RailTel Corporation of India Ltd

(A Mini Ratna PSU under Ministry of Railways)

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

EOI No.: RCIL/NR/RO/EOI/MKTG/TNDR/BSF/2024-25 dated 09-08-2024

Expression of Interest (EOI) for RailTel empaneled Business Associates for exclusive PRE-BID TEAMING ARRANGEMENT for "Hardware Software for Setting up of BSF Private Cloud Infrastructure".

Issued by:

RailTel Corporation of India Ltd
(A Mini-Ratna PSU under Ministry of Railways)Northern Region

RailTel Corporation of India Limited,Northern Region,
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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 hereinand 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 theinformation 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 submittingan EOI. No reimbursement of cost of any type will be paid to persons or entities submitting the EOI.

End Customer Tender Details

Tender Title	Selection of SI agency for Hardware Software for Setting up of BSF Private Cloud Infrastructure
Bid ID	GEM/2024/B/4878706
Date of floating	21-05-2024
Corrigendum	GEM/2024/B/4878706-C-3 dated 01-08-2024
Floated on portal	Government e Marketplace Portal (gem.gov.in)

Snapshot of the Tender details from the portal

Bidder is required to download and read complete RFP/ clarifications/ reply to pre-bid queries/ subsequent amendments/ subsequent corrigendum issued by the end customer till the last date of submission of response to this EOI. Submitting response/ bid to this EOI will be considered as that the bidder has submitted technical and financial bid considering all the entities / details mentioned above and agrees to all terms and conditions mentioned in end customer RFP (BSF) and will not deviate from the quoted technical and financial solution.

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EOI NOTICE

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

EOI Notice No: RCIL/NR/RO/EOI/MKTG/TNDR/BSF/2024-25 dated 09-08-2024

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 "Hardware Software for Setting up of BSF Private Cloud Infrastructure."

The details are as under:

SCHEDULE OF EVENTS

1	Date of EOI Floating	09-08-2024
2	Last date for submission of Bids against EOI	13-08-2024 at 11:00 Hours
3	Opening of Bids received against EOI	13-08-2024 at 11:30 Hours
4	Mode of Bid Submission	Single Stage (Two Packet System)
5	EOI processing fee inclusive tax (non-refundable)	As per Enivida portal fees
6	Bid Validity Period	210 Days from Last Date of Bid Submission
7	Delivery Period	90 Days
8	EMD for Pre-Bid Arrangement	Rs.51,00,000/- (Fifty One lacs rupees only.)
8a	Token EMD	Rs. 5,00,000/- (Rs. Five Lakhs only) to be paid online on eNivida portal along with the EOI.
8b	Balance EMD	Rs. 46,00,000/- (Rs. Forty Six Lakhs 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 https://railtel.enivida.com

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. 46,00,000/- (Rs. Forty Six lacs 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 90 days 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 of ICICI Bank to be used (ICIC0000007). Unique reference (RAILTEL6103) in field 7037

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. Dev kumar, AGM/Marketing.

Email: dev.kumar@railtelindia.com   Contact: +91-9717644212

2: Name: Pushpender Kumar, GM/Marketing.

Email: pushpenderkumar@railtelindia.com Contact: +91- 9871146592

//* 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 no.
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 following documents as per CoR's requirement duly addressing RailTel
    a. **Appendix B-** Technical Specifications& Corrigendum issued by CoR on dated 01.08.2024 of each items mentioned in BOQ.

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, 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 "Mini Ratna (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 BSF (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 BSF (End Customer Organization) For **"Hardware Software for Setting up of BSF Private Cloud Infrastructure".**

Bidder has to 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."

Additional scope of work as per Corrigendum of CoR:
a) All the migration job of shifting of entire hardware and equipment from older racks to the new racks is in the bidder's scope.
b) Bidder has to bear all the expenses to shift all network as well as electric cabling including optical fiber.
c) Bidder has to complete all the work in a live environment with having zero downtime.

Project Warranty and support duration (Warranty):
a) The entire project warranty and support duration will be five (05) years
b) L1 will be decided purely on the rates of initial project cost including five (05) years warranty
c) Project shall be on Turnkey basis.

__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 provider 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   Bidder may submit their response in form of duly signed and stamped and submit techno-commercial bid at the E-nivida 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. valid PAN card. II. Been registered with GST. III. has filed ITR for last 3 financial year ending 31st March 2023.	I. Copy of PAN Card. II. Copy of GST registration certificate. III. Copy of ITR filed.

S.No.	Type	Description	Document Required
3	Financial Turnover (Bidder)	The bidder must have cumulative turnover at least Rs.25.50 Crores in the last 3 financial year (i.e. Current Year and 3 previous FYs) up to date of opening of EOI.	Audited Balance Sheet, CA certificate, and P&L A/c
4	OEM Average Turnover (Last 3 years)	The OEM must have average turnover at least Rs.17 Crores in the last 3 financial year (i.e. Current Year and 3 previous FYs) up to date of opening of EOI.	Audited Balance Sheet, CA certificate, and P&L A/c
5	Net Worth	The bidder must have positive net worth in last 3 FY's (i.e. Current Year and 3 previous FYs) upto date of opening of EOI.	Audited Balance Sheet, CA certificate and P&L A/c
6	Work (SOC) Security operation Experience	The bidder must have executed *SITC of a project in the field of IT / ITeS / ICT / Telecom for any Government department or Public Sector Units or Private Limited companies* in last 3 FYs (i.e. Current Year and 3 previous FYs) upto date of opening of EOI, as: One work costing not less than Rs. 8,92,50,000/ **OR** Two works each costing not less than Rs. 5,10,00,000/- **OR** Three works each costing not less than the Rs.3,82,50,000/- each	Copy of Purchase/ Work Order & completion certificate issued by customer / PO issuing authority. 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. On-going work shall be considered too, subjected to successful completion of minimum 75% work value as per PO duly certified for partial work percentage/value completion by PO issuing authority. **The actual completed work value shall be considered for PO produced for experience.**

S.No.	Type	Description	Document Required
7	Empanelment	Bidder must be empaneled with RailTel as business associate.	Copy of Empanelment letter and Empanelment PBG submitted, if any.

ii. The 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 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 & 4A 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 letterhead 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 letterhead 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 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) 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 amount against PO issued to selected bidder/vendor.
   iv. Original Invoice for the period claimed.

v.   TDS declaration.

vi.   Photocopy of all documents submitted by RailTel along with their invoice to customer.

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 10% 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 the last date of the warranty period i.e. 65 months form Date of PO. completion of all contractual obligations. 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 it 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.

13.3   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.

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

13.5   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.

13.6   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.

13.7   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.

13.8   **If, CoR ask for submission for PBG value more than 10%, same value PBG also needs to be submitted by the selected BA.**

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. Indicative **contract duration is of 5 years** (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, trade mark 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 mis-statement 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. as per CoR tender specified terms.

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 obligation 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.

<div align="right">Annexure - 01</div>

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EOI COVER LETTER
(On Organization Letter Head)

</div>

EoI 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.: GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt. 01-08-2024

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. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024, 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. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024.

