to assist the BUYER personnel in understanding and managing the System. OEM professional services team will also oversee implementation of best management practices and processes. During this period smooth transfer of the control from the OEM to BUYER will be carried out.

(l) **Training Scope.** The SELLER shall provide training to BUYER's personnel on installation, operation, testing, maintenance of systems and software pertaining to the equipment and technology supplied. The quality and content of the training shall be so designed that the BUYERs personnel will be sufficiently exposed to all aspects of planning. Engineering, installation, configuration, testing, operations and troubleshooting etc. of the product solutions and services supplied as part of the SoR. The training shall also cover necessary hardware and software architecture details. The training modules and their duration shall be finalized by the SELLER in consultation with the BUYER. Detailed training material shall also be supplied by the SELLER to enable BUYER to train more number of personnel independently. All the expenses related to travel, boarding and lodging etc. of BUYER personnel will be borne by the BUYER.

(i) Training will be conducted for BUYER's personnel by OEM or OEM certified trainers. The training will be conducted separately for each system or solution. Training will be in two parts: Class room theory classes and hands on practical training on the equipment/services. For the classroom training, SELLER would provide necessary technical literature and quality training material in hard and soft copies. These materials will be used by the BUYER to conduct future training to its personnel.

(ii) Class room training will consist of the following: -

(aa) **Part I (Technology).** This part of training would impart knowledge on hardware, software, architecture, associated technology, best practices etc. for services/solutions supplied in separated sessions for solutions/systems.

(ab) **Part 2 (Operations and Management).** This part of training should cover detailed system overview and system/solutions description, operation and maintenance of solutions/services and other hardware supplied. After the training period, trainee should be confident enough to configure/reconfigure the respective elements and carry out troubleshooting.

(ac) **Part 3 (Maintenance and troubleshooting of the Solution).** This part of training should cover the principle of maintenance and troubleshooting aspects of all the hardware and software solutions procured as part of the contract. Trainees able to recognize the faults and analyse them by using application logs/equipment logs/events and able to maintain/restore the services/solutions in an operational condition.

(iii) The total duration of training for each system/solutions will be based on as per the content of the training required for complete understanding of all the three parts as mentioned in Para 22.13.1. above. The duration of training for each solution will be decided by the SELLER in consultation with the BUYER within three weeks after signing the contract.

(iv) In case of training conduct for any system/solution is not deemed fit by the BUYER after feedback from course participants then training must be repeated by OEM for that system/solution or if the BUYER feels that the trainer does not possess adequate knowledge or not able to explain course contents correctly, training will be terminated with immediate effect and OEM has to re-arrange the trainer for the complete system/solution training.

(m) **Knowledge Transfer Session.** SELLER will be responsible for arranging 02 (two) knowledge transfer (KT) session for 02 days each by OEM professionals for Buyer team separately for each system/solution in once in every six months during warranty and AMC period. KT sessions will be focused on change in technology, feature enhancements, system/solution updates, and new releases, maintaining & enhancing technical skills, technology trend and future road map of technology for each system/solution for BUYER team.

(n) **Contents of Training Material.** The SELLER in association with the OEMs' Advanced Services Team shall include the following documents in the training material: -

- (i) System Specifications
- (ii) System level block diagram of all equipment
- (iii) Technical description of each equipment
- (iv) Operation of various systems and subsystems
- (v) User level Maintenance schedule and drill
- (vi) Precautions
- (vii) Troubleshooting procedures

(o) **Training Material.**

(i) The SELLER shall provide sufficient training material and explanatory notes to the trainees during the training period, one set for each trainee.

(ii) The training material provided to the trainees shall cover all the aspects of the system description and deployment strategy for the respective supplied systems. It should also include installation practices & procedures, testing, preventive maintenance and fault finding/rectification.

(iii) The training material provided to the trainees shall be in English.

(iv) Sufficient diagrams and explanatory material shall be prepared by the SELLER and distributed to the trainees during the training sessions.

(v) The SELLER shall provide 2 sets of hard copy of the training material per training batch. Soft copy of the same shall be distributed using DVD ROM or Pen Drive in number of copies as specified by the BUYER.

(vi) SELLER may also provide online access to OEM labs/ simulator for on-hands training.

3. **Delivery Period (DP).** Delivery period for supply of items would be 12 months from the effective date of contract. Please note that Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Buyer, with applicability of LD clause.

4. **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 submit the compliance statement in the following format along with Technical Bid.

Para of RFP Specifications item-wise	Specification of item offered	Compliance to RFP specification – whether -Yes/No	In case of non-compliance, deviation from RFP to be specified in unambiguous terms

5. **Terms of Delivery.** The delivery terms shall be FOR Destination. The delivery will be treated as complete on successful completion of delivery, acceptance of item after proper inspection by Directorate of MMI/ Dte of AFNET and receipt of User Satisfaction Certificate.

6. **Consignee details** – The following shall be consignee details:-

Ser No.	Items	Consignee
1	IACCS Port Mout Infrastructure (Turnkey Execution) Network connectivity and other critical equipment with necessary Infrastructure	Port Mout
2	Accessories for Network Connectivity	Port Mout
3	Secure Network Gateway Appliance	Delhi, Ahmedabad, Bengaluru, Guwahati, Shillong
4	CMS for Secure Network Gateway Analyser for Secure Network Gateway	Delhi & Shillong
5	Phones and Recording Solution	Delhi, Mumbai, Bengaluru, Prayagraj

7. **Technical Details.** Technical specifications of the Items is placed at **Annexure II**. Bidders before tendering their offer is to ensure that items offered are correctly understood and where required requisite clarification are obtained and forwarded along with the offer. **(Kindly append the Technical Brochure of the item offered, if required. If necessitated, a digital photo of offered item be attached).**

8. **Inspection Agency and Authority.** The Inspection authority will be Dte of Ops MMI and Inspection will be undertaken by the inspecting agency as designating by the inspection authority. The mode of Inspection will be User Inspection and physical verification.

9. **Mandatory Documents:** The below mentioned documents are mandatorily required to be submitted along with bid on or before closing date and time: -

(a) Photo copy of FD Receipt/ Bank Guarantee for EMD amount or proof of exemption.

(b) Copy of the MAF (Manufacturer Authorization Form) stating that the Bidder is an authorised vendor/ representative of OEM for the subject procurement items/ solutions.

(c) **Malicious Code Certificate.** A Malicious Code Certificate is to be rendered on the Company (OEM) Letter Head, by the respective OEMs for each of the products having software/ firmware, and which are part of the solution offered.

10. **Country of Origin.** Bidder is to submit Country of Origin certificate for all major Hardware and Software. The government provisions and regulations with respect to products with country of origin, sharing land border to be adhered to.

11. **Earliest Acceptable Year of Manufacture.** The manufacturing of the items supplied by Seller must be of current production and shall incorporate all the latest improvements and modifications available. Items must be under current life of production and life cycle support. Manufacturing date of the hardware and solution supplied must **not be older than one year** from the date of delivery. Product/ item must not have **End of Sale** announcement date (not **End of Sale** date of product/ item) by OEM within two years from “effective date of commencement of warranty” and must not have date **End of Life** or **End of Support** within seven years from commencement date of warranty. The vendor shall be responsible for intimating **End of Life** or **End of Support** of any of the hardware or solutions supplied, **at least two years** before the declared date. In case any hardware/ software do not comply to the condition mentions above or become unserviceable during warranty/ AMC period, OEM will be responsible to replace these items (hardware/software) with equal/ better specification without any financial cost to Buyer.

12. **Warranty and AMC period.** The OEM and vendor will maintain 24X7 technical helpdesk for logging of faults during the warranty period (02 years) and AMC period (05 years). The OEM and vendor team will assist the Buyer’s team in clearance of faults during the warranty and AMC period. Seller must ensure OEM support made available direct to the Buyer, during the warranty and AMC period. Faulty systems will be repair or replaced during warranty and AMC period. OEM must provide software updates/ upgrades as and when released, for the products supplied, at no additional cost during the warranty and AMC period

### **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.** Normally the contract shall come into effect on the date of signatures of both the parties on the contract except when some other effective date is mutually agreed to and specifically indicated / provided in 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 (Available in MoD website and can be provided on request).

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 recommended 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 delivery of the material and services is delayed for causes not attributable to Force Majeure for more than **Three Months** after the scheduled date of delivery.
- (b) The Seller is declared bankrupt or becomes insolvent.
- (c) The delivery of material is delayed due to causes of Force Majeure by more than **Six 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. **Notice.** 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.** The Seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.

12. **Patents and other Industrial Propriety Rights.** The prices stated in the present contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial propriety rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates, irrespective of the fact of infringement of any or all the rights mentioned above.

13. **Amendments.** No provision of the 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. **Pre-Integrity Pact.** Pre- integrity pact (PIP) will be applicable to all the vendors irrespective of being registered vendors, MSME or DPSU. An “Integrity Pact” would be signed between the Ministry of Defence/Buyer and the Bidder for purchases exceeding Rs.20 Crores at the time of bid submission. This is a binding agreement between the Buyer and Bidders for specific contracts in which the Buyer promises that it will not accept bribes during the procurement process and Bidders promise that they will not offer bribes. Under this Pact, the Bidders for specific services or contracts agree with the Buyer to carry out the procurement in a specified manner. The Format of Pre-Integrity Clause is placed at **Appendix ‘B’**. The essential elements of the Pact are as follows: -

(a) A pact (contract) between the Government of India (Ministry of Defence) (the authority or the “principal”) and those companies submitting a tender for this specific activity (the “Bidder”).

(b) An undertaking by the Principal that its officials will not demand or accept any bribes, gifts etc., with appropriate disciplinary or criminal sanctions in case of violation.

(c) A statement by each Bidder that it has not paid, and will not pay, any bribes.

(d) An undertaking by each Bidder to disclose all payments made in connection with the Contract in question to anybody (including agents and other middlemen as well as family members, etc., of officials); the disclosure would be made either at the time of submission of Bid or upon demand of the Principal, especially when a suspicion of a violation by that Bidder emerges.

(e) The explicit acceptance by each Bidder that the no-bribery commitment and the disclosure obligation as well as the attendant sanctions remain in force for the winning Bidder until the contract has been fully executed.

(f) Undertaking on behalf of a Bidding company will be made “in the name and on behalf of the company’s Chief Executive Officer”.

(g) The following set of sanctions shall be enforced for any violation by a Bidder of its commitments or undertakings: -

(i) Denial or loss of contracts

(ii) Forfeiture of the Bid security and performance bond Liability for damages to the principal and the competing Bidders Debarment of the violator by the Principal for an appropriate period of time.

(h) Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour and compliance program for the implementation of the code of conduct throughout the company.

**Note:** - In case of quoted amount is below Rs 20 Crores, PIP not required to be submitted.

15. **Taxes and Duties: In respect of Indigenous Bidders.**

**Goods and Service Tax (GST).** The bidder must indicate applicable GST for supply of goods or services as per the latest applicable rates along with the authority.

**Note:** As per guidelines on TDS issued by Ministry of Finance, Department of Revenue vide circular No. 65/39/2018 under reference to F.No.S.31011/11/2018-ST-I-DOR dated 14 Sep 18, under Sec 51 of GST Act 2017 GST TDS will be deducted @ 2% I/R/O all purchases, supply of Goods or Services or both including contract where total value of such purchases exceeds Rs 2,50,000/- (Rupees Two Lakh Fifty Thousand) excluding GST.

## **PART IV- SPECIAL CONDITIONS OF RFP**

1. 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.

2. **Performance Security / Warranty Bank Guarantee.** Performance security is payable by the supplier at the rate of **5%** of the total contract value and is to be taken from every successful bidder irrespective of the registration status of the firm. Performance Security deposit payable to the Purchaser is to be furnished by the Supplier in the form of an **Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee** in favour of PCDA, Air Force, RK Puram, New Delhi-66 from any of the issued by a public sector bank or a private scheduled commercial bank authorized to conduct government business, in the prescribed format within thirty days from the date of Contract. The performance security deposit is meant to compensate the Purchaser for any loss suffered due to failure of the supplier to complete his obligations as per the Contract. The **PBG/WBG** will remain valid throughout the duration of the Contract **up-to completion of supplies and continue thereafter as a Warranty Bank Guarantee** for a period of 05 years from the date of its signing and extend upto 05 years or the complete execution of the contract to the satisfaction of both the Buyer/Seller, whichever is later. **This obviates the need to obtain a fresh Warranty Bank Guarantee from the supplier on commencement of the warranty period, with corresponding return of the Performance Guarantee.** In case the execution of the Contract is delayed beyond the Contracted period and the purchaser grants extension of delivery period, with or without LD, the supplier must get the BG revalidated, if not already valid. The format of PBG cum WBG is given in Form DPM-15 (As per Appendix 'C').

3. **The performance Bond is meant to compensate the purchaser for any violation of Para 14 of part III of this RFP regarding Pre- Integrity Pact.** The Performance Bank Guarantee will be subject to encashment by the Buyer, in case the conditions regarding adherence to the delivery schedule, settlement of claims and other provisions of the Supply Order are not fulfilled by the Seller.

**Note: - e-BG accredited by NeSL is Acceptable.**

4. **Option Clause.** Not Applicable.

5. **Repeat Order Clause.** Not Applicable.

6. **Payment Term.** 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 placed at **Appendix 'D'** (Form DPM-11). The payment will be made as per the following terms, on production of the requisite documents:

(a) 100% payment will be made on delivery and acceptance by the user.

OR

(b) Part payment on pro-rata basis also acceptable

7. **Instructions for Despatch.**

(a) The stores shall be despatched to the consignee by the supplier on his own arrangement and expense.

(b) The purchaser shall not pay separately for final insurance and contractor shall be responsible for the safe arrival of the stores at the destination. The consignee will notify to the contractor of any loss or damage to the stores that may have occurred during transit.

8. **Transit Insurance.** The purchaser will not pay separately for transit insurance and the suppliers will be responsible for the entire stores contracted, for its arrival in good condition at destination.

9. **Rectification of Defect.** In the event of the items being given back to the manufacturer for rectification of defects, the manufacturer will ensure that the defects are attended to immediately without loss of time so that the stores can be re-inspected. However, it should be noted that the manufacturer will not be entitled to dispose of the stores which are given for rectification, without prior permission of the Indentor /Purchaser.

10. **Special Conditions.**

(a) The contractor shall make his own arrangement for the procurement of all raw materials required for this contract.

(b) Any improvement / change and modification suggested till the bulk manufacture commences shall be undertaken by the contractor at his own risk and expense to meet the requirement of design / specification to the entire satisfaction of the inspecting officer.

(c) The vendor is to also provide delivery status of ordered item to Directorate of Information Technology (Store), Subroto Park, Delhi-10 and end user till deliveries are completed.

11 **Clarification of Technical Matters.** Any clarification on specification or enquiry(s) on technical matter shall be referred to Wg Cdr Ops MMI (Security) Tele: 01125695632 Extn- 6716 (AFNET), Subroto Park, New Delhi-110010

12 **Advance Payments.** At the discretion of the buyer, partial payment in advance may be made within the limits specified by Govt. of India on case to case basis. The same will be made against an appropriate Bank Guarantee or any authorised guarantee, as accepted by the buyer. The format of Bank Guarantee is as per DPM-16.5.

13. **Paying Authority.** **Accounts Officer, O/o PCDA (Air Force), West Block - V, RK Puram, New Delhi -110066. (Fax 011-26102879).** The payment of bills will be made on submission of the following documents by the Seller to the Paying Authority along with the bill:

(a) Ink-signed copy of contingent bill / Seller's bill.

(b) Ink-signed copy of Commercial invoice / Seller's bill.

(c) Copy of Supply Order/Contract with U.O. number and date of IFA's concurrence, where required under delegation of powers.

- (d) CRVs in duplicate.
- (e) Inspection note.
- (f) 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.
- (g) Exemption certificate for Taxes & duty, if applicable.
- (h) Bank guarantee for advance, if any.
- (j) Performance Bank guarantee / Indemnity bond where applicable.
- (k) 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.
- (l) 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).
- (m) Any other document / certificate that may be provided for in the Supply Order / Contract.
- (n) User Acceptance.
- (o) Photocopy of PBG.

14. **Fall clause.** The following Fall clause will form part of the contract placed on successful Bidder –

- (a) The price charged for the stores supplied under the contract by the Seller shall in no event exceed the lowest prices at which the contractor sells the stores or offers to sell stores of identical description to any persons/Organisations including the purchaser or any department of the Central government or any Department of the State government or any statutory undertaking of the Central or State government, as the case may be, during the period or till the performance of all Supply Orders placed during the currency of the rate contract is completed.”
- (b) If at any time, during the said period the Seller reduces the sale price, sells or offer to sell such stores to any person/organisation including the Buyer or any Dept., 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, he shall forthwith notify such reduction or sale or offer of sale to the Purchase /Contracting Authority and Supplies & Disposals and the price payable under the contract for the stores of such reduction of sale or offer of the sale shall stand correspondingly reduced. The above stipulation will, however, not apply to: -
  - (i) Exports by the Seller.

- (ii) Sale of goods as original equipment at a price lower than the prices charged normal replacement.”
- (iii) Sale of goods such as drugs which have expiry dates.
- (iv) Sale of goods at lower price on or after the date of completion of sale/placement of the order of goods by the authority concerned under the existing or previous Rate Contracts as also under any previous contracts entered into with the Central or State Govt. Depts, including their undertakings excluding joint sector companies and/or private parties and bodies.

(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 sale price of the stores of description identical to the stores supplied to the Government under the contract herein and such stores 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 supplies against all supply orders placed during the currency of the Rate Contract at price lower than the price charged to the government under the contract except for quantity of stores/ categories under sub-clauses (i), (ii), (iii) and (iv) of Sub-para (b) above, details of which are given below: -

- (i) Exports by the Seller.
- (ii) Sale of goods as original equipment at a price lower than the prices charged normal replacement.”
- (iii) Sale of goods such as drugs which have expiry dates.
- (iv) Sale of goods at lower price on or after the date of completion of sale/placement of the order of goods by the authority concerned under the existing or previous Rate Contracts as also under any previous contracts

entered into with the Central or State Govt. Depts, including their undertakings excluding joint sector companies and/or private parties and bodies.

#### 15. **Force Majeure clause.**

(a) Neither party shall bear responsibility for the complete or partial non-performance 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 shall be 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.

16. **Specification**. The following Specification clause will form part of the contract placed on successful Bidder - 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 drawings 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, drawings and specifications due to change in manufacturing procedures, indigenisation or obsolescence. This will, however, not in any way, adversely affect the end specifications of the equipment. Changes in technical details, drawings 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.

17. **OEM Certificate**. In case the Bidder is an OEM, they are to certify (on their letter head) same by clearly stating the lines for which they are the OEM. In case the Bidder is not the OEM, the agreement certificate in original (with English translation duly certified) as per format in **Appendix 'E'** from the OEM for sourcing the spares are to be submitted along with quote for items listed at Appendix 'A' (SOR). OEM certificate should be sourced directly from the OEM and not through any third party. **OEM certificate/ OEM Support certificate sourced through third parties will not be accepted and bids submitted by the firm will be rejected.** Format of OEM support certificate to be submitted in original, is placed at Appendix-'E', A copy of the OEM support certificate is mandatorily required to be submit along with the bid. The proof of the submission is to be forwarded along with the documents submitted in respect of the tender.

18. **Earliest Acceptable Year of Manufacture**. The manufacturing of the items supplied by Seller must be of current production and shall incorporate all the latest improvements and modifications available. Items must be under current life of production and life cycle support. Manufacturing date of the hardware and solution supplied must **not be older than one year** from the date of delivery. Product/ item must not have **End of Sale** announcement date (not **End of Sale** date of product/ item) by OEM within two years from "effective date of commencement of warranty" and must not have date **End of Life** or **End of Support** within seven years from commencement date of warranty. The vendor shall be responsible for intimating **End of Life** or **End of Support** of any of the hardware or solutions supplied, **at least two years** before the declared date. In case any hardware/

software do not comply to the condition mentions above or become unserviceable during warranty/ AMC period, OEM will be responsible to replace these items (hardware/software) with equal/ better specification without any financial cost to Buyer.

19. **Packing and Marking.** The following Packing and Marking clause will form part of the contract placed on successful Bidder –

(a) The Seller shall provide packing and preservation of the equipment and spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, transshipment, storage and weather hazards during transportation, subject to proper cargo handling. The Seller shall ensure that the stores are packed in containers, which are made sufficiently strong, and with seasoned wood. The packing cases should have hooks for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed.

(b) The packing of the equipment and spares/goods shall conform to the requirements of specifications and standards in force in the territory of the Seller's country.

(c) Each spare, tool and accessory shall be packed in separate cartons. A label in English shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. A tag in English with said information shall also be attached to six samples of the item. If quantity contracted is less than six then tag shall be affixed to complete quantity contracted of the item. The cartons shall then be packed in packing cases as required.

- (i) Part Number:
- (ii) Nomenclature:
- (iii) Contract annex number:
- (iv) Annex serial number:
- (v) Quantity contracted:

(d) One copy of the packing list in English shall be inserted in each cargo package, and the full set of the packing lists shall be placed in Case No.1 painted in a yellow colour.

(e) The Seller shall mark each package with indelible paint in the English language as follows: -

- (i) EXPORT (In case of foreign suppliers)
- (ii) Contract No. -----
- (iii) Consignee -----
- (iv) Airport of destination:
- (v) Ultimate Consignee –
- (vi) SELLER -----
- (vii) Package No. -----
- (viii) Gross/net weight: -----
- (ix) Overall dimensions/volume: -----
- (ix) The Seller's marking. Blue diagonal band of 4" across the face of Box/Carton/Crate.



(f) If necessary, each package shall be marked with warning inscriptions: <Top>, "Do not turn over", "Handle with care" etc. The Blue coloured band two inches thick enfaced diagonally across the visible faces of the carton/ box/ crates for easy identification.

(g) Should any special equipment be returned to the Seller by the Buyer, the latter shall provide normal packing, which protects the equipment and spares/goods from the damage of deterioration during transportation by land, air or sea. In this case the Buyer shall finalize the marking with the Seller.