Signature of Authorized Signatory
Name:

Designation:

Annexure - 02

Local Content Compliance
(On OEM letter head)

EoI 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

End Customer Bid No. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024

Dear Sir,

I, the undersigned, on behalf of M/s , hereby submits that our technical solution for the 'Scope of Work' mentioned under the EoI 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 EoI 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 EoI.

Signature of Authorized Signatory
Name:
Designation:

CHECKLIST OF DOCUMENTS FOR BID SUBMISSION

End Customer Bid No. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024

S. No.	Document
1	Proof of submission of Tender Processing Fee and EMD.
2	Authorization Letter/ POA and all Annexures/ Appendices given in the EOI documents.
3	All undertakings on company letter head as required/ stated in the EOI document duly signed and stamped by the authorised signatory.
4	The copy of EOI and subsequent addendum/ corrigendum duly Signed and Stamped by the Authorised Signatory of Bidder
5	All Annexure/ Appendices/Formats/ Declarations as per **CoR's RFP for tender ref. no:** _____ addressing to RailTel's EOI issuing Authority.
6	Compliance of eligibility criteria related documents as per Clause 3 and supporting documents.
7	Any relevant document found suitable by bidder
8	Empanelment certificate issued by RailTel to BA.

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:

Annexure – 04

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

EoI 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
  End Customer Bid No. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024

Item Number	Item Title	Item Quantity	Unit of Measure	Unit Price in INR (Excluding taxes)	Percentage of tax	Unit Price in INR (Incliuding Taxs)	Total Cost in INR (inclusive of taxes)
1	Blade Server	10	Nos				
2	Blade chasis	2	Nos				
3	Cloud management platform for 200 VMS	200	Lot				
4	Virtualization Automation software Hypervisor per proc	20	Nos				
5	Spine switch	4	Nos				
6	Leaf access switch	4	Nos				
7	Network virtualization controller	1	Nos				
8	Smart rack	4	Nos				
9	NAC AAA	200	Users				
10	SAN storage 100 TB	2	Nos				
11	Backup appliance 100 TB	1	Unit				
12	Backup software	1	Nos				
13	DR Automation software	1	Nos				
14	Microsoft Server 2022 standard edition 16 cores each	40	Nos				
15	Passive itmes as per solution requirement	1	as per site requirement				
	Total Cost in INR (inclusive of GST)						0
	Amount in words						

Signature of Authorised Signatory

Name:
Designation: Place:

<div align="right">Annexure - 05</div>

<div align="center">

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

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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. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024

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 an its claims satisfied or discharged or till

RailTel certifies that the terms and conditions of the said Agreement have been fully and 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:
      Address:
      Phone:
      Email.:

      Attn:
      Address:
      Phone:
      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. UNPULISHED 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: Name: Title:	RailTel Corporation of India Limited By: Name: Title:

Witnesses:

Annexure 7

Technical Compliance

EoI Ref. No.: _____ Date: XX-XX-XXXX

End Customer Bid No. GEM/2024/B/4878706 dt 21-05-2024 & Corrigendum dt 01-08-2024

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

S.No.	Scope Item	Specification as pertechnical Document	Proposed OEM Name	MAF Provided (Yes/No)	Compliancesheet
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 ofCoR	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
(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 Pre-Bid Agreement (the "Agreement") is made at New Delhi on this _____ Day of
_____(month) 2022.

<div align="center">BETWEEN</div>

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.

<div align="center">AND</div>

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 "Mini Ratna (Category-I)" 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 used 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 in formation 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 Limited
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

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 un-enforceable 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   For _____
Authorised Signatory   Authorised Signatory
Name: Name:
Designation: Designation:
In Presence of witness:

Signature: Signature:
Name: Name:
Address: 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;

<div align="center">OR</div>

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;

<div align="center">or</div>

    b. fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders;

<div align="center">or</div>

    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.

Annexure 10

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. 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 SIGNAURE 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.*

Annexure 11

Integrity Pact Program

Bringing the practices in RailTel Corporation of India Limited up to the internationally acclaimed best practices for raising integrity levels in procurement of works and services, RailTel is implementing the Integrity Pact Program in line with the recommendation of Central Vigilance Commission (CVC).

The Integrity Pact Program envisages an 'Integrity Pact', an agreement between the prospective Bidders & Contractors and RailTel, committing the persons/officials of both parties, not to exercise any influence on any aspect of the contract.

Coverage:
The Integrity Pact Program will cover the following tenders/procurements:
All tenders relating to procurement of OFC, quad cable, pre-fab shelters, electronic equipment and its installations and/or commissioning etc. and other item(s) or activity/activities proposed to be carried out or required by the Company for the value exceeding Rs. 15 crores at a time including for repair and maintenance of cable /network and any other items required for special works assigned to RailTel

Implementation:
The accompanying 'Integrity Pact' will be issued along with the bidding documents and will also be uploaded on the website.

Bidder of Indian origin shall submit the Integrity Pact (in 2 copies) on a non-judicial stamp paper of Rs. 100/- duly signed by the person signing the bid. Bidder of foreign origin may submit the Integrity Pact on its company's letterhead, duly signed by the person signing the bid.

If the bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.

The 'Integrity Pact' shall be returned by the Bidder duly signed along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'.

On behalf of RailTel, the Integrity pact will be signed by the concerned representative of the Projects department in the Bid Opening Committee immediately on receipt of Integrity Pact signed by the Bidder at the time of Bid opening. One copy of the Integrity Pact shall be retained by RailTel and the 2nd copy will be issued to the representative of the bidders during bid opening. If the Bidders representative is not present during the Bid opening, the 2nd copy shall be sent to the bidder by post/courier.

Bidder's failure to submit the Integrity Pact duly signed along with the Bid shall lead to outright rejection of the Bid.

The bidder shall not change the contents of the Integrity pact.

All the pages of the Integrity Pact are to be signed by both RailTel and the Bidder.

Independent External Monitors (IEMs):

1. CMD of RailTel is the authority to appoint Independent External Monitor(s) to oversee Integrity Pact Program's implementation and effectiveness with respect to the tenders/procurements to which Integrity Pact Program applies. For this purpose, CVC would nominate IEMs for RailTel from the panel of IEMs maintained by it. The Terms and Conditions of their appointment would be decided by CMD, RailTel in line with CVC guidelines in the matter.

2. In all tenders covered under the Integrity Pact, particulars of all IEMs, including their email IDs should be mentioned.

3. A copy of such Tender Document shall be forwarded to both IEM's promptly after publishing of the same, Information regarding the contracts awarded against the said Tender shall be provided to the concerned IEM at regular intervals as decided in consultation with CVO. Additional details/documents, if any, shall be furnished to the concerned IEM/IEMs, as and when sought by them.

4. IEM/IEMs shall provide their opinion on the complaints received by them to CMD RailTel at the earliest. They may however send their report directly to the CVO in case of suspicion of serious irregularities requiring legal/administrative action.

NAME	CONTACT
Shri. Vinit Kumar Jayaswal	**Address:** E-34, Brahma Apartments, Plot-7, Sector-7, Dwarka, New Delhi-110075 **E-Mail ID:** gkvinit@gmail.com **Mobile Number:** (+91)-9871893484
Shri. Punati Sridhar	**Address:** 8C, Block 4, 14-C Cross, MCHS Colony, HSR 6th Sector, Bangaluru-560102 **E-Mail ID:** poonatis@gmail.com **Mobile Number:** (+91)-9448105097

Date – 25.09.2022

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 Photostat 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 their 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:

  2.2.1   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.

  2.2.2   The amount of commission /remuneration included in the price(s) quoted by the tenderer for himself.

  2.2.3   Confirmation of the foreign principals of the Tenderer that the commission/

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 Project or supplies of 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   Failure to furnish correct and detailed information as called for in paragraph 2.0 above 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 of a named sum.

* * * * *

GUIDELINES ON BANNING OF BUSINESS DEALINGS

<u>CONTENTS</u>

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 the irregularities 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.

5.3 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.

5.4 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 alongwith 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.

5.5 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.

5.6 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.

5.7 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;

6.11   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;

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

6.13   Continued poor performance of the Agency in several contracts;

6.14   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 the misconduct/ 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 alongwith 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 for a

prima-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 defense.

9.2 If the Agency requests for inspection of any relevant document in possession of RAILTEL, necessary facility for inspection of documents may he 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/ Contactors, 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 request 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.

* * * * *

(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)

RailTel Corporation of India Limited, hereinafter referred to as "The Principal".

And

…………………………., hereinafter referred to as "The Bidder/ Contractor"

Preamble

The Principal intends to award, 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.

Section 1- Commitments of the Principal

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
   a. No employee of the Principal, personally or through family members, will in 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.
   b. The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.
   c. The Principal will exclude from the process all known prejudiced persons.

2. 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.

Section 2- Commitments of the Bidder(s) / Contractor(s)

1. The 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 contract or 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, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) /Contractors will not use improperly, for purposes 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 on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(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.

e. 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.

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

Section 3: Disqualification from tender process and 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 dealings as per the existing provisions of GFR,2017,PC ACT 1988) or take action as per the procedure mentioned 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 business dealings" 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.

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 anti-corruption approach or 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".

Section 6: Equal treatment of all Bidders / Contractors/Subcontractors.
1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a signed 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 sub-contractors. 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

Section 7: Criminal charges against violation by Bidder(s) / Contractor(s) / Sub contractor(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.

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 or 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.

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.

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 turn out 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 its provision.

8. Issues like warranty/guarantee etc. should be outside the purview of IEMs.

(For & on behalf of the principal)   (For & on behalf of bidder/contractor)

Name: _____   Name: _____
Designation: _____   Designation: _____

Signature: Signature:

(Office Seal)   (Office Seal)

Place: _____   Place: _____
Date: _____   Date: _____
Witness 1:   Witness 1:
(Name & Address)   *(Name & Address)*

_____   _____
_____   _____
_____   _____
_____   _____

Witness 2:   Witness 2:
(Name & Address)   *(Name & Address)*

_____   _____
_____   _____
_____   _____
_____   _____

* * * * *

Item / Component wise Make & Model and HSN Code details

Item Number	Item Title	Item Quantity	Make	Model	HSN Code
1	Blade Server	10			
2	Blade chasis	2			
3	Cloud management platform for 200 VMS	200			
4	Virtualization Automation software Hypervisor per proc	20			
5	Spine switch	4			
6	Leaf access switch	4			
7	Network virtualization controller	1			
8	Smart rack	4			
9	NAC AAA	200			
10	SAN storage 100 TB	2			
11	Backup appliance 100 TB	1			
12	Backup software	1			
13	DR Automation software	1			
14	Microsoft Server 2022 standard edition 16 cores each	40			
15	Passive items as per solution requirement	1			

Note: Above details are required to be filled mandatorily on GeM Portal and after that Price Bid form / page will appear. Therefore, Appendix-A is mandatory and if Bid is received without Appendix-A, then, Bid will be summarily rejected/Technically disqualified.

Appendix-B

Technical Specifications documents of CoR & Corrigendum issued by CoR on dated 01.08.2024 of each items mentioned in BOQ.
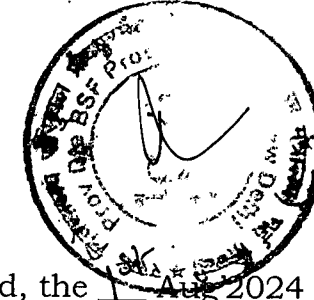
Dated, the ᅮ Aug 2024

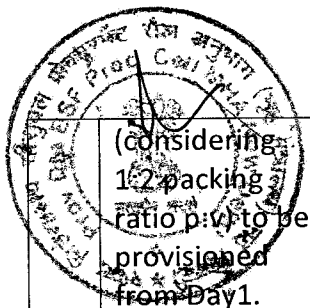## CLARIFICATION NOTICE NO.1

The following clarification are issued in respect of terms and condition given in GeM Bid No.GEM/2024/B/4878706 Dated 21/05/2024 for Procurement of Hardware/Software for setting up of BSF Private Cloud Infrastructure.
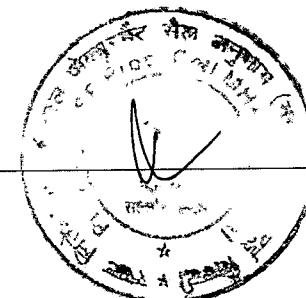
APPENDIX –'A'

QRS/TECHNICAL SPECIFICATION FOR BLADE SERVER

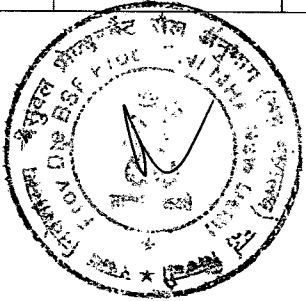| S/N	Technical Minimum Specification	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	M/s AMD Research and Development Center India Pvt Ltd	Reply
1.	Blade Server shall have a minimum of two (2) Intel latest 4th generation Gold Processors with minimum 2.2 GHz & 32 cores per socket. Total 1200 vCPU	No Changes	please revise as below: "Blade Server shall have a minimum of two (2) Intel latest 4th generation Gold Processors/Equivalent AMD Processor with minimum 2.0 GHz & 32 cores per socket. Total 1200 vCPU (considering 1:2 packing ratio p:v) to be provisioned from	No Changes	No Changes	No Changes	No Changes	Blade Server shall have a minimum of two (2) Intel latest 4th generation Gold processors or AMD EPYC 4th generation with minimum	**Accepted** **Blade Server shall have a minimum of two (2) Intel latest 4th generation Gold Processors / Equivalent AMD Processor with minimum 2.2 GHz & 32 cores per socket. Total 1200 vCPU (considering 1:2**