20 **Quality.** The quality of the stores delivered according to the present Contract shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Seller's country or specifications enumerated as per RFP and shall also include therein modification to the stores suggested by the Buyer. Such modifications will be mutually agreed to. The Seller confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications thereto and spares of improved and modified equipment are backward integrated and interchangeable with same equipment supplied by the Seller in the past if any. The Seller shall supply an interchangeability certificate along with the changed part numbers wherein it should be mentioned that item would provide as much life as the original item.

21 **Quality Assurance.** Seller would provide the Standard Acceptance Test Procedure (ATP) within one month of this date of contract. Buyer reserves the right to modify the ATP. Seller would be required to provide all test facilities at his premises for acceptance and inspection by Buyer. The details in this regard will be coordinated during the negotiation of the contract. The item should be of the latest manufacture, conforming to the current production standard and having 100% defined life at the time of delivery.

22. **Franking clause.** The following Franking clause will form part of the contract placed on successful Bidder –

(a) **Franking Clause in the case of Acceptance of Goods** "The fact that the goods have been inspected after the delivery period and passed by the Inspecting Officer will not have the effect of keeping the contract alive. The goods are being passed without prejudice to the rights of the Buyer under the terms and conditions of the contract".

(b) **Franking Clause in the case of Rejection of Goods** "The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer will not bind the Buyer in any manner. The goods are being rejected without prejudice to the rights of the Buyer under the terms and conditions of the contract."

23. **Claims.** The following claims clause will form part of the contract placed on successful Bidder: -

(a) The claims may be presented either:

(i) On quantity of the stores, where the quantity does not correspond to the quantity shown in the Packing List/Insufficiency in packing, or

(ii) On quality of the stores, where quality does not correspond to the quality mentioned in the contract.

(b) The quantity claims for deficiency of quantity shall be presented within 45 days of completion of JRI and acceptance of goods. The quantity claim shall be submitted to the Seller as per Form DPM-22 (Available in MoD website and can be given on request).

(c) The quality claims for defects or deficiencies in quality noticed during the JRI shall be presented within 45 days of completion of JRI and acceptance of goods. Quality claims shall be presented for defects or deficiencies in quality noticed during warranty period earliest but not later than 45 days after expiry of the guarantee period. The quality claims shall be submitted to the Seller as per Form DPM-23 of DPM-2009 (Available in MoD website and can be given on request).

(d) The description and quantity of the stores are to be furnished to the Seller along with concrete reasons for making the claims. Copies of all the justifying documents shall be enclosed to the presented claim. The Seller will settle the claims within 45 days from the date of the receipt of the claim at the Seller's office, subject to acceptance of the claim by the Seller. In case no response is received during this period the claim will be deemed to have been accepted.

(e) The Seller shall collect the defective or rejected goods from the location nominated by the Buyer and deliver the repaired or replaced goods at the same location under Seller's arrangement.

(f) Claims may also be settled by reduction of cost of goods under claim from bonds submitted by the Seller or payment of claim amount by Seller through demand draft drawn on an Indian Bank, in favour of Principal Controller/Controller of defence accounts concerned.

(g) The quality claims will be raised solely by the Buyer and without any certification/countersignature by the Seller's representative stationed in India.

(h) **Claims accepted by the Seller.** After defect detection survey, in case the claim is accepted by the Seller as justified, then the Seller will settle the claim in one of the following ways:

(i) Supply additionally the missing Equipment within the shortest possible period, but not exceeding the delivery period according to Part II Para 2 of the Contract (06 Months) from the date of acceptance of the claim as justified by the seller.

(ii) To repair and deliver the defective Equipment within the shortest possible period, but not exceeding the delivery period according to Part II Para 2 of the Contract (06 Months) from the date of acceptance of the claim as justified by the seller. In case of complicated Equipment, the parties shall mutually agree the repair time periods.

(iii) The warranty period of the repaired Equipment will be extended for the period, when the Equipment was out of service.

(j) **Claims not accepted by the Seller.** After defect detection survey, in case the claim is not accepted by the Seller as justified, then the claim will be settled in the following manner:

(i) The Seller will forward the complete details of defect detection survey report to the Buyer and the reasons for declaring the claim as unjustified and not acceptable to the Seller, within 60 days from the date of defect detection survey completion.

(ii) If it is observed that Equipment sent for replace/repair under the claims has neither fault nor defect initially identified by the Buyer, the Equipment is to be returned to the Buyer as no fault.

24. **Warranty and Annual Maintenance Contract (AMC) Clause.**

(a) Maintenance Philosophy. The following shall be the maintenance philosophy during the Warranty and AMC

(i) **Routine Maintenance.**

(aa) This will covers periodic (Daily, Weekly, Monthly) servicing of the system including checking and logging equipment status and performance, replacement of consumables, cleaning (filter and screens), routine checking of adjustments, if any and replacement of lifed components

(ab) The BUYER will adhere to detailed instructions for operation and care of the equipment, as given in the relevant documents and publications. This includes environmental conditions, power supply regulation etc.

(ac) Any damage to the equipment due to mishandling, improper use, wrong power supply connection etc. will not covered under Warranty and AMC.

(ad) Maintenance practices as defined in the maintenance schedule will be carried out by BUYER's trained technical staff at site.

(ae) The designated staff has to undergo requisite scoped technical training. It is to be ensured that only duly trained Buyer personnel shall carry out the operational activities.

(ii) **Preventive/Breakdown Maintenance**

(aa) Preventive/Breakdown maintenance visits necessitated due to hardware/software faults/redundancy loss/performance degradation shall be undertaken by SELLER as and when required.

(ab) SELLER shall ensure that no non-standard alternations are made or attachments fitted or repairs carried out on the equipment without the consent of the BUYER. Any modifications/changes required to be carried out in the system will be done with the approval of the BUYER.

(ac) SELLER will undertake System Performance Checks on a quarterly basis. The system performance checks will be finalized in coordination with the Buyer

(iii) **Service Level Agreement (SLAs)**

(aa) Technical Support shall be provided on 24x7x365 days

(ab) Serviceability of 99% for critical and 95 % for general systems per year is to be maintained. This amounts to maximum downtime of 01 day for critical and 04 days for general faults per quarter.

(ac) Critical systems include the following: -

1.	EMI/EMC and Fire Protection Shell with associated equipment :-	Ea	1
2.	Secure Network Gateway Appliance	Ea	500
3.	CMS for Secure Network Gateway	Ea	2
4.	Analyser for Secure Network Gateway	Set	1

(ad) General systems include the following: -

Sl. No.	Description of Items / Services	Unit	Qty
5.	19" 15U Wall Mountable Rack	Ea	500
6.	1KVA UPS with Battery	Ea	500
7.	Fiber Distribution Frame (12 Port)	Ea	500
8.	Console Server (8 Serial Port)	Ea	120
9.	Console Server (32 Serial Port)	Ea	40
10.	CU IP Phone 2 Line	Ea	495
11.	CU IP Phone 5/6 Line	Ea	495
12.	IP Phone (15 Line)	Ea	385

(ae) Down time would be calculated at the end of every quarter. Downtime shall be calculated and penalty shall be applicable on prorated basis. Unit for calculation being each equipment supplied as part of the critical system

(af) If downtime exceeds permitted downtime, Penalty would be applicable against the downtime during AMC as follows:-

Sl. No.	Faults	Service-ability %	Permissible Downtime (Days per quarter)	Penalty
(i)	Critical	99 %	01	0.5% every week
(ii)	General	95 %	04	0.5% every week or part thereof

(ag) Penalty shall not exceed 10% of total AMC payments

(ah) During Warranty, instead of penalty warranty extension shall be applicable

b. **Training during Warranty & AMC. One course every six months during the Warranty and AMC period shall be conducted as per scope defined in paras 22.12 and 22.13**

c. All Consumables except Oils and fuel required during operation & maintenance of the DG Set shall be part of Warranty and AMC.

d. On Site spares

(da) Stocking and storage of spares will be done to enable prompt services during Warranty and AMC at Sellers premises.

(db) Critical Hardware Spares will be reviewed by Seller annually.

(dc) Spares & Consumables will be replenished so as to sustain an optimum level of stock based on the consumption pattern.

e. Warranty

(ea) Warranty shall be with effect from delivery of all goods at designated locations or nine months from the date of signing of contract whichever is later.

(eb) Warranty will remain valid for a period of two years from the date of commencement date.

(ec) For Secure Gateways Network Gateways and accessories product support shall be provided during the warranty period for :-

1. Analysing and solving performance issues arising out of deployed solution

2. Offline patch, signature updates, subscriptions and licenses updates for all the equipment as per OEM recommended policies and updates

3. Product firmware upgrades and software updates for all the appliances delivered as per OEM patch release frequencies and recommendations

4. Provision of login credentials with highest level permissions to raise the technical issues, search knowledgebase, download patches & signatures as applicable and manage the device for the supplied equipment

f. AMC

(fa) The Seller may enter into a Comprehensive AMC for the system for a period of five years after completion of initial warranty

(fb) The cost of the AMC shall be fixed as a percentage of the cost of the deliverables during contract finalization. However a separate contract shall be finalized for the AMC.

(fc) Bidder has to ensure support for the equipment during the AMC period as per terms and conditions of the RFP

27. **Recovery of LD charges.** LD would be deducted from pending bills of current/ other contracts / PBG/ WBG.

28. **Cyber Security Compliance by Bidders.** Every bidder is to ensure the following before participation: -

(a) Production/ Maintenance/ OEM organization to implement all cyber security aspects/ controls as mentioned in 'Security Manual for Licensed Defence Industries' issued by Department of Defence Production, Ministry of Defence.

(b) **Right to inspect/ verify** physical / cyber security aspects by BUYER anytime during contract execution phase including surprise audit by BUYER.

(c) For projects involving Management Information Systems, bespoke/ customized software and enterprise-wide solutions, **vendor is to certify that secure coding practices** have been followed and software has been **vetted by CERT-In empanelled vendor**, prior to being submitted for security vetting by DCYA/ SCGs as applicable. DCYA/ SCGs to conduct Vulnerability Assessment and the same be included in the RFP/ contract. If more than one iteration of VAPT takes place for applications during checks by DCYA/ SCGs, DPSU/ILDC will repeat CERT-In empanelled audit by an alternate auditor at his cost prior to re-check by DCYA/ SCGs. Any time lost in iterative checking which may lead to delayed delivery and imposition of LD as per contract will be at cost of DPSU/ILDC and sufficient contingency time to be catered for the same.

(d) In case of a **Cyber Security breach**, BUYER should be informed through the fastest communication mode by the production agency/ OEM/ AMC operator giving full details.

(e) Information gathered by OEM/ production agency/ AMC operators should be disclosed to any sub-contractor only after the approval of BUYER and post incorporation of suitable NDA as per main contract, as appropriate.

(f) Depending on the sensitivity of information, the **medium/ extent of sharing of information/** RFP / contract or part of RFP by production agency/OEM/ AMC operator to sub-contractor/ various sections within, the production agency is to **be specified** ie, whether through Internet/ intranet/ hard copy etc. for control of information as appropriate.

(g) Certificates as per **Appendix 'F'** with respect to malicious code or malware and information security as per DAP 2020 (updated) to be signed as a part of RFP.

**Note:** - Only certificate in respect of malicious code certificate from bidder is required.

(h) Penal consequences on Production/ Maintenance/ OEM organisation in case of any security violation/ loss of data, information, PII and deviations from Cyber Security aspects.

(j) Classified/ sensitive data related to project BUYER generated during course of execution of contract or handed over by BUYER to SELLER should be made available only to employees on '**NEED TO KNOW BASIS**'. Strict accounting of data access/copying of data and access control should be implemented, including encryption of data in transit and storage.

(k) The following information is to be provided by the DPSUs / ILDCs: -

**Defence Public Sector Undertaking (DPSUs)**

(i) Details of last third party Cyber Security audit: -

(aa) Date of Audit

(ab) Name of the CERT empaneled agency which conducted the audit.

(ac) The DPSUs shall provide a compliance certificate to rectification of cyber audit observations, if any.

(ii) CISO (Cyber Info Security officer): -

(aa) Name

(ab) Contact number

**Indian Licensed Defence Companies (ILDCs)**

(i) Companies to provide written undertaking on compliance to DDP Security manual for licensed Defence industries-2014 (SMLDI-2014) and subsequent amendments from time to time.

(ii) Self – certification on compliance to internal Security Audit (As per flow diagram- page 14 of DDp Security Manual refers, copy annexed).

(iii) Annual Cyber Security audit by CERT empaneled agency

(aa) Name of the agency

(ab) Date of last Cyber Security audit.

(iv) CISO (Cyber info Security Officer): -

(aa) Name

(ab) Contact number

(l) The aforesaid details to be provided to the Directorate of Purchase at Air HQ as and when Cyber Audit has been completed at your end during the contract implementation phase and product support phase.

29. **Clause for Bidders Sharing Land Border with India**

(a) Any bidder from a country which shares a land border with India will be eligible to bid in any procurement only if the bidder is registered with the Competent Authority (**Department for Promotion of Industry and Internal Trade**). Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority.

(b) "Bidder" means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the

descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

(c) "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means: -

- (i) An entity incorporated, established or registered in such a country;
- (ii) A subsidiary of an entity incorporated, established or registered in such a country;
- (iii) An entity substantially controlled through entities incorporated, established or registered in such a country;
- (iv) An entity whose beneficial owner is situated in such a country;
- (v) An Indian (or other) agent of such an entity;
- (vi) A natural person who is a citizen of such a country;
- (vii) A consortium or joint venture where any member of the consortium or joint-venture falls under any of the above.

(d) The beneficial owner for the purpose of Para 30 (C) above will be as under: -

- (i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

**Explanation**

(aa) "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company;

(ab) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions



including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;

(ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

(iv) Where no natural person is identified under sub Para 30 (d) (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

(v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

(e) An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

(f) The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

(g) If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution

(h) **The undertaking given at Appendix- 'G' is to be signed by every bidder as having read and understood and acceptance to the conditions specified above.**

30. **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 **10%<sup>+</sup>(plus/minus)** increase or decrease or rounded off the quantity of the required goods up to 10% without any change in the terms & conditions and price quoted by the seller. While awarding the contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

31. **Applicable Law.** This RFP shall be governed by the laws of the Republic of India, both substantive and procedural, for the time being in force and shall be subject to the exclusive jurisdiction of Delhi Courts in India.

**PART -V**  
**EVALUATION CRITERIA & PRICE BID ISSUES**

1. **Evaluation Criteria.** The broad guidelines for evaluation of Bid will be as follows:-

(a) Only those Bid 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.

(c) 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.

(d) The Buyer reserves the right to evaluate the offers received by using Discounted Cash Flow method at a discounting rate of \_\_\_\_%. In case cash flow involves more than one currency, the same will be brought to a common denomination in Indian Rupees by adopting exchange rate as BC selling rate of the State Bank of India on the date of the opening of the Price Bid.

(e) The Lowest Acceptable Bid will be considered further for placement of contract 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.

(f) Acceptance of Standard Conditions of Contract (SCOC) as available in DPM 2009 (Chapter- X).

(g) Any other criteria as applicable to suit a particular case. **L1 will be determined line wise.**

2. **Acceptance to Standard Terms & Conditions.** Attached **Appendix 'H'** to this RFP is to be signed and submitted along with offer **mandatorily**.

3. **Price Bid Format.** The Price Bid Format is given below and Bidders are required to fill this up correctly with full details along with acceptance of summary of standard terms and conditions as per **Appendix 'H'**. Prices should be **firm & fixed** and should be inclusive of packing charges, taxes and duties etc. levied in the country of supply.

**(NOT APPLICABLE be mentioned, in columns where necessitated)**

**(a) Basic cost of the item/items:**

IAF SOR No.	IAF GIG No.	IAF Part No.	Item offered	DoQ	Qty Offered	Unit price	Total of Basic price

4. Unregistered firms claiming compliance will be dealt in accordance with provisions of DPM09 / Chapter 4 Page 24 Para 4.2.9 and 4.3.5.

5. This communication is being issued without prejudice and with NIL financial commitments, whatsoever.

6. One copy of this RFP duly stamped and signed in all pages, be returned to us for our reference and records along with your Most Competitive Bid. It is reiterated that the purchaser reserves the right to withdraw the RFP without assigning any reasons, should it become necessary at any stage.

Thanking you,

Yours faithfully,

Sd/-  
(B Biswas)  
Gp Capt  
Gp Capt Proc (I & W)  
For and on behalf of the President of India

<b>Appendix 'A'</b>	Schedule of requirement
<b>Appendix 'B'</b>	Pre Integrity Pact Format
<b>Appendix 'C'</b>	Performance Bank Guarantee Format
<b>Appendix 'D'</b>	Model ECS Mandate Format (to be submitted in original at the time of payment).
<b>Appendix 'E'</b>	Format of OEM support certificate
<b>Appendix 'F'</b>	Malicious Code Certificate from Hardware OEM.
<b>Appendix 'G'</b>	Undertaking for Bidders Sharing Land Border with India.
<b>Appendix 'H'</b>	Summary of Standard terms and conditions required

**Appendix 'A'**

(Refers to Para 1 PART-II of RFP)

1. **Schedule of Requirements:** - List of items / services required is appended below:-

Ser No.	Denomination of Items / Services	Unit	Qty
1	<b>IACCS Port Mout Infrastructure (Turnkey Execution) Network connectivity and other critical equipment with necessary Infrastructure</b>		
a	EMI/EMC and Fire Protection Shell fitted with following :-	Ea	1
b	Precision Air Conditioning	Ea	3
c	Earthing, Lightening Arrestors, Cabling & Cable Trays	Set	1
d	42U 19' Racks with PDU	Ea	7
e	Fire Detection and Supression System	Set	1
f	Surge Protection	Set	1
g	CCTV Monitoring with min 06 Cameras	Set	1
h	Raised Flooring	Set	1
j	UPS with Battery Bank & Distribution Box - 15 KVA	Ea	2
k	DC Power Supply N+1 Redundancy (16 KW SMPS without Bateery Bank)	Ea	4
l	SMPS Battery Bank	Ea	4
m	Electrical Cabling, PDP, AMF Panel	Set	1
n	FDF, HD-FDF, RJ-45 Jack Panel, OFC Raceway, Tray, Fiber Patch Cords, UTP Patch Cords etc.	Set	1
o	OFC Laying	Km	10
p	DG Sets 125 KVA	Ea	2
2	<b>Secure Network Gateways &amp; Accessories</b>		
a	Secure Network Gateway Appliance	Ea	500
b	CMS for Secure Network Gateway	Ea	2
c	Analyser for Secure Network Gateway	Set	1
3	<b>Accessories for Network Connectivity</b>		
a	19" 15U Wall Mountable Rack	Ea	500
b	1KVA UPS with Battery	Ea	500
c	Fiber Distribution Frame (12 Port)	Ea	500
d	LC-LC Fiber Patch Cords	Ea	500
e	RJ-45 Patch Panel with UTP Patch Cord	Ea	500
f	Console Server (8 Serial Port)	Ea	120
g	Console Server (32 Serial Port)	Ea	40
4	<b>Phones and Recording Solution</b>		
a	CU IP Phone 2 Line	Ea	495
b	CU IP Phone 5/6 Line	Ea	495
c	IP Phone (15 Line)	Ea	385
a	Call Recording Solution Licenses (1500)	Ea	1

**FORMAT FOR PRE-INTEGRITY PACT CLAUSE**

**General.**

1. Whereas the PRESIDENT OF INDIA, represented by \_\_\_\_, hereinafter referred to as the Buyer and the first party, proposes to procure (Name of the Equipment), hereinafter referred to as Defence Stores, and M/s \_\_\_\_\_, represented by, \_\_\_\_\_ (Designation which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignees), hereinafter referred to as the Bidder/Seller and the second party, is willing to offer/has offered the stores.

2. Whereas the Bidder is a private company/public company/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the Buyer is a Ministry of the Government of India performing its functions on behalf of the President of India.

**Objectives.**

3. Now, therefore, the Buyer and the Bidder agree to enter into this pre-contract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence / unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to: -

(a) Enabling the Buyer to obtain the desired defence stores at a competitive price in conformity with the defined specifications of the Services by avoiding the high cost and the distortionary impact of corruption on public procurement, and

(b) Enabling bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices and the Buyer will commit to prevent corruption, in any form, by their officials by following transparent procedures.

**Commitments of the Buyer.**

4. The Buyer Commits itself to the following: -

(a) The Buyer undertakes that no official of the Buyer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.

(b) The Buyer will, during the pre-contract stage, treat all Bidders alike, and will provide to all Bidders the same information and will not provide any such information to any particular Bidder which could afford an advantage to that particular Bidder in comparison to other Bidders.

(c) All the officials of the Buyer will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

5. In case of any such preceding misconduct on the part of such official(s) is reported by the Bidder to the Buyer with full and verifiable facts and the same is prima facie found to be correct by the Buyer, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Buyer and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Buyer the proceedings under the contract would not be stalled.

### **Commitments of Bidders.**

6. The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre contract or post contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following: -

(a) The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Buyer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.

(b) The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Buyer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.

(c) The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

(d) The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

(e) The Bidder further confirms and declares to the Buyer that the Bidder is the original manufacturer/integrator/authorised government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Buyer or any of its functionaries, whether officially or unofficially to the award of the contract to the Bidder, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

(f) The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Buyer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

(g) The Bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.

(h) The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

(j) The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

7. **Previous Transgression.**

(a) The Bidder declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India.

(b) If the Bidder makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

8. **Bid Security: Earnest Money Deposit.**

(a) The bidder, while submitting commercial bid, shall deposit an amount\* **Rs 2.40 Crs** as Earnest Money/Security Deposit, with the buyer through any of the following instruments: -

(i) Bank Draft or a Pay Order in favour of the PCDA, New Delhi,

(ii) A confirmed guarantee by an Indian Nationalized Bank, promising payment of the guaranteed sum to the Ministry of Defence, Government of India, represented on behalf of the President of India, on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the Buyer shall be treated as conclusive proof for payment. A model Bank guarantee format is enclosed.

(b). The Earnest Money/Security Deposit shall be valid up to a period of five years or the complete conclusion of contractual obligations to complete satisfaction of both the bidder and the buyer, whichever is later. In case there are more than one bidder, the Earnest Money/Security Deposit shall be refunded by the buyer to those bidder(s) whose bid( s) does/do not qualify for negotiation by the Commercial Negotiation Committee (CNC), as constituted by the Buyer,

immediately after a recommendation is made by the CNC on the bid(s) after an evaluation.