	(considering 1:2 packing ratio p:v) to be provisioned from Day1.		Dayl.."					2.0 GHz & 32 cores per socket. Total 1200 vCPU (conidering 1:2 packing ratio p:v) to be provisioned from Day1	**packing ratio p:v) to be provisioned from Day1.**
2.	Intel chipset compatible with the offered processors. SAS Raid Controller with RAID 0/1 with **2GB** cache to be offered.	No Changes	please revise as below: "CPU compatible chipset with the offered processors. SAS Raid Controller with RAID 0/1 with min **4GB** cache to be offered."	No Changes	No Changes	No Changes	No Changes	No Changes	**Not Accepted** **The basic requirement for the near foreseeable future remains as stated, however we are open to considering higher configurations.**
5.	Should have at least 32 DIMM slots per server and support minimum up to 1.5TB of DDR5 4000 MHz memory.	No Changes	Please revise as belwo: Should have at least 24 DIMM slots per server and support minimum up to 1.5TB of DDR5 4000 MHz memory.	No Changes	No Changes	No Changes	No Changes	Should have at least 24 DIMM slots per server and supporting minimum up t0 1.5 TB of DDR5 4000 MHz memory	**Accepted** **Should have at least 24 DIMM slots per server and support minimum up to 1.5TB of DDR5 4000 MHz memory.**
7.	Dual port-25G (50GbE per	Please change to:	No Changes	No Changes	No Changes	No Changes	Please change to:	No Changes	**Not Accepted**

blade bandwidth) Ethernet Adaptor. Dual Port 32G (64 Gbps per blade bandwidth) should be provided to SAN. OR In case the bidder decides to provide converge architecture instead of separate network and FC ports, server should provide a minimum of 100 Gbps of bandwidth with Converged network adapter ports across two or more Ports. Each Blade should have	'Dual port 25G (50GbE per blade bandwidth.) Ethernet Adaptor or higher. Dual Port 32G (64 Gbps per blade bandwidth) or higher should be provided to SAN. OR In case the bidder decides to provide converge architecture instead of separate network and FC ports, server should provide a minimum of 50 Gbps of bandwidth with				'Dual port 25G (50GbE per blade bandwidth.) Ethernet Adaptor or higher. Dual Port 32G (64 Gbps per blade bandwidth) or higher should be provided to . SAN. OR In case the bidder decides to provide converge architecture instead of separate network and FC ports, server should provide a minimum of 50 Gbps of bandwidth with Converged		**We have already given two options for port configurations and OEM/Bidder to provide any one of them. This is our minimum requirement, so not accepted.**

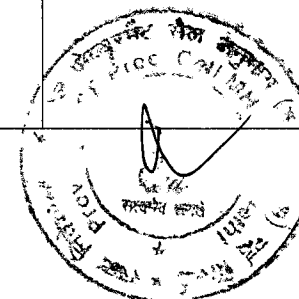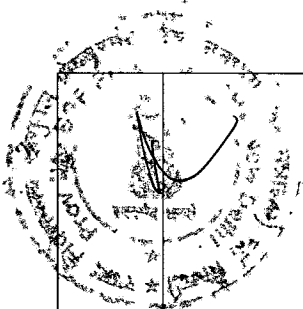|								
redundant network Connectivity to all the Chassis Interconnect modules. Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.	Converged network adapter ports across two or more Ports. Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.					network adapter ports across two or more Ports. Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.		

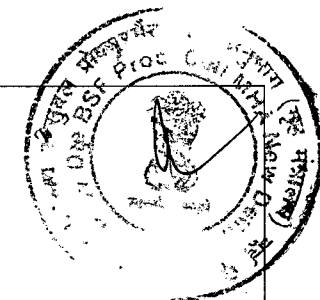## QRS/TECHNICAL SPECIFICATION OF BLADE CHASIS

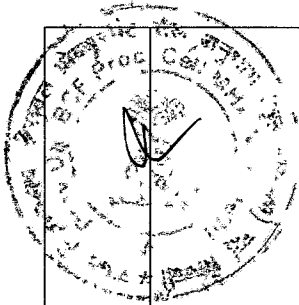| S.NO	ITEM	SPECIFICATION REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
4.	Chassis Connectivity and Management	Chassis Connectivity and Management The blade chassis should have redundant I/O Modules/ switch bays for NW and FC connectivity. In case the bidder proposes Converged I/O Module in chassis, bandwidth should be aggregate of the total Network and FC asked in blades. If any internal/ external Switches or interconnect module required to connect to the Chassis then same has to- be quoted.	No Changes	Please revise it as below: "The blade chassis should have redundant I/O Modules/ switch bays.for NW and FC connectivity. In case the bidder proposes Converged I/O Module in chassis, bandwidth should be aggregate of the total Network and FC asked in blades. If any internal/ external Switches or interconnect module required to connect to the Chassis then same has to- be quoted	No Changes	No Changes	No Changes	No Changes	**Not Accepted** **We are going to install both chassis separately (Different Geographical locations) so required separate pair of switches with each chassis.**

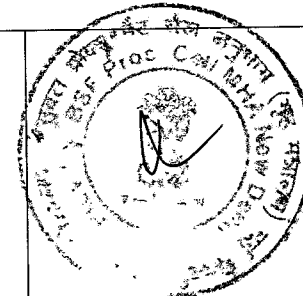|		in redundant-fashion with each chassis separately in -1:1 Non-Blocking Architecture Ethernet uplink of 200G to DC switch and 128G FC uplink to external SAN Switch, in redundancy. The blade solution should support at least 6* 100Gb QSFP+ uplink ports.		in redundant-fashion in 1:1 Non-Blocking Architecture Ethernet uplink of 200G to DC switch and 128G FC uplink to external SAN Switch, in redundancy. The blade solution should support at least 6* 100Gb QSFP+ uplink ports."						
5.	IO Module	Each Chassis should have dedicated sufficient number of redundant Separate Ethernet & FC I/O modules to provide a minimum 50G Ethernet, 64G FC bandwidth per blade server and 25Gbps Ethernet and 32G FC sustained per blade server (with 1 module failure) for	Each Chassis should have dedicated sufficient number of redundant Separate Ethernet & FC I/O modules to provide a minimum 50G Ethernet, 64G FC bandwidth	No Changes	No Changes	No Changes	No Changes	Each Chassis should have dedicated sufficient number of redundant Separate Ethernet & FC I/O modules to provide a minimum 50G Ethernet, 64G FC bandwidth	**Not Accepted** **We have already given two options for port configurations and OEM/Bidder to provide any one of them. This is our minimum requirement.**

| | | a fully populated chassis.
OR
Each Chassis should have dedicated sufficient number of redundant converged modules and ports to provide a minimum FCoE bandwidth of 100Gbps per blade server and 50Gbps sustained per blade server (with 1 module failure) for a fully populated chassis for converged Traffic. | per blade Server and:-25Gbps Ethernet and 32G FC sustained per blade server (with 1 module failure) for-a fully populated chassis.
OR
Each Chassis should have dedicated sufficient number of redundant converged modules and ports to provide a minimum FCoE bandwidth of 50Gbps per blade server and 25Gbps sustained per blade | | | | | per blade Server and:-25Gbps Ethernet and 32G FC sustained per blade server (with 1 module failure) for-a fully populated chassis.
OR
Each Chassis should have dedicated sufficient number of redundant converged modules . and ports to provide a minimum FCoE bandwidth of 50Gbps per blade server and 25Gbps sustained per blade | |

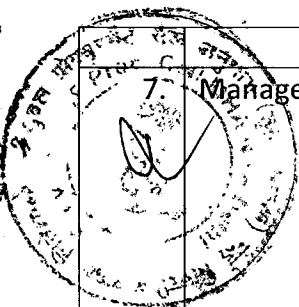|								
			server (with 1 module-failure) for a fully populated chassis for converged Traffic.					server (with 1 module-failure) for a fully populated chassis for converged Traffic.	
		Chassis should support aggregation of multiple enclosures to consolidate data centre network connections, reduce hardware and to scale network bandwidth across multiple enclosures. the interconnects can be internal or external in either case the dedicated interconnects should be provided in redundancy and non-blocking architecture. All the modules/switches	No Changes	the interconnects can be internal or external in either case the interconnects should be provided in redundancy and non-blocking architecture. All the modules/switches for chassis interconnectivity should be in redundancy. For internal/external interconnect switches all the switches in the chassis should be fully populated for maximum throughput &	No Changes	No Changes	No Changes	No Changes	**Not Accepted** **We are going to install both chassis separately (Different Geographical locations) so required separate pair of switches with each chassis.**

8

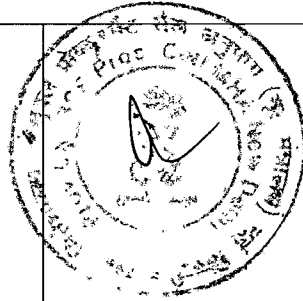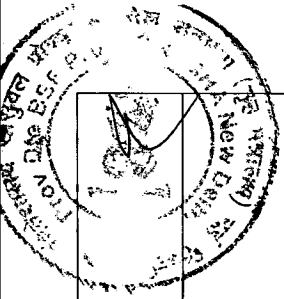|								
		for chassis interconnectivity should be in redundancy. For internal/external interconnect switches all the switches in the chassis should be fully populated for maximum throughput & redundancy as per network architecture from day 1.		redundancy as per network architecture from day 1.				
		All Network and management modules as per · solution should be populated from day 1 to ensure redundancy.	No Changes	Please revise it as below: "All Network and management modules/ Solution as per solution should be populated from day 1 to ensure redundancy."	No Changes	No Changes	No Changes	No Changes	Accepted. Kindly read as **All Network and management modules/Solution as per solution should be populated from day 1 to ensure redundancy.**
6.	Future Scalability	Support for aggregation of multiple enclosures to consolidate data centre network	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**

9

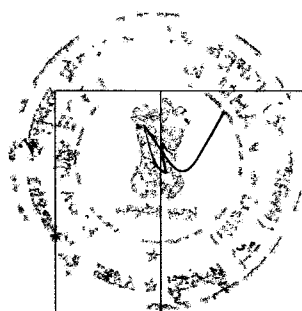|		connections.							
7.	Management	Blade chassis management solution may be provided internal / external to the chassis and must provide single console for managing all associated components like Blade Servers, raid settings, NIC/HBA cards, IO Modules, Power supplies, Fans. Licenses to support the features to be supplied for fully populated chassis.	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
		Centralized Redundant Management solution should be provided so that management of all blade servers across multiple chassis within Data Center can be done from single console. If the	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes ◆	**No Changes**

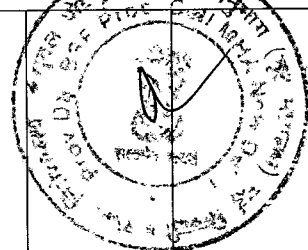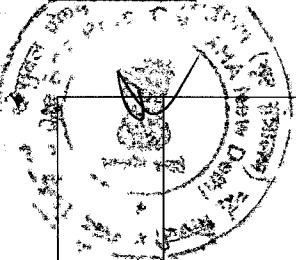|								
		management system runs as a virtual machine, then all hardware and software licenses to enable this should be included.						
		Should support integration with management software to deliver 'composable infrastructure' with a view of resources. This should be flexible and scalable solution providing IT managers with the architecture to implement their software-defined data centre (SDDC) -- and to address the changing business needs and the challenges of today's enterprise data centres. Should support Gigabit out of band management port,	No Changes	Please revise it as below: " This proposed solution be,flexible and scalable solution providing IT managers with the architecture to implement their software-defined data centre (SDDC) - and to address the changing business needs and the challenges of today's enterprise data centres. Should support Gigabit out of band management port to monitor the servers for ongoing management, service alerting and reporting.	No Changes	No Changes	No Changes	No Changes	Accepted. Kindly read as **Should support integration with management software to deliver solution with a view of resources. This should be flexible and scalable solution providing IT managers with the architecture to implement their software-defined data centre (SDDC) -- and to address the changing business needs and the challenges of today's enterprise data**

to monitor the servers for ongoing management, service alerting and reporting. Should support UEFI to configure and boot the servers securely. System should support RESTful API integration. System management should support provisioning servers by discovering and deploying 1 to few servers with embedded Provisioning tool. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support.		Should support UEFI to configure and boot the servers securely. System should support RESTful API integration. System management should support provisioning servers by discovering and deploying 1 to few servers with embedded Provisioning tool. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support should support auto-discovery of resources within an enclosure and on multiple connected				centres. Should support Gigabit out of band management port to monitor the servers for ongoing management, service alerting and reporting. Should support UEFI to configure and boot the servers securely. System should support RESTful API integration. System management should support provisioning servers by discovering and deploying 1 to few servers with embedded Provisioning tool. System should support embedded remote support to transmit hardware events directly to OEM or an

				enclosures"				authorized partner for automated phone home support.
		Should support auto-discovery of resources within an enclosure and on multiple connected enclosures.	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
		Solution should support templates to quickly deploy the VM's.	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
		The management software should be used to create resource pools and have the blade resources assigned to the respective resource pools & re-assign resources to effectively utilize infrastructure	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
		Role Based Access Control users to define roles and privileges and remote	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**

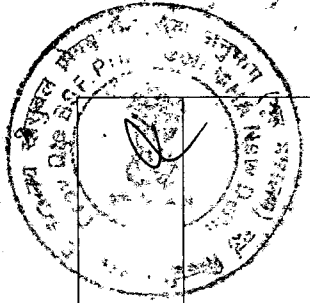|	management capabilities including remote KVM should be included							
	Movement of server identity from one slot / server to another in the event of server failure. The management tool should be able to provide resource pooling and policy management to enable policy based automation.	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
	Management software should support integration with popular virtualization platform management software like vCenter, and SCVMM	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**No Changes**
	The Dashboard minimum should display a health summary of the following:	No Changes	The Dashboard minimum shquld display a health summary of the following: • Server	No Changes	No Changes	No Changes	No Changes	**Not accepted.** **This is our minimum requirement and**

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		• Server Profiles • Server Hardware • Appliance alerts		Profiles • Server Hardware • Appliance alerts *Server management software should provide capability to view health , inventory for third-party compute, network, storage, integrated systems, virtualization, and containers. *The proposed management solution should analyze current configurations & identify potential issues due to driver & firmware incompatibility					additional parameters as suggested may restrict OEM participation.
		1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from	No Changes	Please revise as below: ".1. For firmware security,, system should support remote management chip creating a fingerprint in the	No Changes	No Changes	No Changes	No Changes	Accepted. Kindly read Secure Erase in place of One Button Secure Erase.