(c) In the case of successful bidder a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

(d) The provisions regarding Sanctions for Violation in Integrity Pact include forfeiture of Performance Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.

(e) No interest shall be payable by the Buyer to the Bidder(s) on Earnest Money/Security Deposit for the period of its currency.

(f) The bidder, while submitting commercial bid, shall deposit an amount **Rs 2.40 crs** as Earnest Money/Security Deposit, in case where applicable with the buyer through any of the following instruments: -

(i) To safeguard against a bidder(s) withdrawing or altering its bid during the bid validity period, Bid Security (also known as EMD) is to be obtained from all bidders.

(ii) EMD is not required from Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department or Start-ups as recognised by Department of Industrial Policy & Promotion (DIPP), in accordance with the Ministry of Finance office memorandum bearing No.F.20/2/2014-PPD (Pt.) dated July 25, 2017 (as amended from time to time).

(iii) DPSUs are not required to submit EMD when nominated as ab-initio single vendor. DPSUs will submit all BGs and EMD as applicable while participating in multi-vendor cases with private vendors.

(iv) **Format of EMD.** The Bid Security may be accepted in the following forms, safeguarding the Buyer's interest in all respect: -

(aa) Bank Guarantee from any Indian Public or Private Scheduled Commercial Bank notified by RBI or first-class banks of international repute. The format of the Bank Guarantee for Bid Security is provided at **Appendix 'C'**.

(ab) Insurance Surety Bond - The format and guidelines pertaining to the same shall be issued / notified by the Ministry of Defence.

(ac) Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque shall be payable in an acceptable form. The Beneficiary Bank Details for furnishing the same are as follows:



(v) **Validity of EMD.** The EMD will be valid for Five years or till signing of contract, whichever is later. The EMD shall be extended from time to time as required by the Buyer and agreed by the Bidder. No interest shall be payable by the Buyer to the Bidder(s) on the EMD for the period of its currency. For unsuccessful bidders EMD will be returned on declaration of successful bidder(s).

(g) **Instances of Forfeiture of EMD: -**

(i) If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.

(ii) If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity:-

(aa) If the Bidder fails to furnish the Performance Security for the due performance of the contract.

(ab) Fails or refuses to accept/ execute the contract.

(iii) In case of violation of Pre-Contract Integrity Pact, EMD will be forfeited besides other legal penalties as may be decided by the Ministry of Defence.

(h) In the case of successful bidder a clause would also be incorporated in the Article pertaining to Performance-cum-Warranty Bond in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

(j) The provisions regarding Sanctions for Violation in Integrity Pact include forfeiture of Performance-cum-Warranty Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.

(k) No interest shall be payable by the Buyer to the Bidder(s) on IPBG for the period of its currency.

9. **Company Code of Conduct.** Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.

10. **Sanctions for Violation.**

(a) Any breach of the aforesaid provisions by the Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one 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 1988 or any other act enacted for the prevention of corruption shall entitle the Buyer to take all or any one of the following actions, wherever required:-

- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.
  - (ii) To immediately cancel the contract, if already signed, without giving any compensation to the Bidder.
  - (iii) To recover all sums already paid by the Buyer, and in case of an Indian Bidder with interest thereon at 2% higher than the prevailing Prime Lending Rate, while in case of a Bidder from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the Bidder from the Buyer in connection with any other contract for any other defence stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
  - (iv) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the Bidder, in order to recover the payments, already made by the Buyer, along with interest.
  - (v) To cancel all or any other Contracts with the Bidder.
  - (vi) To debar the Bidder from entering into any bid from the Government of India for a minimum period of five years, which may be further extended at the discretion of the Buyer.
- (b) To recover all sums paid in violation of this Pact by Bidder(s) to any middleman or agent or broker with a view to securing the contract.
- (i) If the Bidder or any employee of the Bidder or any person acting on behalf of the Bidder, either directly or indirectly, is closely related to any of the officers of the Buyer, or alternatively, if any close relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. Any failure to disclose the interest involved shall entitle the Buyer to rescind the contract without payment of any compensation to the Bidder. The term 'close relative' for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.
  - (ii) The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Buyer, and if he does so, the Buyer shall be entitled forthwith to rescind the contract and all other contracts with the Bidder. The Bidder

Sd/-

shall be liable to pay compensation for any loss or damage to the Buyer resulting from such rescission and the Buyer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder.

(iii) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the Buyer with the Bidder, the same shall not be opened.

(c) The decision of the Buyer to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder shall be final and binding on the Bidder, however, the Bidder can approach the Independent Monitor(s) appointed for the purposes of this Pact.

11. **Fall Clause.**

(a) The Bidder undertakes that he has not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India and if it is found at any stage that the similar system or sub-system was supplied by the Bidder to any other Ministry/Department of the Government of India at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, if the contract has already been concluded.

(b) The Bidder shall strive to accord the most favoured customer treatment to the Buyer in respect of all matters pertaining to the present case.

12. **Independent Monitors.**

(a) The Buyer has appointed Independent Monitors for this Pact in consultation with the Central Vigilance Commission.

**For the purpose of this RFP following are the officers appointed as Independent External Monitors (IEMs) with respect of Integrity Pact**

(i) Shri Ranjan Kumar Ghose, IA&AS (1982) (Retd),  
DX-145, Kendriya Vihar, Sector-56  
Gurugram, Haryana-122201  
Mob. 9810152001, e-mail: [ranjankghose@gmail.com](mailto:ranjankghose@gmail.com)

(ii) Shri Yogendra Tripathi, IAS/Karnataka (1985) (Retd)  
Flat No. 2802, 28<sup>th</sup> Floor, Tower-B2, County  
107, Sector-107, Noida, Uttar Pradesh-201301  
Mob: 8527576222, e-mail: [yogendratripaathi@yahoo.com](mailto:yogendratripaathi@yahoo.com)

(iii) Shri Chet Ram, IRS (1985) (Retd)  
Flat No. A-203, Building Gemini, Gladys Alwares Marg,  
Hiranandani Meadows, Off-Pokhran Road No. 2,  
Thane (W), Maharashtra-400610  
Mob: 9869479987, e-mail: [cr\\_koli@yahoo.com](mailto:cr_koli@yahoo.com)

(b) As soon as the Monitor notices, or believes to notice, a violation of this Pact, he will so inform the Head of the Acquisition Wing of the Ministry of Defence, Government of India.

13. **Examination of Books of Accounts.** In case of any allegation of violation of any provisions of this Integrity Pact or payment of commission, the Buyer or its agencies shall be entitled to examine the Books of Accounts of the Bidder and the Bidder shall provide necessary information of the relevant financial documents in English and shall extend all possible help for the purpose of such examination.

14. **Law and Place of Jurisdiction.** This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the Buyer i.e. New Delhi.

15. **Other Legal Actions.** The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

16. **Validity.**

(a) The validity of this Integrity Pact shall be from date of its signing and extend up to 5 years or the complete execution of the contract to the satisfaction of both the Buyer and the Bidder/Seller, whichever is later.

(b) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

17. The Parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

BUYER

BIDDER

Witness

Witness

1. \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

2. \_\_\_\_\_

**Performance Bank Guarantee**

**From:**

**Bank** \_\_\_\_\_

To,

The President of India

Represented by Dte of Procurement, Air HQ (VB)

Ministry of Defence,

Government of India

New Delhi

Dear Sir,

1. Whereas you have entered into a contract No. \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter referred to as the said Contract) with M/s \_\_\_\_\_, hereinafter referred to as the "seller" for supply of goods as per Part-II of the said contract to the said seller and whereas the Seller has undertaken to produce a bank guarantee for **5%** of total contract value amounting to \_\_\_\_\_ to secure its obligations to the President of India. We the \_\_\_\_\_ bank hereby expressly, irrevocably and unreservedly undertake and guarantee as principal obligors on behalf of the seller that, in the event that the President of India represented by Dte of Procurement, Air HQ (VB) declares to us that the Warranty obligation have not been met according to the Contractual obligations under the aforementioned contract, we will pay you, on demand and without demur, all and any sum up to a maximum of \_\_\_\_\_ Rupees \_\_\_\_\_ only. Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said contract. We undertake to effect payment upon receipt of such written demand.
2. We shall not be discharged or released from this undertaking and guarantee by any arrangements, variations made between you and the Seller, indulgence to the Seller by you, or by any alterations in the obligations of the Seller or by any forbearance whether as to payment, time performance or otherwise.
3. In no case shall the amount of this guarantee be increased.
4. This guarantee shall remain valid for 14 Months from the date of supply of goods under the said contract.
5. Unless a demand or claim under this guarantee is made on us in writing or on before the aforesaid expiry date as provided in the above referred contract or unless this guarantee is extended by us, all your rights under this guarantee shall be forfeited and we shall be discharged from the liabilities hereunder.
6. This guarantee shall be a continuing guarantee and shall not be discharged by and change in the constitution of the Bank or in the constitution of M/s \_\_\_\_\_

**Form DPM-11**  
**Model ECS Mandate Format**

**Customer's option to receive payments through e-Payment (ECS/ EFT/ DIRECT CREDIT/ RTGS/ NEFT/ Other payment mechanism as approved by RBI.)**

**Credit Clearing Mechanism**

1. Customer's name
2. Particulars of Bank Account –
  - a. Bank name
  - b. Branch name
  - c. Address
  - d. Telephone numbers
  - e. IFS code
  - f. 9 Digit code number of Bank and Branch appearing on MICR cheque issued by Bank
  - g. Account Type (S.B. Account / Current Account or Cash)
  - h. Ledger number
  - i. Ledger Folio number
  - j. Account number as appearing on Cheque Book
3. Please attach a blank cancelled cheque, or, photocopy of a cheque or front page of your savings bank passbook issued by your bank for verification of the above particulars.

4. Date of Effect

"I, hereby, declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under scheme."

(.....)

Date - Signature of Customer

Certified that the particulars furnished above are correct as per our records.

Bank's Stamp: (.....)

Date:

Signature of the Authorized Official from the Bank

**FORMAT FOR OEM SUPPORT CERTIFICATE**

(ON THE LETTER HEAD OF THE OEM)

Ref No. \_\_\_\_\_

Date: \_\_\_\_\_

1. This is to certify that \_\_\_\_\_ (Name of OEM), the OEM for the items listed below authorize \_\_\_\_\_ (Name of Vendor/Company/Firm) to participate in the Tender Enquiry No. \_\_\_\_\_ dated \_\_\_\_\_ to sell following items to IAF.

SL No. of RFP	Part No.	Description	Drawing No. Code	Major Assy	Qty

2. It is further certified that items to be supplied by the above named firm would correspond to the quality as specified in the RFP.

3. OEM Certificate/OEM Support Certificate to be sourced from OEM only. OEM Certificate/ OEM Support Certificate sourced through third parties will be rejected.

4. This Certificate is valid up to \_\_\_\_\_

Authorised Rubber Seal

Authorized Signatory / Designation

**Note:** This certificate is to be submitted on the OEM's letter head.

## **Appendix 'F'**

(Refers to Para 28 PART-IV of RFP)

### **MALICIOUS CODE CERTIFICATE FROM HARDWARE OEM**

1. It is certified that the firmware/ microcode installed in the hardware products listed below, which is proposed to be delivered by our Business Partner M/s \_\_\_\_\_, is approved by the OEM. The products have been thoroughly tested and found to be working as per the OEM's specifications at the time of delivery and no malicious code has been found in these products. Patch level update of the system is enclosed.

2. The latest security patches as available at the time of supply, have been updated in the firmware. We undertake to provide solutions to address all security issues during the installation, warranty and support period of the equipment, provided end of support for the same has not been declared for the equipment by the OEM(s).

Date:  
firm

(Signed)  
Designation/ Name/ Address of

### **MALICIOUS CODE CERTIFICATE FROM BIDDER**

1. This is to warrant that the hardware and software being offered, as part of the Contract does not contain embedded malicious code at the time of installation and commissioning. Patch level update of the hardware/ software is enclosed.

2. The firm will be considered to be in breach of the contract, in case any physical damage or any compromise in information and cyber security or infringement related to copyright and Intellectual Property Right (IPRs) is caused due to activation of any malicious code embedded in the hardware/ software.

3. The latest security patches as available at the time of installation and commissioning, have been updated in the hardware/ software. We undertake to provide solutions to address all security issues during the warranty and support period of the hardware/software, provided end of support for the same has not been declared for the equipment by the OEM's and to address all exposed security issues by exercising immediate Work-around until the OEM has made the respective solutions available.

Date:  
firm

(Signed)  
Designation/ Name/ Address of



**Appendix 'G'**

(Refers to Para 29 PART-V of RFP)

**UNDERTAKING**

1. "I have read the Clause for Bidders Sharing Land Border with India regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this ..... (**Firm's Name**) is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. (Evidence of valid registration by the Competent Authority shall be attached.)"

Date:  
firm

(Signed)  
Designation/ Name/ Address of

**Certificate by Bidders in the Cases of Specified ToT**

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder does not have any ToT arrangement requiring registration with the competent authority."

OR

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder has valid registration to participate in this procurement. "

Date:  
firm

(Signed)  
Designation/ Name/ Address of

**Appendix 'H'**

(Refers to Para 2 PART-V of RFP)

**SUMMARY OF STANDARD TERMS AND CONDITIONS**  
(to be submitted along with Techno commercial Bid)

SI No	Applicable Clause of		Clause	Acceptance	<b>Remarks</b> (Append amplification Text, if any)
	RFP	<b>DPM 2009</b>			
1.	Part I Para 12	Page No 170 Para 13	Validity of Quotes/ Bid <b>(180 days from TOD)</b>	Please Specify	.....
2.	Part II Para 03 and 05	Page No. 172 Para 4	Delivery Period/ Delivery Terms	YES/ NO	
3.	Part II Para 06	Page No. 172 Para 5	Consignee ( please specify)	YES/ NO	
4.	Part-II Para 07	Page No.192 Para 14	Specification	(YES/NO)	
5.	Part-II Para 08	Page No.196 Para 24	Inspection Authority	(YES/NO)	
6.	Part III Para 08	Page No.177 Para 8	LD clause	YES/ NO	
7.	Part IV Para 02	Page No. 184 Para 1	Performance Bank Guarantee	YES/ NO	
8.	Part IV Para 06	Page No.185 Para 6	Terms of Payment	YES/ NO	
9.	Part IV Para 13	Page 188 Para 9	Fall Clause	YES/ NO	
10.	Part IV Para 18	Page No 192 Para 17	Year of Manufacture	Please Specify	
11.	Part IV Para 19	Page No.194 Para 21	Packing & Marking	(Yes/No)	
12.	Part IV Para 20 & 21	Page No 196 Para 23	Quality/Quality Assurance	(Yes/No)	
13.	Part IV Para 23	Page No.198 Para 27	Franking Clause	(Yes/No)	
14.	Part IV Para 24 & 25	Page No.199 Para 28 & 29	Claims and Warranty	(Yes/No)	
15.	Part V Para 01	Page No.210 Para 28 & 29	Evaluation Criteria	(Yes/No)	
16.	All the other T&C's as mentioned in Part III of RFP are also accepted. (Yes/ No) (in case any deviation please specify )				
Date:..... <div>Company Seal</div> <div>Signature of Authorised Representative / Designation</div>					

(For details kindly visit MoD/Gol Website [www.mod.nic.in](http://www.mod.nic.in))

**TECHNICAL SPECIFICATIONS**

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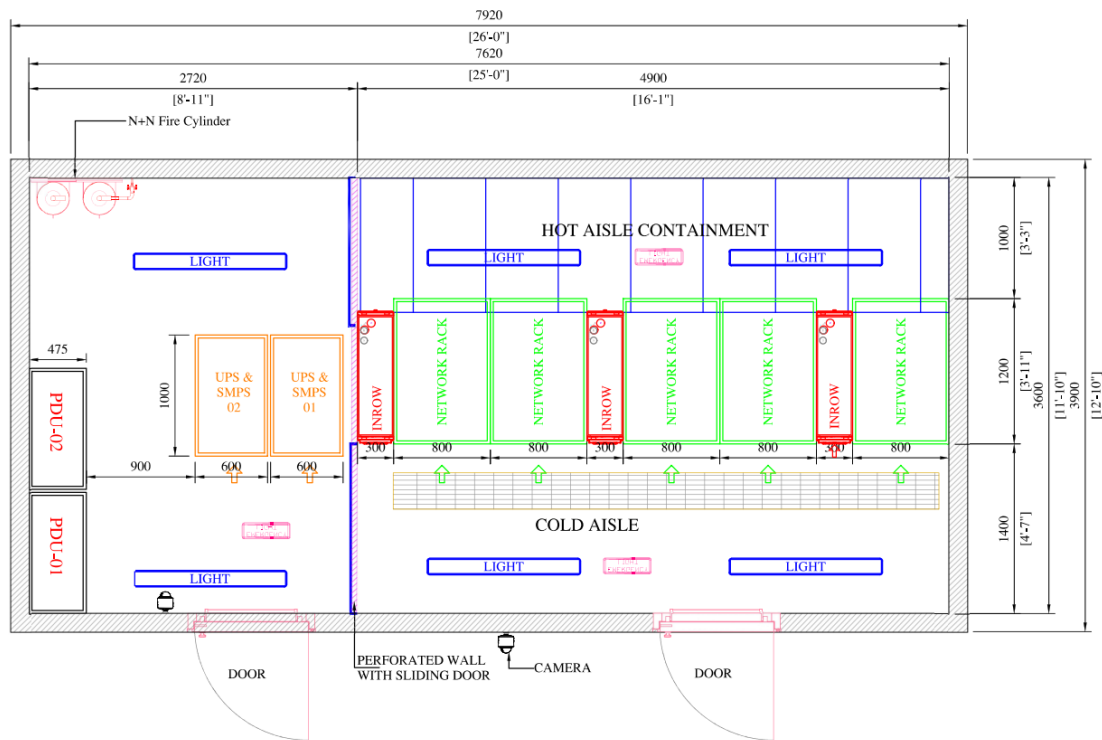
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**TECHNICAL SPECIFICATIONS (01/01)**  
**HARDENED AND SECURE SHELL**

1. **Introduction.** A new hardened and secure shell is to be commissioned for installation of network and associated equipment for Port Mout IACCS Node infrastructure, to protect the equipment housed within it. The scope of the work involves the supply and installation as a part of the turnkey project, including the following: -

- (a) Provisioning of Hardened and Secure Shell
- (b) Provisioning of Electrical work
- (c) Provisioning of power and communication cabling and entry points
- (d) Provisioning of Modular Racks (Network / Server) with iPDUs
- (e) Provisioning of Raised flooring
- (f) Provisioning of Cooling System and environment cooling with monitoring feature
- (g) Provisioning of Water Leak Detection (WLD) System
- (j) Provisioning of Rodent Repellent System
- (k) Provisioning of Fire Detection and Suppression System
- (l) Provisioning of CCTV System
- (m) Provisioning of Access Control System
- (n) Provisioning of Integrated Monitoring system with temperature and humidity sensors
- (o) Installation of DG Sets, AMF Panel, Power Distribution panel and power cabling
- (p) Civil work
- (q) Installation of shed for DG sets

2. The network node will consist of modular infrastructure with approx. area of 300 sq. ft, and should house min five network/server racks and two power racks. The entire work i.r.o. hardened and secure shell for network and associated equipment at AFNET equipment room has to be implemented as a turnkey solution which will include security of the room, civil work, installation of network equipment, DG Sets, AMF panel, Power Distribution panels, associated electrical, mechanical works and shed for DG sets. The scope of the work involved in the setup of the hardened and secure network node includes design, supply, installation, testing & commissioning of all the above subcomponents. The tentative layout is specified below.: -



3. The detailed technical specifications are as follows: -

Sl. No.	Description
1.	<b>General Information</b> Size approx. 300 sq.ft (Length, breadth, and height as per site availability).
2.	<b>EMI-EMC (Protection)</b> The shielding effectiveness of the shell should be according to IEEE 299. 1:2013 Chapter 7.2 for the frequency range 9 kHz to 200 MHz (85db), 200 MHz to 1000 MHz (71db) and 1 GHz to 2 GHz (84db) using data or power cable/ piping entry glands. Lab certificates for Glands used confirming to these standards to be submitted by bidder.
3.	<b>Fire Protection</b> (a) The equipment room shell infrastructure including cable entries, walls, doors must have 120 minutes fire protection from outside to inside as a system test. (b) Rating minimum E120 according to BS476 and insulation panel certified by an authorized laboratory/ test institute.
4.	<b>Panels</b> (a) The wall shall be constructed of 50mm thick ROCKWOOL (as per BS 476/IS8183) insulated panels having 100±2 Kg/m3 density lined with pre coated GI sheet of 0.5 mm on both inner and outer wall of panel (further to increase protection an additional pre-coated GI sheet of 1 mm will be bolted/ fixed on the outside wall of panel while maintaining the same aesthetic look and feel of shell) (b) The edges of the panels shall be shaped to provide a continuous engagement for the Full height of the wall / partition and permitting roll formed slip joint with unique Locking arrangement in the shape of tongue and groove individually from each side (Fascia) of the panels. (c) Proposed Colour is RAL 9002. Paint shall be C5-M.

5.	The shell must be self-supporting, fireproof room comprising modular wall, floor, and ceiling elements. Its modular design is fully adapted to on-site area and height dimensions/ construction/ tightness. To move and install under lower openings as well.
6.	Shell should have opening for door, cable ducts for running power and data cables, lighting system, air conditioning ducts and other components.
7.	<b>Water Protection</b> Shell shall be IP55 rated, test as per IEC 60529 for both IPx4 and IPx5.
8.	<b>Dust Protection</b> (a) Prefabricated Shelter has to be dust protected in a way that no dust is able to enter in sufficient quantity to interfere with the satisfactory operation of the equipment. (b) Rating minimum IP5x according to IEC 60529 & factory test reports shall be provided.
9.	<b>Physical Access protection</b> (a) Shell should be fitted with metal door with 120 min FR and shall not have any windows. (b) Metal door should have manual key/lock system as well as Biometric (PIN and face recognition) to avoid any unauthorised entry into shell. (c) Door is to be provided with 3 Point Panic Bar, Door Closer, door Handle and Panic push bar.
10.	Shell OEM should have complied with make in India program by Govt of India and should have its own sales and service support centre in all major cities in India.
11.	Shell OEM should have presence in India form last 10 years, copy of company registration and trademark registration to be submitted along with last three-year audited balance sheet. OEM must have ISO 50001.
12.	The shell should be entirely manufactured in India.
13.	Shell OEM should have registered on GeM Portal for easy procurement of spares in future. OEM confirmation with GeM Portal ID to be submitted along with technical bid.
14.	<b>Raised False flooring</b> Prefabricated shelter shall be provided with base frame of 250-300mm and all the services shall be above the racks & cooling equipment for cable, piping and services.
15.	Glands shall be 120min FR with IP56 and EMI-EMC protection shall be provided for making pipe/cable entries.
16.	<b>Server and Network Rack</b> (a) <b>Basic Structure.</b> Sturdy frame section construction, consisting of multi folded frame section. Removable top cover with cable entry cut-out with brushes & open Bottom with Cable entry provision.  (i) Server/Network Rack -19" (42U) 800 X 1200 Depth- 5 nos (ii) Fitted with Front Perforated Single Door & Rear Perforated Double Door with comfort handle. Doors should be at least 80 % hexagonal perforated (Holes). (iii) The rack shall have default provisioning to avoid air leakage from the front. (iv) Supply includes:– 3 x Fixed tray, 2 x Vertical accessory mounting channel at rear side and 5 x Horizontal cable manager, earth bar with wires, Captive Hardware pack. (v) All racks should be certified for UL 60950-1, UL2416, EIA 310, DIN 41494 and IEC 297 standards. The OEM should be certified for ISO 9001, 14001, ISO 45001:2018 & ISO 50001:2018.

	<p>(vi) Side panel shall be covered with horizontally split steel panels. The side panels should be easily detachable with locking provision.</p> <p>(vii) Rack should be Castor wheels 4 Nos. with adjustable levellers. The rack shall be not having External height &gt;1991mm including levelling legs and Castors.</p> <p>(viii) Load bearing capacity : 1150Kg</p> <p>(ix) Network Rack and PDU should be from same OEM.</p> <p><b>(b) Surface Finish.</b> Nano Ceramic coated, powder coated with textured polyester RAL 7035 to 80 to 120 microns.</p>
17.	<p><b>Power Racks</b></p> <p>17.1. Rack -19" (42U) 600 X 1000 Depth - 2 nos</p> <p>17.2. Each Rack shall be provided with 4 sets of rail systems to hold and maintain UPS, SMPS, batteries.</p>
18.	<p><b>Rack PDU</b> For rack PDU specification, refer <b>Technical Specification 01/01A</b></p>
19.	<p><b>3 X 8 TR Direct Expansion Microprocessor Based Precision A/C Units</b></p> <p>(a) Cooling shall be N+2 redundant.</p> <p>(b) The In-row cooling unit should have a gross cooling capacity of 30KW with air cooled condenser. Under ambient conditions, the unit should deliver no less than 21KW cooling.</p> <p>(c) The cooling unit should not exceed width of 300mm and should be aligned along with network/server racks. Unit should be suitable for operation up to 48 Deg C.</p> <p>(d) Unit shall be complete with variable speed EC Fans, VFD Brushless Scroll Compressor suitable with R410A Refrigerant, Electronic Expansion Valve for precise control of refrigerant for high energy efficiency, Stainless Steel Drain Pan, Multi Stage SS/Aluminium Finned Electric Heater with Reheat capacity of 6 kW, Humidity sensor, Immersed Electrode type Humidifier and Water Leak Detector.</p> <p>(e) Unit shall have display of airflow, set temperature and other essential parameters on the Microprocessor Controller.</p> <p>(f) SNMP V3 Card shall be provided for monitoring of each unit.</p> <p>(g) A minimum of two variable-speed fans should be used, capable of modulating between 30 % to 100 %. These fans should collectively deliver a total airflow of no less than 3600 CFM at full load, based on 120 CFM per kW of cooling capacity. Additional, the same units shall be capable to provide an extra 10% airflow during the power changeover to limit the raise in temperature.</p> <p>(h) All the Fans should be provided with finger guards for human safety.</p> <p>(j) Thermal Magnetic Circuit breakers provided should be rated as per UL 489.</p> <p>(k) The OEM should be certified for ISO 9001, ISO 14001 and ISO 50001. The In-row cooling system should be UL certified. Shell, rack and rack In-row cooling system as well as outdoor unit should be from same OEM.</p>
20.	<p><b>Lighting</b></p> <p>(a) Fully operational lighting system must be installed as a part of the infrastructure with motion sensors &amp; having 500 lux minimum.</p> <p>(b) Emergency lights to be provisioned as part of equipment room infrastructure, with 90min backup.</p>
21.	<p><b>Fire Detection</b></p>

	<p>(a) The Fire detection system shall comprise of a central unit, connected by two wires to field devices, including fire detection devices, alarm devices and control devices, located throughout the protected building area.</p> <p>(b) The control unit shall continuously monitor the status of all sensing devices and initiate action when a fire or smoke, heat condition is present. As per NFPA 2001 and ISO 14250 guidelines.</p> <p>(c) RE-25SS sounder cum strobe are designed to simplify installations to provide primary and secondary for fire and security applications with 100db at 30cm.</p>
22.	<p><b>Fire Extinguishing System</b></p> <p>To reduce the residual risk of a fire inside the room caused by the server and networking components an effective FK-5-1-12 in NFPA 2001 and ISO 14250, is a fluorinated ketone (or fluoroketone). It shall be clear, colourless, low odour, liquid that is super-pressurized with nitrogen and stored in high-pressure cylinders as part of a Suppression System.</p> <p>(a) 80 ltr cylinder with valves &amp; NOVEC agent</p> <p>(b) Electric, Manual &amp; Pneumatic actuators</p> <p>(c) Discharge &amp; actuation hose</p> <p>(d) Discharge nozzles</p> <p>(e) Pressure switch</p> <p>(f) Manual abort &amp; release switch etc.</p> <p>(g) Cylinder shall be 1+1 redundant with one main and second stand by. One spare cylinder should be supplied in addition to redundant cylinders.</p>
23.	<p><b>CCTV Surveillance</b></p> <p>(a) The system should be equipped with an IP enabled CCTV based surveillance system for monitoring of activity within and outside shell.</p> <p>(b) The system must be supplied with 6 nos of cameras with high resolution IR for night/dark. CCTV surveillance system must be capable of integrating at upto ten cameras for future expansion.</p> <p>(c) The system should have facility of remote viewing over IP network, with continuous activity recording and archival storage for at least 60 days.</p> <p>(d) It must also include an automatic backup feature to a suitable device at regular (configurable) interval, allowing recording to be retained for future requirements.</p> <p>(e) Camera and control unit must comply with IS 13252 (Part 1):2010 and carry certifications such as IP66, IK10, FCC, UL listed, CE and EAC.</p> <p>(f) The system should support web viewer for remote viewing, playback, control and configuration. Additionally, it shall be supported and supplied with two 65" LED display.</p>
23.	<p><b>Lightening and Surge Protection</b></p> <p>The shell must be provided with lightening and surge protection devices. The devices should meet IEC standards 61312, 61024, 61643 pertaining to protection against lightening and surges to withstand static electricity, electric fast transient and surge voltages. Class II protection (Power line protection as sub distribution level)</p>
24.	<p><b>SMPS and UPS</b></p> <p>SMPS (16 KW) and 15 KVA UPS Technical Specification are attached <b>Technical Specifications 01/02 and 01/04</b></p>
25.	<p><b>Network Cabling.</b></p> <p>All structure cabling work within the shell/ room such as rack to rack cabling fibre and copper and security system, SMPS/UPS, PDP, CCTV, ACS and network equipment cabling including OFC routing and laying will to be done by vendor for connectivity to the equipment hosted inside shell and outside shell.</p>



26.	<p><b>Monitoring and Management</b></p> <p>(a) Monitoring and management system for monitoring for all parameters with SNMPv3 compatibility facility.</p> <p>(b) Centralized visibility of all the equipment as per specifications to be considered.</p> <p>(c) An appliance based system (not exceeding 2RU) should be provided to monitor and manage all devices like rack PDU, camera, rack temperature, humidity sensor, door open etc in shall.</p> <p>(d) System must support SNMPv3 and should be capable to extends these monitoring and management capabilities to central designated location.</p> <p>(e) The system should support integration with AD/LDAP along with user access privileges assignment options from administrator.</p>
27.	<p><b>Civil Work</b></p> <p>Site preparation and modification work for requisite installation of all item listed in the equipment room specification such as floor levelling, wall cut-out closures entry beautification platforms for AC outdoor unit, DG Set plinth, DG set shed, day tank for DG Set, trenches, painting etc.</p>
28.	<p><b>Migration/ Connectivity Extension Activity</b></p> <p>In case any live system is to be shifted inside shell, required downtime will be provided to vendor for carry out the work, all work towards sifting of all equipment to temporary sites and reinstallation after work completion is vendor scope of work, user will only facilitate required raw power shutdown permission. Installation &amp; commissioning of all network and associated equipment and connectivity with IACCS node equipment using existing OFC and newly laid OFC will be responsibility of the vendor.</p>
29.	<p><b>Training, Testing, Documentation</b></p> <p>Post installation supplier has to ensure proper testing, training and acceptance of the solution to the user along with all handover documentation including as built drawings and user operation manual.</p>
30.	<p><b>MDF</b> 100 Pair MDF Krone with IPMs with inside and outside of the shell:</p> <p>-</p> <p><b>(a) Krone.</b></p> <ul style="list-style-type: none"> <li>(i) Suitable for use in all xDSL and ADSL 2+ circuits</li> <li>(ii) Flexible indoor and outdoor use</li> <li>(iii) Robust long term environmental stability</li> <li>(iv) Overvoltage protection using 10 pair protection magazine</li> <li>(v) Overvoltage &amp; overcurrent protection using single pair protection</li> </ul> <p><b>(b) IPM.</b></p> <p>Contact resistance: &lt; 2.5 m ohms</p> <ul style="list-style-type: none"> <li>(i) Insulation resistance: &gt; 50 000 Mega ohms</li> <li>(ii) Dielectric strength: 2 KV rms</li> <li>(iii) Impulse current: 5 kA (8/20 micro sec)</li> <li>(iv) Current carrying capacity: 2A</li> </ul>
31.	<p><b>125 KVA DG</b> 125 KVA DG Technical Specification are attached</p> <p><b>Technical Specifications 01/06</b></p>
32.	<p><b>AMF Panel</b></p> <p>AMF Panel (outside) (2x DG, 2x Main) + with two independent bus bar with circuit breaker (4xMCCB 200A, 2xMCCB 100A, 2xMCC 63Amp) PDU, PDP and AMP Panel should be from same OEM. Installation &amp; commissioning, electrical cabling from LT Panel &amp; DG sets to AMF Panel input and electrical cabling from AMF to PDP inside building will be responsibility of vendor and items</p>
33.	<p><b>Power Distribution Panel</b></p>

	PDP with dual bus bar with 2 x 4-Pole MCCB 200A incomer and 2 x MCCB 100A, 2 x MCCB 63A, 2xMCB 32A outgoing
34.	<b>Inside the Shell PDP</b> Dual Bus bar with 2 x UPS, 2 x SMPS, 3 x Inrow, lights etc including cabling from outside shell PDP to inside shell PDP and cabling for SMPS and UPS power supply (cabling from inside shell PDP and cabling from UPS/SMPS to PDUs)
35.	<b>Power Cabling inside the Shell</b> Redundant and independent power supply chain from outside shell Power Distribution Panel to inside shell Power Distribution Panel and further upto 42U Network/Server rack inside shell is to be provisioned. All the power cabling inside the shell will be vendor scope of work.

## **TECHNICAL SPECIFICATIONS (01/01A)**

### **RACK POWER DISTRIBUTION UNITS**

<b>Sl. No.</b>	<b>Description</b>
1.	The vertical metered PDU suitable for 42U Rack should provide a comprehensive view of critical IT equipment power usage, both at the rack and via remote access and physical access. The PDU shall be able to support PDU level power metering via remote access and local display for power visibility and notification of potential overload.
2.	The PDUs should be single-phase 7.4KW with IEC industrial plugs. PDU should have minimum of 20-nos. of C13/C15 outlets and 20 nos. C13/C15/C19/C21- hybrid socket with IEC 309 input power cords.
3.	All outlets should provide high retention to avoid accidental dislodging of power cords and should come with grip technology for locking IEC power cords. The PDU should meet electrical compliance and should be CE and ROHS Certified
4.	The PDU should have monitoring, at the PDU level, with metering accuracy $\pm 1\%$ compliant to ISO / IEC standard. Following monitoring parameters should be included: - (a) Voltage (V) (b) Current (A) (c) Power factor (d) Active power (W) (e) Apparent power (VA) (f) Energy consumption (kwh) (g) Circuit Breaker Status Monitoring
5.	The PDU should have dual Network Ports : 1 x Gigabit Ethernet (10/100/1000) and 1 x (10/100 Mbps) connection/IP address.
6.	The PDU should proactively monitor environmental conditions within the network/server rack and should support upto 8 sensors. It must have sensors for temperature, humidity, door switch, rope fluid leak, dry contact from day one.
7.	The PDU should be high temperature grade, operating temperature up to 60°C.
8.	Single Phase Rack PDUs shall be provided with hydraulic magnetic breakers that are color-coded to match their corresponding outlets.
9.	The PDU shall support firmware upgrade from network or through USB.
10.	The PDU should integrate with monitoring and management system of shell using SNMPv3.
11.	The PDU must have a Hot-Swappable controller, so that it can be replaced without powering off the PDU.
12.	The Rack PDU should have a rotatable colour liquid crystal display (LCD) and input buttons to allow to monitor current, power, and voltage measurements of the Rack PDU. The Temperature Units submenu displays the temperature units in Celsius (°C) & Fahrenheit (°F)
13.	IPDU supports communication protocols including DHCP, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RADIUS, SSH, SMTP, SSL, SNMP (v1, v3), Syslog. Communication module shall be hot-swappable, so that it can be replaced without powering off the PDU.
14.	Should support Web browsers like Google Chrome (mobile and desktop), Mozilla, Firefox, and Microsoft Edge on mobile and desktop

15.	The Rack PDU should support IPv4 and IPv6 Internet Protocol options with full network management and alerting capabilities. Should be able to communicate using HTTP, HTTPS, SNMP, FTPS, and email for network communications
16.	PDU shall have multiple login feature which allows up to eight users to be logged in simultaneously.
17.	The network settings should allow the management of IP configuration, Web REST API access configuration, SSH/FTPS configuration, Network Time Protocol (NTP), date/ time settings and daylight-savings time settings.
18.	The PDU should support strong password policy, for users to change their password at set intervals using the password aging interval policy. One can also specify criteria for passwords to ensure that your users enter strong passwords, including min/max password length, lower character, upper character, numeric and special character for strong password policy.
19.	The PDU, PDP and AMF panel should be form same OEM for smooth service during the warranty periods.
20.	The PDU should have approvals – UL 62368-1, CE, EN 62368-1, TAA ROHS.

**TECHNICAL SPECIFICATIONS (01/02)**  
**DC POWER SUPPLY (SMPS)**

1. DC power supply (DCPS) supply to the trunk equipment i.e. Routers, Aggregator switches and associated equipment installed in Equipment Rooms (ER) of Buyer, is to be supplied from DC power plant source.

**Generic Requirements.**

2. DCPS of -48 V DC Rectifiers i.e. SMPS with 400AH battery bank and use in Auto Float-cum-charge mode as a regulated DC power source. The Switch Mode Power Supply (SMPS) based DCPS must be installed indoor and must have minimum IP 20 ingress protection. DCPS must consist of following in a suitable enclosure:-

- (a) Float Rectifier-cum-Charger (FR/FC) modules.
- (b) Distribution/ Switching/ Control and Alarm unit

3. DCPS must be based upon menu driven Micro Processor Controlled Technique (both FR/FC module and Distribution/Switching/control and Alarm unit) with setting of all the parameters must be through menu driven microprocessor control. Failure of microprocessor of Distribution/ Switching/ Alarm unit must not affect setting of individual FR/FC modules. In that case all FR/FC modules must take care of load on default settings and share the load collectively.

4. The power system, consisting of rectifier(s) and its control system, must be modular in construction. All rectifier modules of the power system must be centrally controlled by a monitoring/ supervisory and control module without any manual intervention. The control system shall monitor the healthiness of the battery bank and provide quick charging facility to recoup the battery within permissible time as recommended by the battery manufacturer. The monitoring/ supervisory and control module must support hardware-reset functionality. The system must continue to operate and deliver required output even if the monitoring/ supervising and control module fails or stops communication with the rectifier(s).

5. The system must support the configuration of setting the current limit in battery path. The configuration must be done either at the site or remotely through remotely through central monitoring and management.

6. DCPS must be designed for ultimate system capacity as specified in this document for which equipped capacity shall be configured through N+1 no's of rectifier module where N stands for number of module required for equipped capacity.

7. All modules of the same type must be physically and electrically compatible and interchangeable between units supplied by the manufacturer.

8. The system must have provision of auto load sharing between installed modules.

9. All factory wiring, distribution/ switching/ alarm unit, sizes of fuse/ MCBs etc. must be provided for the ultimate capacity. Size of bus-bar, MCB, cable for load and battery side must be kept minimum 70% of ultimate capacity.
10. DCPS must be rack mountable chassis/ panel. The chassis must be manufactured from GI Sheet steel sheet of minimum 1.2mm. The finished chassis must be powder coated. Thickness of coating must be minimum 75 microns and color must be RAL 7035.
11. All cables used for internal wiring must be of Heat Resistant Fire Retardant (HRFR) type. All cables shall be unarmored multi/ single core copper PVC insulated cables/ Nyvin Cables. The minimum size of cable should be selected as per capacity of the cable. Terminals and holes in the DC (+) ve bus must be suitable for easy termination and bolting as required.
12. All bus bars used in the system shall be tin coated copper bus bars. Cross sectional area shall be suitable for the rated capacity.
13. The system employed Switched Mode Rectifier (FR/FC) in a modular configuration for flexible provision of DC power. To cater for higher load requirements, same type of FR/FCs rectifier modules mounted in the same rack or different racks must be capable of working in parallel load sharing arrangement.
14. The power system modules must be provisioned with inbuilt fan for cooling. The fan speed shall be varying in auto mode based on output current and temperature.
15. The system should be able to provide, Power Factor greater than 0.98 for nominal input & output voltages.

### **System Characteristics**

#### **16. Input Specification.**

- (a) The system must operate on 3-phase AC input voltage between 320 V–480 V AC, frequency 50  $\pm$ 5% Hz three Phase four wires.
- (b) Input Voltage Range : 90 ~ 300VAC
- (c) Frequency : 50  $\pm$ 5% Hz
- (d) Harmonic Distortion (THD) : 5 %
- (e) EMI Conducted : EN 300386 (CISPR 32- Class A)
- (f) Protection : Internal Fuse
- (g) AC over voltage protection : Incl. loss of neutral

#### **17. Output Specification. (DC Output).**

- (a) Nominal system voltage : 53.5V
- (b) Operating voltage range : 42 - 58 V
- (c) Voltage Regulation :  $\pm$ 1% of the regulated voltage
- (d) Overvoltage protection : 59 V
- (e) EMI (conducted) : EN 300386 (CISPR 32- Class A)
- (f) Load sharing : Yes

- (g) Protection : Internal Fuse
- (h) Efficiency : 94% or better under normal conditions.

18. **Rectifiers.**

- (a) The rectifiers must be based on Switch Mode Power Supply (SMPS) technology using switching frequencies of 20 KHz and above. The rectifiers must be supplied in N+1 (N Working+1 Standby) configuration.
- (b) The number of rectifiers (in N+1 configuration) will be decided by vendor based on overall load on DC Power System as per required load (i.e. total load consisting of equipment load plus battery charging load). e.g. in case of total DC Power System of 16 KW capacity is required by customer for equipment and battery charging load then Qty-05 Rectifier Module (04 Main + 1 Hot Stand by) need to be provisioned.
- (c) Each Rectifier module must be of 4KW and must support output current limits of 83.3A@48V, for each Module.
- (d) Rectifier shall gradually reach to 54V output in less than 90 second after switching it ON.
- (e) In case of low AC input voltage, the rectifier must stop output when input is 90V or less. It must resume output once input voltage reaches 100V.
- (f) In case of high AC input voltage, the rectifier must stop output when input is more than 305V. It must resume output once input voltage reduces to 300V.
- (g) Individual rectifier modules rating must be such that under full load on output side, no module is loaded more than 100% of its rated capacity. Spare module must not be considered while calculating load on individual module.
- (h) Rectifier must be hot swappable and compatible with other fitted rectifiers.
- (j) In the event one of the rectifiers fails, other rectifiers must take full load and deliver required output. The design of the pluggable units must be such that it will not allow plugging of a module in the wrong slot or upside down. Each one of the pluggable units must have provision for positive locking in place after insertion into the slot.
- (l) A separate monitoring/ supervisory control module must control all rectifiers. In case any of the rectifier modules loses communication with this control module, such rectifier(s) must go back to its default settings in less than 10 seconds and voltage dropped from 53.5 V and must continue to operate under these conditions till communication is restored.
- (m) Protection functions of control module (e.g. input and output High Voltage, Low Voltage, over loading (105% max) and short circuit protection etc.) must be duplicated in each rectifier module so that in the event of failure of the

controller the rectifier module(s) must continue to work on default values in rectifier.

(n) Unless specified otherwise in datasheet, DC output voltage range of rectifier must be 42 to 58 V. However, over voltage protection circuit in the rectifier must be set to shut-off the module when the voltage exceeds (-) 56 V.

(o) The modules must be rated to operate continuously at 50 Degree C. Derating curves for higher temperature must be submitted by manufacturer.

(p) DC output from rectifiers must be distributed to batteries (for charging) and/or to connected loads of the facility.

(q) Rectifiers must be suitable for specified input AC power voltage and frequency variations.

(r) The Psophometric Noise with a battery of appropriate capacity connected across the output should be within 2 mV (RMS), while delivering the full rated load. For test purpose this can be taken as equivalent to 4 mV when the battery is not connected other conditions remaining the same as per ITU-T Rec 0.41.

(s) The rectifier's high frequency output noise must be limited to 50mV (RMS) and peak to peak ripple including switching spikes must within 250mV over a range of 10Hz to 20 MHz

(t) Slow start circuitry must be employed such that FR/FC module input current and output voltage must reach their nominal value within 10 seconds.