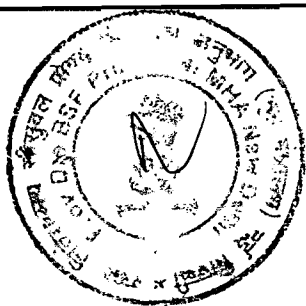| | | booting up unless the firmware matches the fingerprint. This feature should be immutable 2. One Button Secure Erase - Making server retirement and redeployment simpler. 3. Security Dashboard for Server to detect possible security vulnerabilities. | | silicon, preventing servers from booting up unless, the firmware matches the fingerprint. This feature should be immutable 2. - Should maintain repository for firmware to aid rollback or patching of compromised firmware. Should, also store Factory Recovery preloaded to rollback to factory tested secured firmware 3. Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote .Locations 4. Secure Erase - Making server retirement and redeployment simpler. • 5. Security | | | | | |

				Dashboard for Server to detect possible security vulnerabilities."					
		1. Offered servers shall have On Premises cloud enabled monitoring and analytics engine for proactive management. All required licenses for same shall be included in the offer. 2. On Premises Cloud Enabled Monitoring and analytics engine shall have capability to provide following: a. Providing Firmware upgrade and patch upgrade recommendations proactively. b. Providing power and support entitlement status,	No Changes	This clause is not clear , as there are two ways to provide management capability of the infra i.e On Prem or SAAS through cloud , whereas this clause is asking for on prem cloud enabled monitoring platform. So please clarify	No Changes	No Changes	No Changes	No Changes	**Clarification** **This is a BSF owned private cloud and we are asking for on Premises cloud enabled monitoring platform, so there is no option for SAAS through cloud.**

c. Recommendations to eliminate performance bottlenecks and critical events, based on Analytics engine having capability of proactive recommendation for arresting the issues / problems. d. Automatic creation of support cases. e. Detection of the Service Pack for Server and notifications for any hotfixes that may be available for the Configuration. f. Customer advisories based on their relevance to server configuration. g. Should have continuous, proactive health monitoring and							

		recording of required system parameters as well as diagnostic telemetry data on a 24x7 basis. h. Should have monitoring & analytics feature for the offered server/chassis along with its sub-components to predict, prevent, and auto-resolve problems and by providing automating case creation and log file submission for the problems that can't be auto resolved.							

QRS/TECHNICAL SPECIFICATION OF CLOUD MANAGEMENT PLATFORM

No Query from any OEM/Reseller

QRS/TECHNICAL SPECIFICATION OF VIRTUALIZATION & AUTOMATION

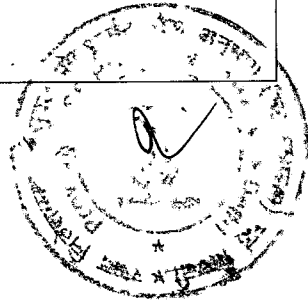| SNO.	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
12.	The solution should model what-if scenarios based on the real-time environment to accurately forecast capacity needs. Shall have the capability to install on multiple Hypervisor's like VMware & Hyper-V.	No Changes	No Changes	No Changes	Second part of the clause is not clear. We understand that the requirement is that solution should be capable to install and analyze performance data from multiple Hypervisor's like VMware & Hyper-V. Please confirm if the	No Changes	Second part of the clause is not clear. We understand that the requirement is that solution should be capable to install and analyze performance data from multiple Hypervisor's like VMware & Hyper-V. Please confirm if the	Clarification. Our requirement is that solution should be capable to install and analyse performance data from multiple Hypervisor's like VMware & Hyper-V.

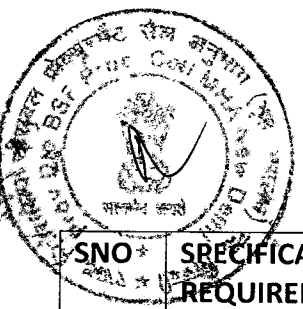|					understanding is correct		understanding is correct	
13.	Porposed software solution shall be provided for minimum 300 virtual machines and should be scalable as required.	No Changes	Since QTY is revised in the cloud management platform to 200 VMs, please clarify, is this also applicable here as well ?	No Changes	Our Licensing is based on no. of CPU Cores with no limit on the no. of VM's running on those cores of the servers. We understand that the same should meet the requirement. Please confirm	No Changes	Our Licensing is based on no. of CPU Cores with no limit on the no. of VM's running on those cores of the servers. We understand that the same should meet the requirement. Please confirm	Accepted. Kindly read as **Proposed software solution shall be provided for 640 cores or 200 Virtual machines and should be scalable as required.**
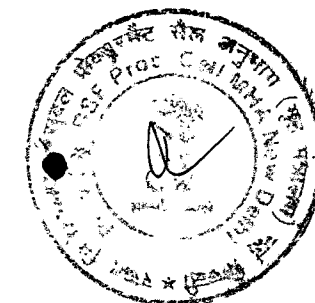
QRS/TECHNICAL SPECIFICATION OF SPINE SWITCH

SNO	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s E-PSPL	M/s PC Solutions	REPLY
5.	Switch should support VXLAN and EVPN control plane. 250 VRF instances with route leaking functionality	No Changes	Please revise as below: "Switch should support VXLAN and EVPN control plane. Min 1000 VRF instances with route leaking functionality"	No Changes	No Changes	No Changes	No Changes	No Changes	**Not accepted.** **This is our minimum requirement and additional parameters as suggested may restrict OEM participation.**
8.	The Switch should have minimum 32 MB packet buffer size per port.	No Changes	Please revise as below: "The Switch should have, minimum 32 MB packet buffer.size per switch with Intelligent buffer	No Changes	No Changes	No Changes	No Changes	No Changes	**Not accepted.** **This is our minimum requirement and additional parameters as suggested may restrict OEM participation.**

22

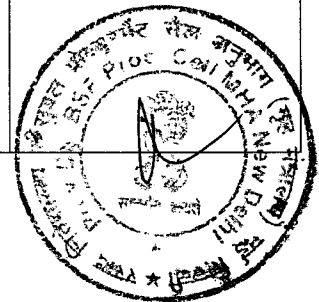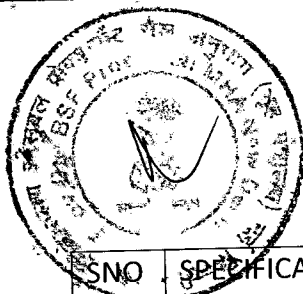|			Mechanism"						
9.	The switch should have MAC Address table size of 90k, 100k IPv4 LPM routes, 4K multicast routes, 3000 VLANs.	No Changes	Please revise as below: "The switch should have MAC Address table size of 200k, 400k IPv4 LPM routes, 30K multicast routes, min 4000 VLANs table "	No Changes	No Changes	No Changes	No Changes	No Changes	**Not accepted.** **This is our minimum requirement and additional parameters as suggested may restrict OEM participation.**

QRS/TECHNICAL SPECIFICATION OF LEAF ACCESS SWITCH

SNO	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
6.	Switch should support VXLAN and EVPN control plane. 250 VRF instances with route leaking functionality	No Changes	Please revise as below: "Switch should support VXLAN and EVPN control plane. Min 1000 VRF instances with route leaking functionality"	No Changes	No Changes	No Changes	No Changes	Not accepted. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.
8.	The Switch should support 32MB packet buffer size, 16GB RAM 8GB flash.	No Changes	Please revise as below: "The Switch should support 32MB packet buffer size, 16GB RAM 100GB flash with Intelligent buffer Mechanism"	No Changes	No Changes	No Changes	No Changes	Not accepted. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.
9.	The switch should have MAC Address table size of 90k, 100k IPv4	No Changes	Please revise as below: "The switch should have MAC Address table size of 200k, 400k IPv4 LPM routes, 30K multicast	No Changes	No Changes	No Changes	No Changes	Not accepted. This is our minimum

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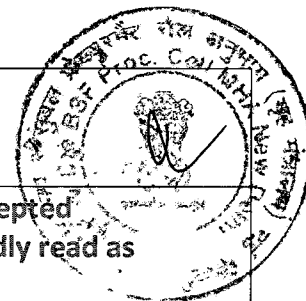|								
	LPM routes, 4K multicast routes, 3000 VLANs		routes, min 4000 VLANs table "					requirement and additional parameters as suggested may restrict OEM participation.
14.	The switch shall support distributed stateful/dynamic segmentation, east-west firewalling with minimum of 800Gbps performance, NAT, encryption, and telemetry services-all delivered inline from day-1. This feature should be inbuilt internal or additional external hardware device from day-1.	Please remove this point to removed: Stateful Gateway services needs to be moved to Gateway devices	Please remove this clause	No Changes	No Changes	No Changes	Please remove this point to removed: Stateful Gateway services needs to be moved to Gateway devices	**No Change** **Our requirement is very clear and this is our minimum requirement from day 1. Bidder can provide inbuilt or external software/hardware to meet this functionality**

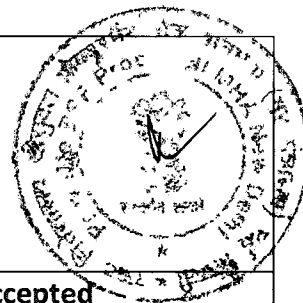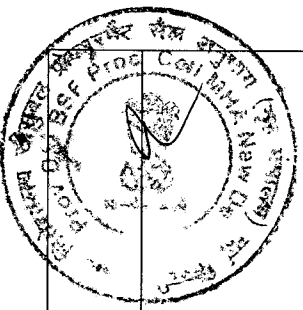## QRS/TECHNICAL SPECIFICATION OF NETWORK VIRTUALIZATION CONTROLLER

SNO	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
1.	Offer layer should support Network Virtualisation using Virtual Over Lay Network using VXLAN	No Changes	No Changes	No Changes	Industry is using Geneve protocol for encapsulation on overlay networks. Geneve is more suitable for data center east-west traffic as it is highly scalable and secure. VMware solution uses Geneve for east-west/ overlay network. Please confirm and requirement can be phrased as " Offer layer should support Network Virtualisation using Virtual Over Lay	No Changes	Industry is using Geneve protocol for encapsulation on overlay networks. Geneve is more suitable for data center east-west traffic as it is highly scalable and secure. VMware solution uses Geneve for east-west/ overlay network. Please confirm and requirement can be phrased as " Offer layer should support Network Virtualisation using Virtual Over Lay	**Accepted** **Kindly read as** **Offer layer should support Network Virtualisation using Virtual Over Lay Network using VXLAN/Geneve.**

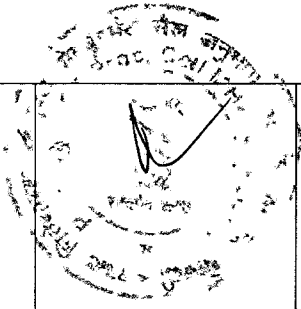|								
					Network using VXLAN/ Geneve"		Network using VXLAN/ Geneve"	
2.	Switch should support VXLAN and EVPN symmetric IRB for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center	No Changes	No Changes	No Changes	Technical compliances are for network virtualization controller and this requirement we understand needs to be met by proposed network virtualization solution. Please confirm. Please confirm and requirement can be phrased as " Network Virtualization Solution should support VXLAN/ Geneve and EVPN symmetric IRB for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data	No Changes	Technical compliances are for network virtualization controller and this requirement we understand needs to be met by proposed network virtualization solution. Please confirm. Please confirm and requirement can be phrased as " Network Virtualization Solution should support VXLAN/ Geneve and EVPN symmetric IRB for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data	**Accepted** Kindly read as **Switch should support VXLAN/Geneve and EVPN symmetric IRB for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center**

| 3. | The solution must be supplied with a Central management solution and associated licenses for managing, monitoring and provisioning the Physical Fabric from Day-1 from same OEM of Switch. | No Changes | No Changes | No Changes | center"

This clause is limiting the participation to specific OEM. Industry's practice is implement network virtualization which is agnostic to underline network hardware. Request to remove the requirement of solution to be provides from same OEM of switch and rephrase "The solution must be supplied with a. Central management solution and associated licenses for.managing, monitoring and provisioning the entire virtual | No Changes | center"

This clause is limiting the participation to specific OEM. Industry's practice is implement network virtualization which is agnostic to underline network hardware. Request to remove the requirement of solution to be provides from same OEM of switch and rephrase "The solution must be supplied with a. Central management solution and associated licenses for.managing, monitoring and provisioning the entire virtual | Accepted
Kindly read as

The solution must be supplied with a Central management solution and associated licenses for managing, monitoring and provisioning the Physical/Virtual Fabric from Day-1.

● |

					Fabric from Day-1 from same OEM of Switch/ independent software defined solution."		Fabric from Day-1 from same OEM of Switch/ independent software defined solution."	
5.	Centralized management appliance or SDN Controller should not participate in Data plane and control plane path of the Physical fabric.	No Changes	No Changes	No Changes	There seems to be typo in this clause. SDN controller should not participate in data plane to provide uninterrupted operations even if control plane goes down. Clause should be phrased as "Centralized management appliance or SDN Controller should not participate in Data plane path of the fabric."	No Changes	There seems to be typo in this clause. SDN controller should not participate in data plane to provide uninterrupted operations even if control plane goes down. Clause should be phrased as "Centralized management appliance or SDN Controller should not participate in Data plane path of the fabric."	**Accepted** **Kindly read as** **Centralized management appliance or SDN Controller should not participate in Data plane and control plane path of the Physical/Virtual fabric.** ●
6.	.Solution should provide management of complete fabric with VxLAN EVPN Architecture.	No Changes	No Changes	No Changes	As requested above please provide option for Geneve in addition to VxLAN	No Changes	As requested above please provide option for Geneve in addition to VxLAN	**Accepted** **Kindly read as** **Solution should provide management of complete fabric**

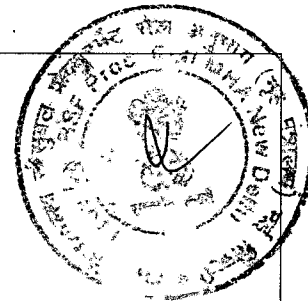|								
					"Solution should provide management of complete fabric with VxLAN/ Geneve EVPN Architecture or VLAN IS-IS Architecture."		"Solution should provide management of complete fabric with VxLAN/ Geneve EVPN Architecture or VLAN IS-IS Architecture."	with VxLAN/Geneve EVPN Architecture.
7.	Solution should provide per-Physical switch configuration deployment history of underlay, overlay, and interface configurations.		To Delete this Point		We understand that clause is referring to virtual switch deployed on overlay network. VMware solution works on overlay network and virtual fabric. Request to rephrase "Solution should provide per-vSwitch configuration deployment history of overlay, and virtual interface configurations."	No Changes	We understand that clause is referring to virtual switch deployed on overlay network. VMware solution works on overlay network and virtual fabric. Request to rephrase "Solution should provide per-vSwitch configuration deployment history of overlay, and virtual interface configurations."	Accepted Kindly read as

Solution should provide per-Physical/ Virtual switch configuration deployment history of underlay, overlay, and physical/virtual interface configurations. |
| 12. | Tracks the details and connectivity of servers (hosts) that | No Changes | please clarify or remove this clause as Blade servers are | No Changes | No Changes | No Changes | No Changes | Clarification.