(u) The total line harmonic voltage distortion must not be more than 5%.

(v) The total current harmonic distortion contributed by the unit at the input must not exceed 5% for voltage range 184-276V for load between 50 to 100% of the rated capacity.

(w) Rectifiers must have built in protection against the input AC under / over voltage, output under / over voltage and over load and short circuit.

(x) Rectifier must provide following features:

- (i) Start-up delay provision
- (ii) Rectifier sleep mode
- (iii) Independent operation during isolation of controllers
- (iv) Slow start up provision and power limit setting (20% to 105%)
- (v) Current capacity limit in range of 50-100%
- (vi) Auto reset after fault condition
- (vii) MTBF >10 lac hours

19. **Environmental Conditions for Rectifier Module.**

(a) Operating Temperature : -10 to 55°C

(b) Operating relative humidity range : 5% to 95% (Non Condensing)



- (c) Acoustic Noise: 50 dg (A)  
 (d) Acoustics Noise : 50 dg (A)

### **DC Distribution Panel**

20. The DC distribution panel shall be for termination of DC loads. Number of DIN rail mounted MCBs and Terminal blocks shall be provided for the (-) ve and (+) ve terminals respectively for each outgoing load.
21. Number and rating of output MCB (DC DB) must be Qty 05 of 63 Amps, Qty 02 of 32 Amps and Qty 02 of 16 Amps
22. DC load MCBs must conform to IEC 60947-2 /60898-1 and must have following characteristics: -
- (a) Finger touch proof terminals
  - (b) Thermal magnetic trip unit technology
  - (c) C - Type thermo magnetic release characteristics
  - (d) Rated breaking capacity (Icu) of 10KA and service breaking capacity 75% of rated capacity.
  - (e) Rated AC voltage – 230/400 V and rated DC voltage 60V.
  - (f) Degree of protection of IP20
  - (g) Pollution degree Class II
  - (h) Operating temperature range from -30 to 70°C with allowed derating.
  - (i) Cable termination suitable for MCB of rating  $\geq 63A$  as per requirement
  - (j) MCB shall be calibrated at temperature of 30-degree C
23. The MCB shall not catch fire even under failure condition. Heat Resistant Fire-Retardant type of materials only shall be used. Confirmation to this extent shall be provided by manufacturer.

### **Lightening and Surge Protection.**

24. DCPS must be supplied with Class B and C Surge Protection Device (SPD) suitable lightning/ surge protection for following surges:-

#### **(a) Lightning Electromagnetic impulse and other High Surges**

##### **Between Requirement**

R, Y, B & N  $I_{imp} \geq 25 \text{ kA}, 10/350 \mu\text{S}$  for each phase  
 N & PE  $I_{imp} \geq 100 \text{ kA}, 10/350 \mu\text{S}$   
 $I_{imp}$  = Value of lightning impulse current

#### **(b) Voltage Surges.**

##### **Between Requirement**

R, Y, B & N  $I_n \geq 10 \text{ kA}, 8/20 \mu\text{S}$  for each phase  
 N & PE  $I_n \geq 20 \text{ kA}, 8/20 \mu\text{S}$   
 $I_n$  = Value of nominal discharge current.

25. SPD must have health indication (Green-OK and Red-failure).

26. SPD must be cartridge type with heat resistant and fire retardant enclosure. The SPD must never catch fire even when it fails due to surge and/or high voltage / current. Test report demonstrating this must be required prior to approval of the model offered.
27. Offered SPD must have been tested and certified by IEC EE-CB / KEMA/ VDE/ UL approved laboratory.

### **Battery Management.**

28. **Auto Float Mode.** The float voltage of each module shall be continuously adjustable & pre-settable at any value in the range of –48 to –56V from both FR/FC or DSCA. There must also be a provision of setting float/charge voltages globally from DSCA.

29. **Auto Charge Mode.**

- (a) In auto charge mode FR/FC, must supply battery and equipment current till terminal voltage reaches set value and must change over to constant voltage mode. It must remain in this mode till a charge over to float mode signal is received.
- (b) The DC output voltage at the terminals must be maintained within  $\pm 1\%$  of half load present voltage from 25% load to full load condition when measured over the full specified input range.

30. Set of batteries used for back-up power must be connected to power supply system using fuses or MCBs for (-) ve terminals. For positive terminal tin coated copper bus bar or terminal blocks (TBs) must be provided.

31. Rating and number of such fuses/ MCB/ TBs must be as specified in datasheet. When fuses are used, they must meet following requirements: -

- (a) Fuses must be designed for minimum rated voltage of 80V DC. Breaking capacity/ short circuit capacity shall be minimum 25kA and must comply IEC 60269-1 and IEC 60269-4.
- (b) Fuse full range protection must meet characteristics as per IEC 60269-4.
- (c) Voltage drop must be less than 40mV across the fuse.
- (d) Operating temperature range (–) 20 Degree C to (+) 70 Degree C. Calibration temperature must be minimum 40-degree C.
- (e) It should comply pollution degree Class III.
- (f) While sizing fuse component temperature effect on de-rating shall be considered.

32. **Current Limiting (Voltage Drop).**

- (a) The current limiting (Voltage Drop) must be provided for float/ charge operation. The float/ charge current limiting must be continuously adjustable

between 50 to 100% of rated output current for output voltage range of –44.4 to –56 Volts. For test purposes upper limit of 100%+5% and lower limit of 50%-5% shall be acceptable.

(b) The float and charge current limit adjustments shall be provided on the front panel of the rectifier module. The FR/FC module must be fully protected against short circuit. It must be ensured that short circuit does not lead to any fire hazard. The unit must start delivering output automatically when the short circuit is removed.

33. **Temperature Compensated Float Charge, Boost and Equalize Charge.**

There shall be provision for monitoring the temperature of battery and consequent arrangement for automatic temperature compensation of the FR/FC output voltage to match the battery temperature dependent charge characteristics. The output voltage of the rectifier in float/ charge operation must decrease or increase at the rate of 72 mV (3m V/cell, 24 cell battery) per degree increase or decrease in temperature over the set voltage or as recommended by the VRLA Battery supplier. The output voltage must decrease till the open circuit voltage of the battery is reached. The open circuit voltage range must be settable between 2.1V/cell to 2.2V/cell. The increase in output voltage due to decrease in temperature has been taken care of by the tripping of the unit due to output voltage high (57V) protection. A tolerance of +/-5mV may be acceptable over the specified rate of 72mV/deg C. Failure of temperature compensation circuit including sensors must create an alarm and must not lead to abnormal change in output voltage.

34. State of charge supervision and display.

35. Automatic capacity test

36. Symmetry supervision for voltage and currents

37. The DCPS must be compatible with VRLA batteries and Lithium battery.

**Rectifier Management.**

38. **Load Sharing (Parallel operation).** FR/FC modules must be suitable for operation in parallel with one or more modules of similar type, make and rating. The current sharing must be within  $\pm 10\%$  of average current per rectifier module in the unit. In the event of failure of DSCA, FR/FC module parameters must not be disturbed. In case of failure of a FR/FC module, all the other FR/FC modules share the load collectively.

39. **Soft Start Feature.** Soft/ Slow start circuitry must be employed such that FR/FC module input current and output voltage must reach their nominal value within 10 seconds. The maximum instantaneous current during start up must not exceed the peak value of the rectifier input current at full load at the lowest input voltage specified.

40. **Voltage overshoot/ Undershoot.**

(a) The FR/FC modules must be designed to minimize output voltage overshoot/ undershoot such that when they are switched on, the DC output

voltage must be limited to  $\pm 5\%$  of the set voltage & return to their steady state within 20 ms for any load of 25% to 100%.

(b) The DC output voltage overshoot for a step change in AC mains must not cause shut down of FR/FC module and the voltage overshoot must be limited to  $\pm 5\%$  of its set voltage and return to steady state within 20 ms.

(c) The modules must be designed such that a step load change of 25 to 100% must not result in DC output voltage overshoot/ undershoot of not more than 5% and return to steady state value within 10 ms without allowing the unit to trip.

41. Rectifier replacement counter logging

42. Redundant & capacity lacking monitoring

43. **Protection.** The FR/FC module which has failed (for any reason) must be automatically isolated from the rest of the modules and an alarm must be initiated for the failure.

#### **DC Over Voltage Protection.**

44. Each FR/FC module must be fitted with an internal over voltage protection circuit. In case output DC voltage exceeds  $-57V$ , the over voltage protection circuit must operate & shut off the faulty module. A tolerance of  $\pm 0.25V$  is permitted in this case. Restoration of the module shall be through system controller.

45. Shutting off of faulty FR/FC module must not affect the operation of other FR/FCs operating in the rack. Operation of over voltage shut down must be suitably indicated on the module and also extended monitoring/control unit. The circuit design must ensure protection against the discharge of the battery through the FR/FC module in any case. The over voltage protection circuit failure must not cause any safety hazard.

#### **Fuse/Circuit Breakers**

46. Fuses or circuit breakers must be provided for each FR/FC module as follows:-

- (a) Live AC input line
- (b) Negative DC output
- (c) Against failure of control sensing circuit

47. All fuses/ circuit breaker used must be suitably fault rated. The contractor shall furnish details of all required circuit breakers/ fuses during detail engineering.

#### **Over Load/Short Circuit Protection.**

48. The FR/FC module must be fully protected against over load/ short circuit and it should not lead to fire hazards.

49. Alarms and indicating lamps

50. Audio alarm and visual indications/ display such as audio warning, LEDs/ LCDs must be provided on each FR/FC module for detection of SMPS module failure.

### **System and Rack Configuration.**

51. **System Configuration.** The FR/FC modules shall be accommodated in a rack. The system shall employ a modular configuration to provide flexibility, keeping in view the future load requirements of DC Power. The system shall be configured for ultimate capacity of this specification. The control, monitoring and alarm arrangement shall be provided suitably in the panel.

52. **Constructional Features of Rack.** The rack shall be so designed that individual FR/FC module can be easily mounted/ removed from the front side of the rack by sliding into the rack and fixed securely by a suitable mechanical arrangement. The associated AC input, DC output connections, control/alarms and interface cable connecting the modules shall be easily pluggable without causing any interruption in the supply and damage to the load or other working module.

53. Thermal engineering of hardware design must be done by the contractor so as to ensure the uninterrupted use of the equipment. Forced cooling is permitted (DC fans are permitted in the rack or FR/FC module). If cooling is provided at rack level it shall be provided with additional fan with facility for manual switch over. Proper filtering shall be provided to control dust ingress. There shall be an arrangement for automatic Switching-OFF of fans during AC input failure. If required individual modules may be separated by air baffle to provide effective convection. The contractor shall also ensure that the failure of fan does not cause any fire hazards. The failure of any of the fans shall draw immediate attention of the maintenance staff by audio alarm and visual alarms fitted in SMPS.

54. **Distribution/ Switching/ Control and Alarm Unit.** Depending upon the system requirements and manufacturer's design, one or all power plant racks shall be provided with a distribution/ switching/ control and Alarm unit (arrangement) for the ultimate system capacity.

55. **The unit must comprise of the following: -**

- (a) Termination for the batteries.
- (b) Termination for the load.
- (c) Interconnecting arrangement for power equipment.
- (d) Battery switching Arrangement (Connection to/isolation from system) \*
- (e) Termination for AC input to the rack.
- (f) Termination for AC and DC to FR/FC modules.
- (g) Circuit breakers/ fuses etc.

56. Distribution/ switching/ control/ alarm and sub system of equipment must be in modular form and may be accommodated in a rack with other FR/FC modules. The unit shall preferably be housed in upper portion of rack above FR/FC modules and shall be designed to meet the ultimate capacity of system as specified in these technical specifications.

### **Alarms and Indications**

57. Following Audio, Visual indications/ display for Audio warning and LEDs or LCDs (or a combination of both) must be provided to indicate: -

(a) **Functional Indications.**

- (i) Mains available (not mandatory if provided at module level)
- (ii) FR/FCs in Auto Float Mode
- (iii) FR/FCs in Auto Charge Mode

(b) **Alarm Indication.**

- (i) Load Voltage High / low (High > 57V, low below 44.4V)
- (ii) FR/FC fail
- (iii) Mains out of range
- (iv) System Over Load
- (v) Mains "ON"/Battery Discharge
- (vi) Fan fail (in case fan provided at rack level)
- (vii) Low Battery Voltage

(c) **Digital Meters/ Display Units.** There must be provision to monitor the following parameters through digital meters or digital display units:-

- (i) Input AC Voltage
- (ii) Output DC Voltage
- (iii) Output DC Current of Charger
- (iv) Battery Current.
- (v) Load Current
- (vi) Mains Run Hrs
- (vii) Battery Run Hrs
- (viii) Rectifier Energy
- (ix) Battery Energy
- (x) Load Energy

**System Controller Features.**

58. High-end microcontroller based color touch display.

59. Integrated PLC (Programmable Logic Controller) functions to enhance flexibility, and monitoring and controlling site infrastructure.

60. Remote and local SW and configuration update.

61. Easy maintenance by pluggable architecture and MicroSD card slot to enable automatic backup

62. Local Monitoring with LAN / WEB browser with configurable access rights, login control and user profiles.

63. Remote Monitoring with Web browser, REST, SNMP V1,V2 & V3, Syslog, MODBUS, customer specific protocols via Ethernet , RS232, RS485 or modem , IPV4/IPV6. The SMPS must have Network Interface of 100/1000 Mbps Base Tx for management purposes.

64. Dry contacts/ SNMP traps/ SMS, dial-out together with modems

65. The Controller of SMPS have wide range of battery charging current limit and suitable for both Li-ion battery and VRLA battery charging.

66. Controller should support minimum USB/ Ethernet for PC interface for programming/reconfiguration of the parameters through laptop.
67. The controller of SMPS can store last 10,000 events (minimum) including major alarms etc. The same shall be downloaded in excel format.
68. The Distribution/ switching/ alarm and control arrangement shall comply with the requirements.
69. The system (including FR/FC modules) must be suitable for operation from AC mains or from DG set.

### **Central Monitoring System Features**

70. It should provide a single pane view for monitoring of all SMPS' deployed in network. It should have real time alerting mechanism for any failure to the monitoring personnel.
71. It should collect/receive logs sent by the SMPS' on network. It must store logs for the purpose of post incident analysis.
72. Central Monitoring solution must be compatible with all SMPS models being provided by the vendor.
73. It should provide RBAC feature to control access of the solution.

### **Standards**

70. The SMPS shall be designed in accordance with the applicable sections of the current revision of the following standards. Where a conflict arises between these documents and statements made herein, the statements in this specification shall govern:-
- (a) Safety Compliance: IEC/EN 60950, UL 60950, CAN/ CSA – C22.2
  - (b) EMI (radiated) Compliance: EN 55022, Class B
  - (c) Environment Compliance : RoHS Compliant

**TECHNICAL SPECIFICATIONS (01/03)**  
**4 KW DC POWER RECTIFIER (DC POWER MOUDLE)**

1. **4 KW Rectifier (DC Power Moudle).** 4 KW Rectifier (DC Power Module) must be compliance to the following: -

- (a) The rectifiers shall be based on Switch Mode Power Supply (SMPS) technology using switching frequencies of 20 KHz and above. The rectifiers must work in N+1 (N Working+1 Standby) configuration.
- (b) The number of rectifiers (in N+1 configuration) will be decided by vendor based on overall load on DC Power System as per required load (i.e. Total load consisting of equipment load plus battery charging load). e.g. in case of total DC Power System of 16 KW capacity is required by customer for equipment and battery charging load then Qty-05 Rectifier Module (04 Main + 1 Hot Stand by) need to be provisioned.
- (c) Each Rectifier module must be of 4KW and must support output current limits of 83.3A@48V, for each Module.
- (d) Rectifier must gradually reach to 54V output in less than 90 second after switching it ON.
- (e) In case of low AC input voltage, the rectifier must stop output when input is 90V or less. It must resume output once input voltage reaches 100V.
- (f) In case of high AC input voltage, the rectifier must stop output when input is more than 305V. It must resume output once input voltage reduces to 300V.
- (g) Individual rectifier modules rating must be such that under full load on output side, no module is loaded more than 100% of its rated capacity. Spare module shall not be considered while calculating load on individual module.
- (h) Rectifier must be hot swappable and compatible with existing rectifier.
- (j) In the event one of the rectifiers fails, other rectifiers must take full load and deliver required output. The design of the pluggable units shall be such that it will not allow plugging of a module in the wrong slot or upside down. Each one of the pluggable units must have provision for positive locking in place after insertion into the slot.
- (k) 4KW Rectifier will be used by customer to enhance power capacity of existing SMPSs deployed pan-IAF. Therefore, vendor supplied 4KW Rectifiers must be compatible with existing SMPS and seamlessly fitted with any additional license, software and hardware module without any impact on performance of already fitted rectifiers.
- (l) A separate monitoring/supervisory control module must control all rectifiers. In case any of the rectifier modules loses communication with this



control module, such rectifier(s) must go back to its default settings in less than 10 seconds and voltage dropped from 53.5 V and shall continue to operate under these conditions till communication is restored.

(m) Protection functions of control module (e.g. input and output High Voltage, Low Voltage, over loading (105% max) and short circuit protection etc.) shall be duplicated in each rectifier module so that in the event of failure of the controller the rectifier module(s) shall continue to work on default values in rectifier.

(n) Unless specified otherwise in datasheet, DC output voltage range of rectifier shall be 42 to 58 V. However, over voltage protection circuit in the rectifier must be set to shut-off the module when the voltage exceeds (-) 56 V.

(o) The modules shall be rated to operate continuously at 50 Degree C. Derating curves for higher temperature shall be submitted by manufacturer.

(p) DC output from rectifiers shall be distributed to batteries (for charging) and/or to connected loads of the facility.

(q) Rectifiers shall be suitable for specified input AC power voltage and frequency variations.

(r) The Psophometric Noise with a battery of appropriate capacity connected across the output should be within 2 mV (RMS), while delivering the full rated load. For test purpose this can be taken as equivalent to 4 mV when the battery is not connected other conditions remaining the same as per ITU-T Rec 0.41.

(s) The rectifier's high frequency output noise shall be limited to 50mV (RMS) and peak to peak ripple including switching spikes must be within 250mV over a range of 10Hz to 20 MHz.

(t) Slow start circuitry must be employed such that FR/FC module input current and output voltage shall reach their nominal value within 10 seconds.

(u) The total line harmonic voltage distortion must not be more than 5%.

(v) The total current harmonic distortion contributed by the unit at the input must not exceed 5% for voltage range 184-276V for load between 50 to 100% of the rated capacity.

(w) Rectifiers must have built in protection against the input AC under / over voltage, output under / over voltage and over load and short circuit.

(x) Rectifier must provide following features:

- (i) Startup delay provision
- (ii) Rectifier sleep mode
- (iii) Independent operation during isolation of controllers
- (iv) Slow startup provision and power limit setting (20% to 105%)

- (v) Current capacity limit in range of 50-100%
- (vi) Auto reset after fault condition
- (vii) MTBF >10 lac hours

2. **Environmental Conditions for Rectifier Module.**

- (a) Operating Temperature : -10 to 55°C
- (b) Operating relative humidity range : 5% to 95% (Non Condensing)
- (c) Acoustic Noise: 50 dg (A)
- (d) Acoustics Noise : 50 dg (A)

**Rectifier Management.**

3. **Load Sharing (Parallel operation).** FR/FC modules shall be suitable for operation in parallel with one or more modules of similar type, make and rating. The current sharing shall be within  $\pm 10\%$  of average current per rectifier module in the unit. In the event of failure of DSCA, FR/FC module parameters shall not be disturbed. In case of failure of a FR/FC module, all the other FR/FC modules share the load collectively.

4. **Soft Start Feature.** Soft/ Slow start circuitry shall be employed such that FR/FC module input current and output voltage shall reach their nominal value within 10 seconds. The maximum instantaneous current during start up shall not exceed the peak value of the rectifier input current at full load at the lowest input voltage specified.

5. **Voltage overshoot/ Undershoot.**

(a) The FR/FC modules shall be designed to minimize output voltage Overshoot/Undershoot such that when they are switched on, the DC output voltage shall be limited to  $\pm 5\%$  of the set voltage & return to their steady state within 20 ms for any load of 25% to 100%.

(b) The DC output voltage overshoot for a step change in AC mains shall not cause shut down of FR/FC module and the voltage overshoot shall be limited to  $\pm 5\%$  of its set voltage and return to steady state within 20 ms.

(c) The modules shall be designed such that a step load change of 25 to 100% shall not result in DC output voltage Overshoot/Undershoot of not more than 5% and return to steady state value within 10 ms without allowing the unit to trip.

6. Rectifier Replacement Counter logging

7. Redundant & Capacity lacking monitoring

8. **Protection.** The FR/FC module which has failed (for any reason) shall be automatically isolated from the rest of the modules and an alarm shall be initiated for the failure.

**Standards**

9. The SMPS shall be designed in accordance with the applicable sections of the current revision of the following standards. Where a conflict arises between these documents and statements made herein, the statements in this specification shall govern:-

- (a) Safety Compliance : IEC/EN 60950, UL 60950, CAN/ CSA – C22.2
- (b) EMI (radiated) Compliance : EN 55022, Class B
- (c) Environment Compliance : RoHS Compliant

**TECHNICAL SPECIFICATIONS (01/04)**  
**15 KVA UPS**

1. The 19" rack mountable 15 KVA online UPS will be utilized to power up network and IT devices e.g. Layer 2 switch, Layer 3 switch, Router, Firewall, Servers and other network & IT elements within IAF premises. The UPS to meet following specifications:-

SI No	Description	Specification
<b><u>15 KVA UPS</u></b>		
1.	Type	True online double conversion, Rectifier & Inverter both with IGBT based DSP Processing Design.
2.	Form Factor	19" Rack Mountable Max Height : 2U Necessary mounting kit and rail assembly to be supplied along with the UPS Tower mount not acceptable Auto Start & Cold Start feature shall be available UPS to be compatible with DG Set supply and mains supply FAN failure/ life prediction and Speed control
3.	Electrical Input	Input Voltage : 3-Φ4W+G (3-Phase & Neutral + Ground) 310-480 V AC Input Frequency : 50 Hz ± 10% Power Factor : 0.99 or better on full load, THDi<3%
4.	Electrical Output	Output Voltage : 230V ± 2% Single Phase Output Frequency : 50Hz ± 0.1% Harmonic Distortion less than 3% for linear load Output Voltage Distortion (THDu) <2% Power Factor : 0.9 or better without de-rating for 0 to 40 deg C temp range
5.	Overload Conditions	Overload Conditions - Overload Capacity : upto 125% overload for one minute and upto 150% overload for 30 second
6.	Overall efficiency (AC to AC) online	95% or better (On full R Load - Double conversion) ECO Mode efficiency – 98.5% or better
7.	Output Waveform	Pure Sine wave
8.	Protection against	Short Circuit, Overloading, Low battery, Input Over/ Under voltage, Over Temperature Deg of Protection – IP20 Inbuilt Surge Protection Device – Fitted with Class B and C Surge Suppressors
9.	Protection for battery under voltage	Protection for under voltage at battery terminal at 10.5V per 12 V battery
10.	Protection for battery over voltage	Protection of over voltage, short circuit & over load at UPS output terminal
11.	Electrical cabling	Minimum 05 Mtrs for I/O connections (inclusive) Minimum 05 Mtrs for Battery connections (inclusive)
12.	Network Interface Card	Network Interface - 100/1000 Mbps RJ45 interface for remote monitoring and forwarding log data in SNMPv3 protocol
13.	SNMP Management	SNMPv3

14.	Central Monitoring Solution (CMS) for UPS	Required Licenses and software/hardware must be supplied with UPS for central management and monitoring. Must be compatible with existing CMS of IAF. Supplied UPS must be managed and monitored through existing CMS solution available with existing CMS solution available with IAF.
15.	Noise level	< 54 dB at 1 meter distance
16.	Operating Temp/RH	0 to 40 deg C and 5 to 95% RH
17.	Bypass	Automatic bypass switch
<b>Display</b>		
18.	Measurements (on LCD)	Input : Voltage, Frequency Bypass : Voltage, Frequency Output : Voltage, Frequency, current, load level and percentage, Battery voltage, Capacity voltage, Change Mode, Last battery test time
19.	Fault Indication (on LCD)	Fault codes are available
20.	Indication (LED)	AC Indicator/ battery Mode of operation/ Bypass feeding the load/ UPS Fault
21.	Audible Alarm	Input Fuse Open, PFC soft start Fail, DC BUS over shutdown, DC BUS under shutdown, INV volt abnormal, Output overload shutdown, Charger Fault, INV IGBT over heat shutdown, PFC over heat shutdown, Battery disconnected Battery Low beep/ DC Fault beep/ UPS overload beep/ O/P short circuit fault beep/ Shutdown beep
<b>Certificates</b> (All certificate from OEM are to be submitted for Indian Operations)		
22.	Product certificate	BIS
23.	QMS	As per ISO 9001
24.	EMS	As per ISO 14001
25.	OSHAS	As per ISO 18001 or 45001
26.	OEM Factory	Shall have NABL accredited Calibration lab in India
27.	Product Safety Certifications	EN 62040-2, EN 61000-3-2 ESD : IEC61000-4-2: level 4 RS : IEC61000-4-3: level 3 EFT : IEC61000-4-4: level 4 Surge : IEC61000-4-5: level 4 CS : IEC61000-4-6: level 3 BIS, ROHS, UL & CE
<b>Battery</b>		
28.	Battery	12V SMF-VRLA conforming to JISC:8702 (Pt.I,II & III) Battery backup for 30 minutes or more (for battery sizing, select 0.8 PF) Minimum 16115 VAH or more Battery nos shall be settable from 32 to 40 UPS shall also be capable to work with 24 batteries in case of failure of some batteries Battery Life - Service life of 3 years, with a replacement warranty for 36 months Battery Replacement – Field replaceable by user

## TECHNICAL SPECIFICATIONS (01/05)

### PASSIVE INFRA FOR 42U RACK FDF RJ-45 PATCH PANEL OPTICAL AND RJ-45 PATCH CORDS

#### **Fiber Distribution Frame (96 Pair Port/ 192 Port)**

1. The Fiber Distribution frame/ Light Interface Unit (LIU) of 192 ports should be 2U size, 19 Inch rack mountable and should support following specifications: -

SI No	Description
<b><u>Fiber Distribution Frame (FDF - 192 Port)</u></b>	
1.	FDF -192 Port should accept multiple Interface LC type Adaptors
2.	FDF must have snap-in sub modules capable of supporting 24 Fibers. Each FDF must support to insert min 8 snap-in sub modules
3.	Panel must be capable of supporting minimum 04 x 48 Core OFC per FDF
4.	Must have integrated fiber splicing trays for termination of outdoor single mode fiber. FDF should be supplied with cable glands and other required accessories for routing of outdoor single mode fiber
5.	Must have minimum 4 knockouts at the rear to enable termination of loose tube or tight buffered cables as well as blown fiber tubes
6.	Must be slide able for ease of reconfiguring fibers and should have tamper proof positive locking mechanism by means of clips supplied as standard with each unit
7.	Should be made of rugged steel or better specification material
8.	The metal gauge thickness should be of min 1.8 mm
9.	All FDF components should be from same OEM and OEM should have manufacturing facility in India with ISO Certification
10.	Should be UL or ETL approved & ROHS Complied
11.	Should meet ANSI/TIA/EIA 568-C.3 or ISO/IEC 11801:2017 operating specifications for rack mounted
12.	Each FDF must be supplied with 64 x 7 feet, 64 x 5 feet and 64 x 3 feet patch cords
<b><u>LC Adapter Strips/ Plates for LIU-192 Ports</u></b>	
LC adapter strips and plates for LIU must meet following specifications: -	
13.	LC adapter should provide a min. of 12 duplex or 24 simplex-position LC adapter solutions. 12 or 24 LC Ports to be provided in one adaptor, allowing for multiple LC connectors to be mated within the adapter
14.	It should have Ceramic or Phosphor Bronze which will have alignment sleeves accommodate single mode and multimode operation
15.	The product must be compliant with ISO/IEC 11801, ANSI/TIA/EIA 568.B.3-2000, ANSI/TIA/ EIA-492 & RoHS Compliant
16.	It must have snap fit/ quick fit mounting for installation flexibility
17.	Adapter strips should come with LC couplers
18.	Adapter strips should be preloaded with adapters/couplers (simplex or duplex). The couplers should be available with dust covers
19.	Adapter strips should be suitable for both Wall Mount and Rack Mount LIUs
<b><u>LC-LC Fiber Patch Cord</u></b>	
LC-LC Fiber Patch Cord must meet following specifications: -	

20.	LC-LC fiber patch cords of (Qty 64 x 7 feet, Qty 64 x 5 feet and Qty 64 x 3 feet with FDF 192 port are required for providing fiber connectivity for networking equipment
21.	The fiber patch cord shall be factory terminated with LC connector at both ends with a tight buffer construction of 0.9 mm
22.	Insertion loss: $\leq 0.3$ dB@1310nm for both SM & MM
23.	Return loss : $\geq 50$ dB@1310nm for SM, not applicable for MM
24.	Durability : Minimum 200 insertions
25.	Tensile strength: 150 N in short term, Crush Resistance: 500 N/ 10 cm
26.	Cable OD : 1 to 3 mm
27.	Flame retardant fiber optic cable with tight-buffered coating on each optical fiber
28.	Patch cord shall be bend insensitive type as per ITU G.657.A2 & G.652 D and comply with ANSI/TIA/EIA 568-C.3 standards
29.	The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
30.	Should be UL or ETL approved & ROHS Complied
<b><u>LC Fiber Pigtailes</u></b>	
LC fiber pigtailes must meet following specifications: -	
31.	LC fiber pigtail should provide Qty 192 x 1.5 mtr with FDF 192 Port
32.	Optical fiber pigtailes must comply with ANSI/TIA/EIA 568-C.3 standards
33.	LC pigtail to be single mode
34.	LC pigtailes should be 1.5 mtr length with tight buffer construction of 0.9 mm
35.	Optical fiber pigtailes should have max. tensile strength of 30N in short term. It should have max. crush resistance of 100N/100(short term)
36.	Insertion loss: $\leq 0.3$ dB@1310nm for both SM & MM
37.	Return loss : $\geq 50$ dB@1310nm for SM, not applicable for MM
38.	The fiber shall be bend insensitive type as per ITU G.657.A2 & G.652 D. The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
39.	Should be UL or ETL approved & ROHS Complied

### **Fiber Distribution Frame (12 Port)**

2. The Fiber Distribution Frame/ Light Interface Unit (LIU) of 12 ports should be 1U size, 19 Inch rack mountable and should support following specifications: -

SI No	Description
<b><u>Fiber Distribution Frame (FDF - 12 Port)</u></b>	
40.	FDF -12 Port should accept multiple Interface LC type Adaptors
41.	FDF must have snap-in sub modules capable of supporting 12/24 Fibers. Each FDF must support to insert min 8 snap-in sub modules
42.	Panel must be capable of supporting minimum 02 x 24 Core or 01 x 48 Core OFC per FDF
43.	Must have integrated fiber splicing trays for termination of outdoor single mode fiber. The FDF should be supplied with cable glands and other required accessories for routing of outdoor single mode fiber cables
44.	Must have minimum 4 knockouts at the rear to enable termination of loose tube or tight buffered cables as well as blown fiber tubes

45.	Must be slide able for ease of reconfiguring fibers and should have tamper proof positive locking mechanism by means of clips supplied as standard with each unit
46.	Should be made of rugged steel or better specification material
47.	The metal gauge thickness of LIU should be of min 1.8 mm
48.	All FDF components should be from same OEM and OEM should have manufacturing facility in India with ISO Certification
49.	Should be UL or ETL approved & ROHS Complied
50.	Should meet ANSI/ TIA 568-C.3 or ISO/IEC 11801:2017 operating specifications for rack mounted
51.	Each FDF must be supplied with Qty 12 x 7 feet and Qty 12 x 3 feet patch cords
<b><u>LC Adapter Strips/ Plates for LIU</u></b>	
LC adapter strips and plates for LIU must meet following specifications: -	
52.	LC adapter should provide a min. of 6 duplex or 12 simplex-position LC adapter solutions, allowing for multiple LC connectors to be mated within the adapter
53.	It should have Ceramic or Phosphor Bronze which will have alignment sleeves accommodate single mode and multimode operation
54.	The product must be compliant with ISO/IEC 11801, ANSI/TIA/EIA 568.B.3-2000, ANSI/TIA/ EIA-492 & RoHS Compliant
55.	It must have snap fit/quick fit mounting for installation flexibility
56.	Adapter strips should come with LC couplers
57.	Adapter strips should be preloaded with adapters/couplers (simplex or duplex). The couplers should be available with dust covers
58.	Adapter strips should be suitable for both Wall Mount and Rack Mount LIUs
<b><u>LC-LC Fiber Patch Cord</u></b>	
LC-LC Fiber Patch Cord must meet following specifications: -	
59.	LC-LC fiber patch cords Qty-12 x 7 feet and Qty 12 x 3 feet with FDF 12 Port, are required for providing fiber connectivity for networking equipment
60.	The fiber patch cord shall be factory terminated with LC connector at both ends with a tight buffer construction of 0.9 mm
61.	Insertion loss: $\leq 0.3$ dB@1310nm for both SM & MM
62.	Return loss : $\geq 50$ dB@1310nm for SM, not applicable for MM
63.	Durability : Minimum 200 insertions
64.	Tensile strength: 150 N in short term, Crush Resistance: 500 N / 10 cm
65.	Cable OD : 1 to 3 mm
66.	Flame retardant fiber optic cable with tight-buffered coating on each optical fiber
67.	Patch cord shall be bend insensitive type as per ITU G.657.A2 & G.652 D and comply with ANSI/TIA/EIA 568-C.3 standards
68.	The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
69.	Should be UL or ETL approved & ROHS Complied
<b><u>LC Fiber Pigtaills</u></b>	
LC fiber pigtaills must meet following specifications: -	
70.	LC fiber pigtail should provide Qty 12 x 1.5 mtr with FDF 12 Port
71.	Optical fiber pigtaills must comply with ANSI/TIA/EIA 568-C.3 standards
72.	LC pigtail to be single mode
73.	LC pigtaills should be 1.5 mtr length with tight buffer construction of 0.9 mm
74.	Optical fiber pigtaills should have max. tensile strength of 30N in short term. It should have max. crush resistance of 100N/100(short term)
75.	Insertion loss: $\leq 0.3$ dB@1310nm for both SM & MM



76.	Return loss : $\geq 50$ dB@1310nm for SM, not applicable for MM
77.	The fiber shall be bend insensitive type as per ITU G.657.A2 & G.652 D. The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
78.	Should be UL or ETL approved & ROHS Complied

### **RJ-45 Patch Panel (24 Port)**

3. RJ-45 Patch Panel of 24 ports should be 1U size, 19 Inch rack mountable and should support following specifications: -

SI No	Description
<b><u>RJ-45 Patch Panel (24 Port)</u></b>	
79.	RJ-45 Patch Panel shall have fully populated with Cat-VI jack and jack should have shutter to protection from dust and contaminant
80.	Should have port identification 9 mm or 12 mm labels on each of 24 ports
81.	All Patch Panel components shall be from same OEM and OEM should have manufacturing facility in India with ISO Certification
82.	Should be UL or ETL approved & ROHS Complied
83.	Should meet ANSI/TIA/EIA 568.2-D and ISO/IEC 11801-1 standards
84.	Each Patch panel must be supplied with Qty-24 x 3 feet (grey color), Qty – 12 x 5 feet (blue color) and Qty – 12 x 7 feet (red color) Cat-VI UTP patch cords
<b><u>Cat-VI UTP Patch Cord</u></b>	
Cat-VI UTP RJ-45 Patch Cord must meet following specifications: -	
85.	Cat-VI UTP RJ-45 patch cord must comply with ANSI/TIA/EIA 568.2-D standards
86.	Cat-VI UTP RJ-45 patch cord should be of 24 AWG, stranded copper conductors 100 ohm
87.	Cat-VI UTP RJ-45 patch cord should be made of material which is Low Smoke Zero Halogen (LSZH) compliant and RoHS compliant

**TECHNICAL SPECIFICATIONS (01/06)**  
**125 KVA DG SET**

**125 KVA Diesel Generator Set**

1. Supply, Installation, testing and commissioning of 125 KVA, 415V, 0.8pf. Diesel Generator Set comprising of Diesel engine compatible with CPCB IV+ norms with alternator and all accessories, control panel, acoustic enclosure and all other specifications described below as per relevant IS/BS/IEC specifications, terms and conditions enclosed.

**Engine**

2. Diesel engine shall deliver sufficient BHP at full load and at 1500 rpm for powering alternator of 125 kVA (100 kW at 0.8pf) and shall be turbo charged after cooled type conforming to IEC: 60034-1 with an overload capacity of 10% for one hour in 12 continuous hours of operation. The engine shall be suitable for cold starting and shall be equipped with following accessories.

- (a) 6 cylinder, In-line 4 stroke, radiator cooled engine
- (b) Optimized fuel consumption with electronic injection
- (c) Cooling system is designed and tested for 50°C ambient conditions
- (d) Radiator with blower type fan and guard.
- (e) Fly wheel housing and flywheel with guard
- (f) Engine barring mechanism in flywheel housing
- (g) Residential type silencer and exhaust pipe of minimum one mtrs height above acoustic enclosure (as per site requirement) to meet MoEF/ CPCB IV+ Standards.
- (h) Stainless steel exhaust flexible bellows
- (j) 12V DC Electric starter and connected accessories
- (k) Battery charging alternator with built in regulator 12V DC
- (l) Thermostat valve for radiator
- (m) Electronic governor
- (n) Turbo charger – Exhaust gas driven

3. **EATS (Exhaust after Treatment System)**

- (a) Compact design enabling optimized Genset size
- (b) Integrated control module for engine and EATS
- (c) Shall meet stringent emission norms as per MoEF/ CPCB IV+ Standards.

**Alternator**

4. Alternator of capacity 125 kVA/100 kW at 0.8 pf continuous operation rating at 1500 rpm, self- excited self-regulated brushless type with exciter field controlled by a solid state voltage regulator and regulation of < 1% of rated voltage from no load to full load, class 'H' (or better) insulation, floor mounted, self-ventilated SPDP enclosure (IP: 23). Alternator shall be suitable for tropical climate and saline atmosphere and conforming to IS: 4722/IEC 60034. Adequate size terminal boxes is to be provided for phase and for the neutral terminals. Maximum output voltage shall be 415 volts, 3-phase, 4 wire 50Hz with neutral terminals brought out for earthing. The alternator shall generally conform to IEC 60034-1 and having the following accessories: -

- (a) Space heater with thermal cut off

- (b) Self-excited alternator conforming to IS/IEC 60034-1
- (c) Shall have compact design with sealed bearings for longer life and lesser maintenance
- (d) Shall have impregnation on all wound components for better mechanical strength.
- (e) The alternator should be capable of parallel operation with similar capacity DG sets and governor shall be suitable for this purpose.
- (f) The alternator should be capable of feeding rectifiers / SCR type UPS / Computer loads and non-linear loads etc.

### **Engine Instrument Panel**

5. Control panel should powder coated for weather-proof and long-lasting finish. The control panel must consist of the following parts: -

- (a) Microprocessor Based Controller
- (b) Bus bars with suitable capacity with incoming/ outgoing terminals
- (c) Indicating lamps for 'Load ON' and 'Set Running' Instrument fuses duly wired and ferruled.
- (d) MCCB of suitable rating with short circuit protections
- (e) AC/DC separation inside control panel for safety
- (f) Starting switch with key
- (g) Lube oil pressure indicator
- (h) Water temperature indicator
- (j) Hour meter and RPM indicator
- (l) DEF level indicator.

### **Engine Controller Features**

6. Microprocessor based generator set monitoring, metering and control system with LCD display designed to meet the features: -

- (a) AMF Functionality
- (b) Electronic Governing
- (c) Remote start-stop
- (d) Audible & Visual warning for Inducement
- (e) **Engine Metering.** Oil pressure, Engine temperature, starting battery voltage, Engine running hours
- (f) **AC Alternator Metering.** L-L Voltage and L-N Voltage, Current (phase and total), kVA (phase and total) and Frequency. kwh, Total & per phase (kw & kVA), PF, Utility Voltage and Frequency
- (g) **Engine Protection.** Low lube oil pressure, High/Low coolant temperature, Battery High/ Low/ Weak Volts, Fail to Crank/ Start, Sensor failure, Cranking lockout, Low fuel level.
- (h) **AC Alternator Protection.** Over/Under Voltage, Over/Under Frequency, Loss of AC sensing, Over speed, Over Current, kW Overload
- (j) **Data Logging.** Engine hours, Control hours and upto 5 recent fault codes.
- (k) glow plug control
- (l) 12/24 Volt DC operation
- (m) Sleep mode
- (n) Modbus interface (RS485 RTU)
- (o) In Power compatible (PC based service tool)

- (p) **Certifications.** Meets the requirement of relevant ISO, EN, Mil Std. and CE standards.
- (q) Maintenance due alarm based on Engine Run Time and due date
- (r) Fuel and DEF level visual display
- (s) Exerciser scheduler

7. **Silencer.** Hospital Grade Silencer inside canopy with rain cap suitably optimized to meet stringent noise limit as per MoEF/ CPCB IV+ Standards.

8. **Mounting Arrangement.** The diesel engine and alternator to be aligned and assembled, dynamically balanced on a sturdy, fabricated, welded construction, channel iron base frame with AVM pads. Skid mounted radiator. Base frame with integral fuel tank and DEF tank is provided with drain plug, air vent, inlet and outlet connection and provision for cleaning

9. **Acoustic Enclosure.** Outer body and doors are made up of 1.6mm thick Cold Rolled Closed Annealed (CRCA) sheet. The acoustic enclosure composite in construction and be a fully assembled integral unit and provided with a bulkhead light fitting for inside illumination. The acoustic enclosure parts are to be powder coated after pre-treatment process. The enclosure must confirm to the specification of the CPCB. The enclosure must have the following features: -

- (a) Specially designed to meet stringent MoEF/ CPCB norms of 75 dBA@1mtr at 75% load under free field conditions
- (b) The acoustic enclosure is made CRCA sheets in Munsell green shade and a structural/ sheet metal base frame painted in black
- (c) 11 tank pretreatment process and UV resistant powder coating of all parts to withstand extreme environment
- (d) High quality noise absorbent and fire-retardant grade acoustic insulation material (Rockwool) complying to IS 8183.
- (e) Top lifting for easy handling at site
- (f) External fuel & DEF filling provision
- (g) Shall be suitable for outdoor mounting
- (h) Designed to have optimum serviceability
- (j) Air inlet louvers specially designed to operate at rated load

10. **Control Panel.** Control panel must be of front operated, cubicle type, free standing, floor mounting, 630A MV panel controlled by 630A 4P MCCB (Microprocessor Based) suitable for operation on 415V, three phase, 4 wire, 50Hz AC supply system and to withstand a short circuit level of 50kA rms symmetrical. The main body, structure, doors of control panel shall be fabricated out of 14 SWG CRCA sheet steel whereas the internal barriers may be fabricated with 16 SWG CRCA sheet. The panel shall be of dust and vermin proof construction suitable for installation on built up trench with the following facilities: -

- (a) Fire and corrosion resistant coating applied one coat primer and two coats inside and powder coating outside.
- (b) Fire retardant FRP/ DMC/ SMC fitting for opening around bus bar near the sectional barrier
- (c) Facilities in the terminals to have direct termination with aluminum cables
- (d) Shall have High mechanical and electrical strength
- (e) Door interlocking facility
- (f) Shall have fire barriers
- (g) Switch body to be made of fire-retardant materials
- (h) Shall be mountable in any position in vertical plane for operation

- (j) The electrical panel board should undergo the metal surface treatment through a 7-tank process system or better.
- (k) Panel shall be fabricated on the ISMC (100 x 50 mm) base.

**11. Metering.**

- (a) Digital Multi-function meter suitable for the panel – 1 Set
- (b) Epoxy resin cast current transformers of suitable capacity, ratio, accuracy class shall be provided for metering and protection separately for the metering and protective devices stipulated below (vide IS 2705 with latest amendments)

**12. Protections.**

- (a) 1 No. Built in OC, SC and EF release on MCCB
- (b) 1 No. under voltage relay
- (c) 1 No. over voltage relay
- (d) 1 No. Emergency stop push button shall be provided outside the enclosure.

**13. Multiple LED type indication shall be provided for the following: -**

- (a) Generator ON
- (b) ACB ON
- (c) ACB OFF
- (d) ACB Spring charged
- (e) 24V DC Control supply ON

**14. Push Buttons**

- (a) Engine start
- (b) Engine stop
- (c) Fault accept/reset
- (d) ACB close and trip

**15. Annunciations.** The annunciation panel shall be integral to the generator panel and shall have trip, alarm and visual indication features in the event of the following conditions: -

- (a) Low Lube oil pressure
- (b) High water temperature
- (c) Engine over speed
- (d) Low-DEF level

**16. Generator Set Controller.** Microprocessor based monitoring for metering and control system with LED backlit LCD display with tactile feel soft switches should be provided and should have provisions for: -

- (a) Engine electronic governing with temperature compensation & smart start algorithm
- (b) Remote start/stop
- (c) **Engine metering.** for lube oil pressure, Coolant temperature, engine speed, run hours, battery voltage etc
- (d) **Engine protection.** Low lube oil pressure (LLOP), High coolant temperature, Over speed (alarm & shutdown), Battery (Over/Under/Weak Voltage), fail to crank/start, Sensor failure etc

- (e) **Alternator metering.** L-L voltage and L-N voltage, current (in all phases), kW & kVA (phase and total), frequency and power factor
- (f) **Data logging.** Engine hours, Control hours, Engine starts and fault codes.
- (g) 24V dc operation
- (h) Sleep mode
- (j) Programmable I/Os (4 inputs and 2 outputs)
- (k) PC based service tool
- (l) Auto/manual start/stop
- (m) Relay drivers for remote annunciation
- (n) Alternator trim adjustment from the front key pad
- (o) Remote monitoring capability through separate interface modules

17. **Base Frame.** The diesel engine and alternator shall be aligned and assembled, dynamically balanced on a sturdy, fabricated, welded construction, channel iron base frame. Base frame shall have lifting provisions and predrilled holes suitable for grouted foundation.

18. **Fuel Tank (In Built).** Approximately 275 Ltr. Capacity inbuilt fuel tank with fuel level indicator, fuel inlet and outlet, necessary hose pipes, etc. Inter connectivity valves for 990 ltrs day tank / belly tank etc.

19. **Battery with Charger.** Battery of required capacity with static charger with all interconnections shall be supplied with suitable stand.

20. **990 Ltrs Day Fuel Tank.** 990 Litters capacity Day Fuel Tank apart from in-built fuel tank in acoustic enclose with level indicators and controllers for pick up and closing of fuel pumps on configurable lower and upper limits. The Day fuel oil tank shall be installed at the required location as suggested by the site with necessary wall and floor supports steel frame structure. It shall be fabricated of 3 mm (minimum) thick MS sheet and complete with all standard accessories like level indicator, fuel inlet and outlet, air vent, drain plug, inlet arrangement for direct filling and set of sufficient long fuel hoses. In-built fuel tank and all day tank must have level indicator and controller. If oil level in in-built tank goes less than 30% it must be filled from all day tank. If oil level goes less than 30% in all day tank, command goes to existing motor to fill the day tank from main tank.

## 21. **Piping and Accessories.**

The piping shall be of Class "C" M.S pipe of 40 mm dia.

All accessories such as strainer, isolating valves, non-return valves etc. shall be supplied and installed as required based on approved piping layout drawings.

The piping schematic shall be submitted at the time of drawing approval. Which should include supply, over flow return from engine & drain pipes.

The piping shall be painted with one coat of primer and two coats of finishing paint of approved color.

One number manual gear pump for filling the day tank shall be supplied.

22. **Exhaust Pipe.** One mtr above the Acoustic Enclosure.

23. Technical Parameters of Generator, Engine and Alternator.

<b><u>Generator Set Specification</u></b>	
Model	125 kVA
Power Rating kVA / kW	125/100
No. of Phases	3 Phase
Output Voltage and Frequency	415 V, 50 Hz

(V and Hz) Power Factor	0.8 (lagging)
Current (A)	174
RPM	1500
Standard Fuel tank Capacity (litre)	275
<b><u>Engine Specification</u></b>	
Required Power for Rated kVA (hp)	154 or more
Cooling	Liquid Cooled
DEF	As per ISO 22241
Aspiration	Turbocharged, Charge Air
No. of cylinders	6, In-line
Fuel	High Speed Diesel
Performance class of generator set	ISO 8528-5 G2
Starting system	24 V DC Electrical
<b><u>Alternator Specification</u></b>	
Model	125 kVA
Enclosure	IP 23
Voltage regulation (Max.)	± 1%
Class of Insulation	H Class
Waveform distortion/Total Harmonic Distortion	No load < 1.5%, Non-distorting balanced

#### **TECHNICAL SPECIFICATIONS (02)**

### **SECURE NETWORK GATEWAY FOR SYSTEM INTEGRATIONS (UNIFIED THREAT MANAGEMENT (UTM) APPLIANCE)**

1. Secure Network Gateway/ Unified Threat Management (UTMs) must support following functional requirements: -

<b><u>Sl No</u></b>	<b><u>Description</u></b>
1.	The appliance must be 1U size hardware based, reliable, purpose-built security appliance with hardened operating system that eliminates the security risks associated with general-purpose operating systems and must have dual internal power supply from day one
2.	Security solution must have the capability to virtualize one physical firewall into minimum eight virtual firewalls
3.	Each Virtual firewall domain/instant context environment must have feature of Firewall, IPSec & SSL VPN, IPS, Web & application control, anti-virus/ malware, traffic shapping & policy based routing, user & group management, logging and reporting
4.	Firewall must have Trusted Platform Module (TPM) to protect password and keys
5.	Solution should have comprehensive security control on SSH Man-in-the-middle (MITM) deep inspections.
6.	Firewall solution should support IPv4 & IPv6 traffic, NAT64, NAT46, DNS64, DHCPv6, IPv4 & IPv6 IPSec VPN
7.	Solution should have built in SD-WAN functionality to achieve to flow the traffic over multiple links
8.	The proposed system should have integrated traffic shaping functionality
9.	Firewall should support active-active and active-stand by when deployed in HA
10.	Solution must support active-passive, active-active and virtual clusters for high availability

11.	Firewall appliance should have minimum 12 x 1 GE RJ-45 interfaces, 8 x 1GbE SFP and 4 x 10GbE SFP+ slot and populated with long range (LR) SFP 4 x 1GE LR & SFP+ 4 x 10GE LR Management Console – RJ45 Port dedicated
12.	Firewall Throughput must be minimum 25 Gbps
13.	Firewall must have minimum IPSec VPN throughput 25 Gbps
14.	Firewall must have minimum IPS throughput 5 Gbps
15.	Firewall must have minimum NGFW (FW + IPS + AVC) throughput 2.5 Gbps for mix / production traffic
16.	Firewall must have minimum Threat Prevention (FW + IPS + AVC + Malware protection with logging enable) throughput 2.5Gbps for mix / production traffic
17.	Firewall must support 2K site-to-site IPSec tunnels and 10K client to site IPSec tunnels from day 1
18.	Firewall must support minimum 300 concurrent SSL VPN users from day 1 and should be scalable in future
19.	Firewall must support 125K new sessions per second from day 1
20.	Firewall must support 2.5M concurrent sessions from day 1
21.	Firewall must have minimum latency equal or less than 3.5µs
22.	Solution must have MAC host check per portal for SSL VPN
23.	Solution must support AES256, ARIA128, ARIA192, ARIA256, SEED encryption types
24.	The device shall utilize inbuilt hardware VPN acceleration: - (a) IPSEC (DES, 3DES, AES) encryption/decryption (b) SSL encryption/decryption
25.	Solution must support IPSec VPN deployment capability: - (a) Gateway to Gateway (b) Hub-n-Spoke architecture (c) Full Mesh architecture (d) Support Redundant Gateway architecture (e) VPN termination in transparent mode (f) Supports NAT traversal
26.	Solution must support site-to-site VPN configurations: - (a) Route based IPSec tunnel (b) Policy based IPSec tunnel
<b>Intrusion Prevention System (IPS)</b>	
27.	The IPS detection methodologies shall consist of: - (a) Signature based detection using real time updated database (b) Anomaly based detection that is based on thresholds
28.	IPS must have provision to create custom signature for IPS and should have a at least 15K up to date signatures
29.	IPS must support fail open (fail wire) for GE ports in event if IPS ceased to function i.e. crucial network traffic will not be blocked due to OFF/down Firewall
30.	IPS solution should have capability to protect against Denial of Service (DOS) and DDOS attacks. Should have flexibility to configure threshold values for each of the Anomaly. DOS and DDOS protection should be applied and attacks stopped before firewall policy look-ups
31.	IPS signatures should have a configurable actions like terminate a TCP session by issuing TCP Reset packets to each end of the connection, or silently drop traffic in addition to sending alert and logging the incident
32.	Signatures should a severity level defined to it so that it helps the administrator to understand and decide which signatures to enable for what traffic (e.g. for severity level : high, medium, low)



33.	Solution must support configuring threshold setting against TCP Syn flood, TCP/UDP/SCTP port scan, ICMP sweep
34.	IPS must have capability to define filters based on serverity, target, OS, application and/or protocols
<b>Antivirus &amp; Anti-BOT Capabilities</b>	
35.	Firewall must have integrated antivirus and anti-bot capabilities
36.	Security solution must have gateway antivirus features which must be able to scan, block, allow or monitor only using AV signatures/Anti-malware engine and file blocking based on per firewall policy based or based on firewall authenticated user groups with configurable selection of the following services: - (a) HTTP, HTTPS (b) SMTP, SMTPS (c) POP3, POP3S (d) IMAP, IMAPS (e) FTP/FTPS/SFTP
37.	Solution must be capable to detect and prevent virus such as Trojan, malwares, malicious data etc at gateway level
38.	Security solution must have anti-bot capabilities from day 1.
39.	Security solution must analyse bot applications and must block all connections to control and command center
40.	Security solution must support capability to remove exploitable content that is known to be safe
41.	Security solution must be capable to detect virus outbreak and prevent using checksums to filter files
<b>Application Control</b>	
42.	Security solution must support 3000+ application signatures, first packet identification, deep packet inspection, custom application signatures, SSL decryption and deep packet inspection to ensure & maintain deep visibility and granular control over applications
43.	Security solution support applications such as Torrent, P2P, botnets, games, social networks irrespective of websites
44.	Security solution must support to create custom application signature
45.	Security solution must be capable to protect critical applications by enforcing granular application usage with traffic shaping
46.	Security solution must be capable to detect traffic using HTTP/HTTPS protocol and able to block QUIC traffic so that browser automatically fall back to HTTP/S + TLS 1.2
47.	The administrator shall be able to define application control list based on selectable application group and/or list and its corresponding actions
48.	The OEM should have their own threat intelligence center for all security services and don't depend on a third party for security update
<b>Logs, Report and Integration</b>	
49.	Security appliance must have the capability to logging and reporting to log archival solution/SIEM Solution available in BUYER environment
50.	Real-time display of information allows you to follow real-time trends in network usage such as the source IP address and the destination URL for HTTP traffic.
51.	The Gateways i.e. UTMs must be capable to integrate with the existing Central Management Solution (CMS) deployed in DC-DR architecture for geographical redundancy, with adequate licenses in the operational network of BUYER from day 1.
<b>Central Management Solution (CMS)</b>	

52.	<p>Security Gateways i.e. UTM must be manageable from dedicated hardware based appliance deployed at geographically redundant in DC-DR architecture to ensure the following: -</p> <ul style="list-style-type: none"> <li>(a) CMS appliance must have minimum two 2x GE RJ-45 and 2x10/25G SFP+ interfaces with fully populated short range (SR) SFP+ on all ports</li> <li>(b) CMS appliance must have minimum 6 x TB storage capacity</li> <li>(c) CMS appliance must be capable to manage 1000 Security Gateway/ VDOMs</li> <li>(d) CMS appliance must be capable providing real time monitoring, event logs collection</li> <li>(e) Management access control using profile/Role Based Access Control (RBAC) for granular control.</li> <li>(f) CMS must be capable of defining separate users and devices groups. Assign privilege to user's group and individual user for respective device based on function roll defined by the super admin</li> <li>(g) CMS must be supplied in HA with Geographical redundancy deployment</li> <li>(h) CMS appliance must be capable to firmware upgrade, signature update, policies formulation &amp; enforcement</li> <li>(i) Dashboard of all Security gateways health status, firmware version and signature version</li> <li>(j) In case any Gateway health status is low due to any subassembly failure, complete failure, power failure, switch OFF, CMS must highlight these gateways</li> <li>(k) Incase firmware or signature of any Gateway is pending for update, it must be reported by CMS</li> <li>(l) CMS must be capable to manage and configure existing security gateway deployed in BUYER's system</li> </ul>
<b>Central Logging and Reporting Solution</b>	
53.	Logging and reporting solution must be hardware based appliance with minimum two 2x GE RJ-45 and 2x10/25G SFP+ interfaces with fully populated short range (SR) SFP+ on all ports
54.	Appliance must have minimum 6 x TB storage capacity and must have capability to store 500 Gb/ day logs
55.	Solution must be able to receive the alerts and event logs from all security gateways to investigate the suspicious traffic and alerts
56.	Analysis solution must ingest alerts, enrich and orchestrate with visual playbook editor for auto response
57.	Appliance should be capable to logging and reporting to archival solution and SIEM of BUYER
58.	Solution must have real time display of information which allow user to follow real time trends in network usage such as source IP address and destination URL for HTTP traffic, any malicious event, virus outbreak etc

## **TECHNICAL SPECIFICATIONS (03/01)**

### **19" 15U WALL MOUNTABLE RACK**

1. The 19" 15 U height IP 55 dust proof rack for housing networking/ firewalls, UPS, FDF, RJ-45 Patch Panel and termination of optical fiber and CAT VI cables. The rack will be mounted on a wall through suitable support. The rack should meet following specifications:-

<b>SI No</b>	<b>Specification</b>
<b><u>19" 15U Wall Mountable Rack</u></b>	
1.	Enclosure with IP 55 Standards with dimension 600w x 15U h x650d
2.	Cabinet material should be GI 1.2 mm
3.	Rack should be fully welded except openable parts and based on steel frame architecture to bear at least 50 Kg of load
4.	Rack should have provisions of rear panel and front door. Front panel should be made of 4mm safety glass pane and sheet steel section and rear panel to be made of sheet steel. Rear panel must be permanently welded/ bolted and sealed
5.	Rack will be mounted on the wall with the help of wall fixing brackets and fixed with wall bolts. Suitable wall fixing brackets to be provided to withstand at least equipment load of 50Kg + Rack self weight by the Vendor
6.	The cabinet has to be based powder coated by Anti Corrosive priming and then powder coated to RAL 7035 textured Pure Polyester (PP) to 80 to 120 Microns.
7.	Should be painted with RAL 7035 color textured paint
8.	Control Lock : 3-point heavy duty lock with Pad Lock Provision
9.	Gasketing : Poly Urethane gasketing so that dust & water cannot enter the rack, as well as protection from rodents and IP51 Protection
10.	PG 29 glands to be provided at the bottom for cable entry : 4 nos
11.	Should have all the requisite cable brackets, guiding kits for structured and loop free cabling
12.	Horizontal PDU 5 Sockets 5/15A (3-Pin) with 16 Amp main switch MCB, 1.5M Chord with 15 Amp plug for input power supply from UPS
13.	Equipment tray two number, one for UPS and one for battery. Load bearing capacity: 35 KG (approx.)
14.	Copper Earth Bar : Horizontal, copper 16 mm wide & 3 mm thick, 19" compatible, M4 tapped holes at 45 mm pitch with Earthing cables
15.	Earthing Cables: Insulated copper cable, 500mm length (approx.) M4 lug crimped with M4X16 screw, M4 nut and washer attached
16.	Cable Manager : Horizontal, mild steel, 1U height with PVC loops (19" compatible)
17.	Front panel hardware: Stainless steel cage nut, M6 Plastic/SST washer, M6x16 SST screw.
18.	The Rack must be fitted with following cooling and filter accessories: - <ol style="list-style-type: none"><li>2 Fans of 90CFM and 2 Filter with IP51 Canopy Fan Specs.</li><li>Air throughput, unimpeded air flow.</li><li>Temperature range: -10°C to +55°C</li><li>Rated operating voltage V, Hz: 230, 50 Hz</li><li>Outlet filter Material: ABS. For ventilation by convection,</li><li>Two outlet filters should be installed in the enclosure</li></ol>

	<ul style="list-style-type: none"> <li>g. Hood for IP 55 protection for fan &amp; filter units.</li> <li>h. Power consumption 19.0 W/ Fan</li> <li>i. Thermostat controlled automatic ON/OFF the fan operation as per temperature setting</li> </ul>
19.	All removable parts of enclosure should be bolted from inside to have burglar protection
20.	Din Rails with provisions for mounting power supply unit
21.	Standards: Regulatory Standard Compliance: IP55 to ISO 9001, 14001, OHSAS 18001 certificate
22.	Rack shall be supplied in assembled condition
23.	<p>Bidder will responsible for fitting of following accessories in 15U Rack: -</p> <ul style="list-style-type: none"> <li>a. 1 KVA UPS : Qty – 01</li> <li>b. Fiber Distribution Frame (FDF) – 12 Port : Qty – 01</li> <li>c. RJ-45 Patch Panel - 24 ports : Qty – 01</li> <li>d. RJ-45 UTP Patch Cord, 1 feet approx. for Patch Panel : Qty-24</li> </ul>

## **TECHNICAL SPECIFICATIONS (03/02)**

### **1 KVA UPS**

1. The 19" rack mountable 1 KVA online UPS will be utilized to power up network and IT devices e.g. Layer 2 switch, Layer 3 switch, and other network & IT elements within IAF premises. The UPS to meet following specifications: -

<b>SI No</b>	<b>Description</b>	<b>Specification</b>
<b><u>1 KVA UPS</u></b>		
1.	Type	True online double conversion, Rectifier & Inverter both with IGBT based DSP Processing Design.
2.	Form Factor	19" Rack mountable Max Height : 2U Necessary mounting kit and rail assembly to be supplied along with the UPS Tower mount not acceptable Auto Start & Cold Start feature shall be available UPS to be compatible with DG Set supply and mains supply FAN Speed share vary as per load
3.	Electrical Input	Input Voltage : 180-280V AC Single Phase Input Frequency : 50 Hz $\pm$ 10% Power Factor : 0.99 or better
4.	Electrical Output	Output Voltage : 230V $\pm$ 2% Single Phase Output Frequency : 50Hz $\pm$ 0.1% Harmonic Distortion less than 3% for linear load Power Factor : 0.9 or better without de-rating for 0 to 40 deg C temp range
5.	Overload Conditions	Overload Conditions - Overload Capacity : 125% overload for One minute and 150% overload for 30 second.
6.	Overall efficiency (AC to AC) online	90% or better (On Full R Load - Double Conversion) ECO Mode efficiency – 95%
7.	Output Waveform	Pure Sine wave
8.	Protection against	Short Circuit, Overloading, Low battery, Input Over/Under voltage, Over Temperature, Deg of Protection - IP20
9.	Protection for battery under voltage	Protection for under voltage at battery terminal at 10.5V per 12 V battery
10.	Protection for battery over voltage	Protection of over voltage, short circuit & over load at UPS output terminal
11.	Electrical cabling	Minimum 03 Mtrs for Battery connections (inclusive)
12.	Network Interface Card	Network Interface - 100/1000 Mbps RJ45 interface for remote monitoring and forwarding log data in SNMPv3 protocol
13.	SNMP Management	SNMPv3
14.	Central Monitoring Solution (CMS) for UPS	Required Licenses and software/hardware must be supplied with UPS for central management and monitoring Must be compatible with existing CMS of IAF

		Supplied 1 KVA UPS must be managed and monitored through existing CMS solution available with existing CMS solution available with IAF
15.	Noise level	< 40 dB at 1 meter distance
16.	Operating Temp/RH	0 to 40 deg C and 5 to 95% RH
17.	Bypass	Automatic bypass switch
<b>Display</b>		
18.	LCD Display (Inbuilt)	Backup time, Load Battery, Mode of Operation, Fault, KVA, KW, Battery Status in Bar, Temp Info, Load Info
19.	Alarms and Indication	Audio alarm and necessary alarms indication essential for performance monitoring of UPS
<b>Certificates</b> (All certificate from OEM are to be submitted for Indian Operations)		
20.	Product certificate	BIS
21.	QMS	As per ISO 9001
22.	EMS	As per ISO 14001
23.	OSHAS	As per ISO 18001 or 45001
24.	OEM Factory	Shall have NABL accredited Calibration lab in India
<b>Battery</b>		
25.	Battery	12V SMF-VRLA conforming to JISC:8702 (Pt.I,II&III) Battery backup for 30 minutes or more (for battery sizing, select 0.8 PF) Minimum 42 AH or more VDC - 24VDC or higher Battery Life - Service life of 3 years, with a replacement warranty for 36 months Battery Replacement – Field replaceable by user MS Frame for batteries to be supplied by the vendor

## **TECHNICAL SPECIFICATIONS (03/03)**

### **PASSIVE INFRA FOR 15 U RACK FDF RJ-45 PATCH PANEL OPTICAL AND RJ-45 PATCH CORDS**

#### **Fiber Distribution Frame (12 Port)**

1. The Fiber Distribution Frame/ Light Interface Unit (LIU) of 12 ports should be 1U size, 19 Inch rack mountable and should support following specifications: -

SI No	Description
<b><u>Fiber Distribution Frame (FDF - 12 Port)</u></b>	
1.	FDF -12 Port should accept multiple Interface LC type Adaptors
2.	FDF must have snap-in sub modules capable of supporting 12/24 Fibers. Each FDF must support to insert min 8 snap-in sub modules
3.	Panel must be capable of supporting minimum 02 x 24 Core or 01 x 48 Core OFC per FDF
4.	Must have integrated fiber splicing trays for termination of outdoor single mode fiber. The FDF should be supplied with cable glands and other required accessories for routing of outdoor single mode fiber cables
5.	Must have minimum 4 knockouts at the rear to enable termination of loose tube or tight buffered cables as well as blown fiber tubes
6.	Must be slide able for ease of reconfiguring fibers and should have tamper proof positive locking mechanism by means of clips supplied as standard with each unit
7.	Should be made of rugged steel or better specification material
8.	The metal gauge thickness of LIU should be of min 1.8 mm
9.	All FDF components should be from same OEM and OEM should have manufacturing facility in India with ISO Certification
10.	Should be UL or ETL approved & ROHS Complied
11.	Should meet ANSI/ TIA 568-C.3 or ISO/IEC 11801:2017 operating specifications for rack mounted
12.	Each FDF must be supplied with Qty 8 x 7 feet and Qty 8 x 3 feet patch cords
<b><u>LC Adapter Strips/ Plates for LIU</u></b>	
LC adapter strips and plates for LIU must meet following specifications: -	
13.	LC adapter should provide a min. of 6 duplex or 12 simplex-position LC adapter solutions, allowing for multiple LC connectors to be mated within the adapter
14.	It should have Ceramic or Phosphor Bronze which will have alignment sleeves accommodate single mode and multimode operation
15.	The product must be compliant with ISO/IEC 11801, ANSI/TIA/EIA 568.B.3-2000, ANSI/TIA/ EIA-492 & RoHS Compliant
16.	It must have snap fit/quick fit mounting for installation flexibility
17.	Adapter strips should come with LC couplers
18.	Adapter strips should be preloaded with adapters/couplers (simplex or duplex). The couplers should be available with dust covers
19.	Adapter strips should be suitable for both Wall Mount and Rack Mount LIUs
<b><u>LC-LC Fiber Patch Cord</u></b>	
LC-LC Fiber Patch Cord must meet following specifications: -	

20.	LC-LC fiber patch cords Qty-8 x 7 feet and Qty 8 x 3 feet with FDF 12 Port, are required for providing fiber connectivity for networking equipment
21.	The fiber patch cord shall be factory terminated with LC connector at both ends with a tight buffer construction of 0.9 mm
22.	Insertion loss: $\leq 0.3 \text{ dB@1310nm}$ for both SM & MM
23.	Return loss : $\geq 50 \text{ dB@1310nm}$ for SM, not applicable for MM
24.	Durability : Minimum 200 insertions
25.	Tensile strength: 150 N in short term, Crush Resistance: 500 N / 10 cm
26.	Cable OD : 1 to 3 mm
27.	Flame retardant fiber optic cable with tight-buffered coating on each optical fiber
28.	Patch cord shall be bend insensitive type as per ITU G.657.A2 & G.652 D and comply with ANSI/TIA/EIA 568-C.3 standards
29.	The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
30.	Should be UL or ETL approved & ROHS Complied
<b><u>LC Fiber Pigtails</u></b>	
LC fiber pigtails must meet following specifications: -	
31.	LC fiber pigtail should provide Qty 12 x 1.5 mtr with FDF 12 Port
32.	Optical fiber pigtails must comply with ANSI/TIA/EIA 568-C.3 standards
33.	LC pigtail to be single mode
34.	LC pigtails should be 1.5 mtr length with tight buffer construction of 0.9 mm
35.	Optical fiber pigtails should have max. tensile strength of 30N in short term. It should have max. crush resistance of 100N/100(short term)
36.	Insertion loss: $\leq 0.3 \text{ dB@1310nm}$ for both SM & MM
37.	Return loss : $\geq 50 \text{ dB@1310nm}$ for SM, not applicable for MM
38.	The fiber shall be bend insensitive type as per ITU G.657.A2 & G.652 D. The fiber outer jacket should be made of material which is Low Smoke Zero Halogen (LSZH) compliant as per IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2
39.	Should be UL or ETL approved & ROHS Complied
<b><u>RJ-45 Patch Panel (24 Port)</u></b>	
RJ-45 Patch Panel of 24 ports should be 1U size, 19 Inch rack mountable and should support following specifications: -	
1.	RJ-45 Patch Panel shall have fully populated with Cat-VI jack and jack should have shutter to protection from dust and contaminant
2.	Should have port identification 9 mm or 12 mm labels on each of 24 ports
3.	All Patch Panel components shall be from same OEM and OEM should have manufacturing facility in India with ISO Certification
4.	Should be UL or ETL approved & ROHS Complied
5.	Should meet ANSI/TIA/EIA 568.2-D and ISO/IEC 11801-1 standards
6.	Each patch panel must be supplied with Qty-08 x 1 feet (grey), Qty-08 x 2 feet (grey), Qty-08 x 3 ft (grey), Qty-12 x 7 ft (blue) and Qty-12 x 7 ft (red) Cat-VI Cat-VI UTP patch cords.
<b><u>Cat-VI UTP Patch Cord</u></b>	
Cat-VI UTP RJ-45 Patch Cord must meet following specifications: -	
7.	Cat-VI UTP RJ-45 patch cord must comply with ANSI/TIA/EIA 568.2-D standards
8.	Cat-VI UTP RJ-45 patch cord should be of 24 AWG, stranded copper conductors 100 ohm



9.	Cat-VI UTP RJ-45 patch cord should be made of material which is Low Smoke Zero Halogen (LSZH) compliant and RoHS compliant
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### **TECHNICAL SPECIFICATIONS (03/04)**

#### **CONSOLE SERVER**

1. The console server solution is required for remote serial-over-IP access of serial ports of various networking devices as well as servers, to ensure that on-site infrastructure is remotely accessible. The proposed solution / device should comply to the following specifications: -

SI No	Specification
<b><u>Console Server</u></b>	
1.	Console server must be capable of connecting devices with a USB, RS232 or better serial interface to a local area network for <b>transmission of serial data over Ethernet</b> to remote users for out-of-band management.
2.	Secure console management of any device with a serial, USB, or Ethernet console management port
3.	Software selectable RS232, USB/ 422/485 serial port interfaces or better
4.	10/100/1000 RJ45 Copper or SFP Fiber Ethernet connection
5.	Console server must support advanced AAA security & SSH/SSL encryption for seamless integration into existing IT & network management systems
6.	The device should support serial-over-IP connections via SSH/ Telnet Client, Java-free web-browser, telephony modem, cellular modem or better
7.	Console server must be of 1 RU form factor and should also be capable of at-the-rack access
8.	The device should have hot-swappable redundant power supply units
9.	Console server must support serial interfaces of networking devices (switch, router etc), firewalls, telecom devices, Wireless access points
10.	Console server must support serial interfaces of servers with different OS platforms such as Linux, Windows or other OS
11.	Type I : Min 08 ports - min 140 numbers
12.	Type II: Min 32 ports - min 60 numbers
13.	Type I and Type II console server should be from same OEM
14.	The devices should be supplied with centralized management solution to manage all the console servers. It must support minimum of 15 users per port concurrent sessions
15.	The centralized management server should support web based access
16.	Console server must integrate with the existing central management solution deployed with adequate licenses in the operational network of BUYER from day 1.
17.	Required licenses, software and other relevant hardware/application software must be supplied for central management and console server devices with existing console servers.

## **TECHNICAL SPECIFICATIONS (04/01)**

### **MULTI-LINE IP PHONE (2 OR MORE LINES)**

1. The IP Phone will be installed at User desk for VoIP communication. The phone must be robust, and meeting the specifications as enumerated in succeeding paragraphs.

2. **IP Phone Features.** The IP Phones should support the following generic IP Phone features: -

#### **2.1. Device Features.**

- a. On hook and off-hook dialing.
- b. Call forward (all, while busy, if no answer).
- c. Call hold and retrieve, switch between calls on hold.
- d. Call back.
- e. Call park and pickup.
- f. Call waiting and resume.
- g. Call Divert / Forward / Transf.
- h. Do Not Disturb (DND) toggle.
- i. Directories—Missed, Placed, Received calls on the phone.
- j. Dial from phone directory.
- k. Call Transfer – blind or consultative.
- l. Last number redial (off net and on net).
- m. Multiple speed dials per phone.
- n. Mute capability for speakerphone.
- o. Adjustable volume for ringer and in-call audio (speaker and hand-set)
- p. Standard Keypad
- q. Port for head-set
- r. Display with backlit
- s. Full-duplexed hands-free speakerphone
- t. Wideband audio handset, headset and full duplex speakerphone.
- u. Voice activity detection
- v. Echo cancellation
- w. Real-time QoS statistics on phone

#### **2.2. Device's Networking Features.**

- a. 2-port Ethernet switch to connect a co-located PC. Must support 802.1q VLAN tagging.
- b. Must support the automatic (DHCP) and manual configuration of IP address on the network.
- c. Must be IPv6 compliant and must have the IPv4/IPv6 Dual Stack.
- d. Must support IEEE 802.3af (Power over Ethernet)
- e. Phone must be capable of displaying call statistics of the ongoing call in real time describing Jitter, packets dropped, codec used and other QoS parameters.

3. The phone must meet the following specifications: -

- a. The phone must support SIP protocol as defined by IETF RFC 3261. The phone will communicate with the Call Control module through SIP protocol.
- b. The phone must support 2 or more programmable lines (numbers).
- c. It must have a high resolution back-lit LCD display of at least 5 inch (Diagonal).
- d. The phone must support visual indication of the status for different lines.
- e. Must have at least 3 interactive keys / soft keys to guide a user through call features & functions.
- f. IP Phone should have minimum a 10/100 or higher Ethernet access.
- g. Must support IEEE 802.3af (Power over Ethernet).
- h. Must have provision for connecting end-user PC to the switch through the phone.
- i. The IP Phone should be IPV4 and IPV6 compliant day one.
- j. It must be possible to disable the PC port available on the phone.
- k. It must be possible to disable the user privilege to change any settings on the phone locally.
- l. Must support web-based access to the phone.
- m. The phone must have adjustable foot stand system so that it can be placed on user desk or can be hanged on the wall whenever required.
- n. The phone should support Login/Logout feature to enable the user to login into the phone using LDAP/ Profile password for security purpose and to access user profile settings.
- o. The Phone must have functionality to provide detailed call quality, call statistic like (jitter, MoS and packet loss) information on the device itself.
- p. The phone must be natively registered and integrated with existing voice call manager solution of Buyer.

4. **Environment Parameter.** All products which will be deployed must meet the following environmental specifications: -

- a. Operational Temp: 5 to 40 degree Celsius
- b. Humidity: 10-90 % non-condensing

5. **Licenses.** Necessary licenses for making the phone operational are to be provided along with the phone.

## **TECHNICAL SPECIFICATIONS (04/02)**

### **MULTI-LINE IP PHONE (5 OR MORE LINES)**

1. The IP Phone will be installed at User desk for VoIP communication. The phone system must be robust, and meeting the specifications as enumerated in succeeding paragraphs.

2. IP Phone Features. The IP Phones should support the following generic IP Phone features: -

a. Device features.

- (i) On hook and off-hook dialing.
- (ii) Call forward (all, while busy, if no answer).
- (iii) Call hold and retrieve, switch between calls on hold.
- (iv) Call back.
- (v) Call park and pickup.
- (vi) Call waiting and resume.
- (vii) Call Divert / Forward / Transf.
- (viii) Do Not Disturb (DND) toggle.
- (ix) Directories—Missed, Placed, Received calls on the phone.
- (x) Dial from phone directory.
- (xi) Call Transfer – blind or consultative.
- (xii) Last number redial (off net and on net).
- (xiii) Multiple speed dials per phone.
- (xiv) Mute capability for speakerphone.
- (xv) Adjustable volume for ringer and in-call audio (speaker and handset)
- (xvi) Standard Keypad
- (xvii) Port for head-set
- (xviii) Display with backlit
- (xix) Full-duplexed hands-free speakerphone
- (xx) Wideband audio handset, headset and full duplex speakerphone.
- (xxi) Voice activity detection
- (xxii) Echo cancellation
- (xxiii) Real-time QoS statistics on phone

b. Device's networking features.

- (i) 2-port Ethernet switch to connect a co-located PC. Must support 802.1q VLAN tagging.
- (ii) Must support the automatic (DHCP) and manual configuration of IP address on the network.
- (iii) Must be IPv6 compliant and must have the IPv4/IPv6 Dual Stack.
- (iv) Must support IEEE 802.3af (Power over Ethernet)
- (v) Phone must be capable of displaying call statistics of the ongoing call in real time describing Jitter, packets dropped, codec used and other QoS parameters.

3. The phone must meet the following specifications: -

- a. The phone must support SIP protocol as defined by IETF RFC 3261. The phone will communicate with the Call Control module through SIP protocol.
- b. The phone must support 5 or more programmable lines (numbers).
- c. It must have a high resolution back-lit LCD display of at least 5 inch (Diagonal). Optionally, Seller may provide a touch screen LCD panel.
- d. The phone must support visual indication of the status for different lines.
- e. Must have at least 3 interactive keys / soft-keys to guide a user through call features & functions.
- f. Must support IEEE 802.3af (Power over Ethernet).
- g. The IP Phone should be IPV4 and IPV6 compliant day one.
- h. Must have provision for connecting end-user PC to the switch through the phone.
- i. IP Phone should have minimum a 10/100 or higher Ethernet access.
- j. It must be possible to disable the PC port available on the phone.
- k. It must be possible to disable the user privilege to change any settings on the phone locally.
- l. Must support web browser-based access to the phone.
- m. The phone must have adjustable foot stand system so that it can be placed on user desk or can be hanged on the wall whenever required.
- n. The phone should support Login/Logout feature to enable the user to login into the phone using LDAP/ Profile password for security purpose and to access user profile settings.
- o. The Phone must have functionality to provide detailed call quality, call statistic like (jitter, MoS and packet loss) information on the device itself.
- p. The phone must be natively registered and integrated with existing voice call manager solution of Buyer.

4. **Environment Parameter.** All products which will be deployed must meet the following environmental specifications.

- a. Operational Temp: 5 to 40 degree Celsius
- b. Humidity: 10-90 % non-condensing

5. **Licenses.** Necessary licenses for making the phone operational are to be provided along with the phone.

## **TECHNICAL SPECIFICATIONS (04/03)**

### **MULTI-LINE PHONE (15 OR MORE LINE)**

1. The IP Phone will be installed at User desk for VoIP communication. The phone system must be robust, and meeting the specifications as enumerated in succeeding paragraphs.

2. **IP Phone Features.** The IP Phones should support the following generic IP Phone features: -

#### **a. Device Features.**

- (i) On hook and off-hook dialing.
- (ii) Call forward (all, while busy, if no answer).
- (iii) Call hold and retrieve, switch between calls on hold.
- (iv) Call back.
- (v) Call park and pickup.
- (vi) Call waiting and resume.
- (vii) Call Divert / Forward / Transf.
- (viii) Do Not Disturb (DND) toggle.
- (ix) Directories—Missed, Placed, Received calls on the phone.
- (x) Dial from phone directory.
- (xi) Call Transfer – blind or consultative.
- (xii) Last number redial (off net and on net).
- (xiii) Multiple speed dials per phone.
- (xiv) Mute capability for speakerphone.
- (xv) Adjustable volume for ringer and in-call audio (speaker and hand-set)
- (xvi) Standard Keypad
- (xvii) Port for head-set
- (xviii) Display with backlit
- (xix) Full-duplexed hands-free speakerphone
- (xx) Wideband audio handset, headset and full duplex speakerphone.
- (xxi) Voice activity detection
- (xxii) Echo cancellation
- (xxiii) Real-time QoS statistics on phone

#### **b. Device's Networking Features.**

- (i) 2-port Ethernet switch to connect a co-located PC. Must support 802.1q VLAN tagging.
- (ii) Must support the automatic (DHCP) and manual configuration of IP address on the network.
- (iii) Must be IPv6 compliant and must have the IPv4/IPv6 Dual Stack.
- (iv) Must support IEEE 802.3af (Power over Ethernet)
- (v) Phone must be capable of displaying call statistics of the ongoing call in real time describing Jitter, packets dropped, codec used and other QoS parameters.

3. The phone must meet the following specifications: -
- a. It must support SIP protocol as defined by IETF RFC 3261 and must be compatible with the solution provided for the VoIP communication system.
  - b. The phone must support at least 15 programmable lines (numbers).
  - c. It must have a high resolution back-lit LCD display of at least 3.5 inch(Diagonal).
  - d. The phone must support visual indication of the status for different lines.
  - e. The IP Phone should be IPV4 and IPV6 compliant day one.
  - f. Must support IEEE 802.3af (Power over Ethernet). Power Adapters must be provided with all the phones.
  - g. Must have at least 3 interactive keys / soft keys to guide a user through call features and functions on the phone.
  - h. Must have provision for connecting end-user PC to the switch through the phone.
  - i. IP Phone should have minimum a 10/100 or higher Ethernet access.
  - j. It must be possible to disable the PC port available on the phone.
  - k. It must be possible to disable the user privilege to change any settings on the phone locally.
  - l. The phone should support Login/Logout feature to enable the user to login into the phone using LDAP/ Profile password for security purpose and to access user profile settings.
  - m. Must support web browser-based access.
  - n. The phone must have adjustable foot stand system so that it can be placed on user desk or can be hanged on the wall whenever required.
  - o. The Phone must have functionality to provide detailed call quality, call statistic like (jitter, MoS and packet loss) information on the device itself.
  - p. The phone must be natively registered and integrated with existing voice call manager solution of Buyer.
4. **Environment Parameter.** All products which will be deployed must meet the following environmental specifications.
- a. Operational Temp: 5 to 40 degree Celsius
  - b. Humidity: 10-90 % non-condensing
5. **Licenses.** Necessary licenses for making the phone operational are to be provided along with the phone.

## **TECHNICAL SPECIFICATIONS (04/04)**

### **RECORDING SOLUTION**

1. A Recording solution (Software only) is required as a comprehensive solution that will enable the Buyer to perform recording of designated IP Phones which may be distributed over multiple voice clusters. The recording solution must have a high availability of 99.99%, and should fulfill the following requirements: -

a. The solution should be a software-based recorder, complying with standard protocols, that does not require the phones to be connected to any additional hardware to facilitate call recording. Necessary licence for deployment of solution in HA should be provided along with solution.

b. The system must be able to record RTP streams (Phone Call conversation) of standard voice codecs like G.711 (A-law, u-law), G.722 and G.729 (including G.729a, G.729b and G.729ab) originating from the IP endpoints.

c. Proposed voice recording solution must be able to add minimum 5,000 endpoints, with concurrent recording capability of about 1,500 endpoints. Voice recording solution must be natively integrated with existing Voice recording solution and combined recording capacity of integrated voice recording solution must be able to add minimum 7,500 endpoints with concurrent recording capacity of 4,500 endpoint points.

d. It must support efficient recording of all calls at a centralized location. The recording solution must not require the need to set-up the recorder at dispersed locations.

e. A single endpoint (phone) configured for recording should enable recording of the conversation (both RTP streams) even if other endpoint participating in the call is/are not configured for recording. The solution should not mandate that both the end-points (phones) be configured / added for recording.

f. Adequate redundancy to be incorporated in the system for uninterrupted service all the time. The phone recording solution (recorder) must be fully redundant with 1:1 redundancy, located at geographically dispersed locations, to ensure 99.99% availability. In case of separate recorder and database system, then the 1:1 redundancy is to be extended for the database system too.

g. Each phone call (conversation) has to be stored as a separate file, with suitable naming convention, which will include the date and time stamp of the instance of the call and it must be able to sort the files based on common fields such as date / time, extension number, line number, location name / group, etc.

h. System must have in-built capability to automatically as well as manually record and store calls into a database.

i. It must have a web-based GUI for easy access to the stored data, for subsequent retrieval, sorting, searching as well as replay, from the recorder and /or from any PC on the network. It should have dashboard indicating real time on-going recordings. The solution should have its own EMS for monitoring the health and critical performance metrics of the solution. EMS should preferably be integrated with proposed voice NMS for consolidated monitoring through voice monitoring and analytics solution.



- j. Each phone call (conversation) has to be stored in a legally accepted format so as to be tamper-proof documented evidence.
- k. It must provide a mechanism of marking desired recording files as protected, which should not get purged or deleted from the recorder, irrespective of the time frame.
- l. It must support Real-Time Streaming Protocol (RTSP) for playback of recorded media and live monitoring support.
- m. The solution must support standard encryption technology such as AES, MD5, etc. to protect data when recorded, stored, in transit and archived, to store as well as archive voice files and must be able to easily convert into windows media format i.e. WAV format. All the necessary licenses for encryption of voice recording solution must be provided from day one.
- n. It must log all access and actions carried out on the system using syslog. Further, it must be possible to forward the syslog's to a syslog server. It must preferably include Authorization, Authentication and Accounting (AAA) solution or compatibility.
- o. There must be multi-level administration and role based administrative controls (RBAC) with a minimum of three levels of Super user, Operator and Read-only privilege.
- p. It must have a Dashboard for Real-time monitoring of the events / alarms as well as the Health of the system (CPU / Memory utilization). Alert (incident/ event / mail / SMS) should be generated for any missing recording (RTP stream).
- q. It must be capable of recording encrypted conversations secured using SRTP.
- r. It should comply with the general database management standards, with respect to, back-up and disaster recovery, providing capabilities of back-up as well as restoration of system configuration as well as database.
- s. All access and activity to the recording solution should be securely logged. Calls playback, any administration changes should be logged properly for future reference and audit purpose.
- t. Should support full-time or rules-based recording, including recording on demand.
- u. It should have provisions for disaster recovery of the system, which should include recovery of application data / configuration data / inventory data as well as user data. It should have provisions for periodical backup on the system / on the network / on external media.
- v. Current Call recording solution, after addition of 1500 call recording license, must be able to manage simultaneous call recording of 6000 endpoints without any performance degradation or limitation.
- w. Solution should be supplied along with perpetual licenses for simultaneous recording of 1500 endpoints.

x. OEM will be responsible for gap-analysis and submit comprehensive report for existing deployed solution. In case any call recording OEM's and third party's software, hardware, support, professional service is required for upgradation of existing Call Recording solution for simultaneous call recording of 6000 endpoints, same must be highlighted in report and must be supplied along with Call recording solution.

2. **Misc Aspects.**

Description	Details	Offered/Not Offered	Complied/Not complied	<u>Supporting documents/References</u>
Warranty (Part IV Para 24)				

3. **Commercial Aspects.**

Description	Details	Offered /Not Offered	Complied/Not complied	<u>Supporting documents /References</u>
EMD (Part I Para 12)				
PIP (Part III Para 14)				
Performance security/ Warrant bank guarantee (Part IV Para 2)				