We are already using |

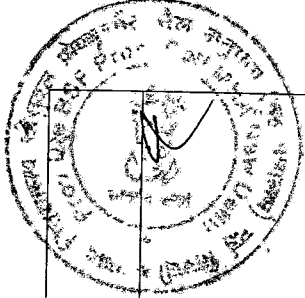|								
	are connected to Switches (HCI "VMware or Nutanix".		asked only, no HCI is asked so this point has no relevance so please remove or update accordingly.					number of HCIs and this functionality is required from days 1.
14.	End Point group	Clarifications - End Point refers to the Leaf Switches in the Fabric	No Changes	No Changes	Please clarify and elaborate the requirement. Are we referring to solution's capability to provide visibility and detect traffic patterns of endpoints/ workloads/VMs in a group	No Changes	Clarifications - End Point refers to the Leaf Switches in the Fabric And Please clarify and elaborate the requirement. Are we referring to solution's capability to provide visibility and detect traffic patterns of endpoints/ workloads/VMs in a group	Clarification. Yes we are referring to solution's capability to provide visibility and detect traffic patterns of endpoints/ workloads/VMs in a group and required from day 1.
15.	Solution must integrate with VMware vCenter compute for topology view	Clarifications - This integration should be allowed as the	Solution must integrate with VMware vCenter compute for topology.view.	No Changes	No Changes	No Changes	Clarifications - This integration should be allowed as the Roadmap line	Clarification This is our minimum requirement from day 1 and additional

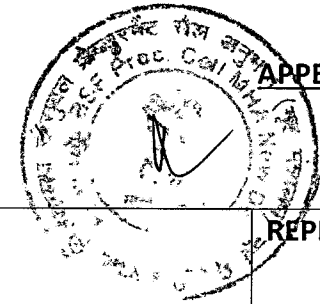|								
	(virtual machines, vSwitch/DVS, port group, VNIC, VMNIC)	Roadmap line item and not a Day0 Requirement	(virtual machines, vSwitch/DVS, port group, VNIC, VMNIC) and Microsoft Hyper-V with System Center, Kubernetes, Redhat Openshift and manage virtualise networking from the single pane of glass and must support micro-segmentation based on VM attributes like hostname, OS, VM Tags, FQDN, Microsoft AD based classification				item and not a Day0 Requirement	**parameters as suggested may restrict OEM participation.**
16.	Solution should provide topology and Endpoint Visibility, End to End Flow Visualization and Network Health Monitoring.	Clarifications - End Point refers to the Leaf Switches in the Fabric	Please revise as below: "Solution should provide topology and Endpoint Visibility, End to End Flow Visualization and Network Health Monitoring. Switch should provide below telemetry features: •Full Inventory like Global, fabric, switch,	No Changes	No Changes	No Changes	Clarifications - End Point refers to the Leaf Switches in the Fabric	Clarification ● **Our requirement is very clear and this is our minimum requirement from day 1 and additional parameters as suggested may restrict OEM participation.**

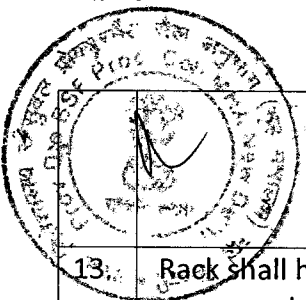| | | | ports, endpoints, VMs ,L3 neighbors, IPv4/v6 routing table etc.
•Verified Scale limits with Hardware/software lifecycle & EoS.
•Network Topology and Utilization of Operational like MAC/Route & Hardware resources like port utilization/ BW
•Switch Anomolies related with Advisories , PSIRT and Field Notices
•Software upgrade check with TAC assist
•Latency and flow , packet flow analysis and path trace
•Bug Scanning , Switch's CAM Analyzer, Microbursts and log collector
•Real Time Interface statistics like CPU, memory, power, temperature, and | | | | |

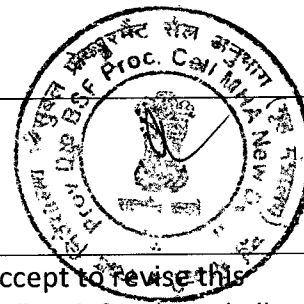|								
		interfaces with historical information. •Switch and fabric-level power consumption, cost (kWh), and CO_2 emissions CO_2 emissions.						
21.	Solution should be in high availability mode. Bidder should supply hardware/software in 1+1 or N+1.	Clarifications - Network Virtualization Software to hosted on VM and High availability requirement can be met through Virtualization software high availability features	No Changes	No Changes	No Changes	No Changes	Clarifications - Network Virtualization Software to hosted on VM and High availability requirement can be met through Virtualization software high availability features	Clarification Our requirement is very clear and Bidder should supply hardware/software along with licenses in 1+1 or N+1 from day 1. ●

QRS/TECHNICAL SPECIFICATION OF SMART RACK SOLUTION

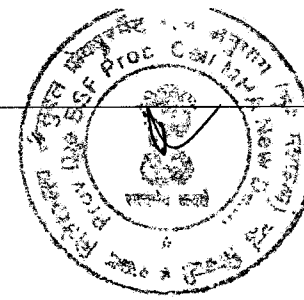| SN O	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
1.	42U Network rack with dimension (HWD) 2000mmX800mmX1200 mm	Please accept to revise this clause as "42U Network rack with dimension (HWD) max 2000mmx750mm/800mmx120 0mm with both castors and levelling legs",	No Chang es	No Changes	No Changes	No Chang es	Please accept to revise this clause as "42U Network rack with dimension (HWD) max 2000mmx750mm/800mmx120 0mm with both castors and levelling legs",	Not accepted. Required standard size of rack as per industry standard – (HWD) 2000mm x 800mm x 1200mm.
4.	All 19" rails should be made of 1.5mm steal with minimum 14 times folded for maximum rigidity and must have EIA-310 standard hole-mounting pattern with U marking on front and rear of each rail for ease of installation.	Please accept to revise this clause to make it generic "All 19" rails should be made of 1.5mm steel and folded for maximum rigidity and must have EIA-310 standard hole - mounting pattern withj U marking on front and rear of each rail for ease of installation"	No Chang es	No Changes	No Changes	No Chang es	Please accept to revise this clause to make it generic "All 19" rails should be made of 1.5mm steel and folded for maximum rigidity and must have EIA-310 standard hole - mounting pattern withj U marking on front and rear of each rail for ease of installation"	Not accepted. We required rack with minimum 14 times folded frame structure to have more rigidity, load bearing capacity and

								strength. This is our minimum requirement.
13.	Rack shall have the necessary hardware accessories ((50 each M6 cage nuts and screws), Cage nut installation tool, plastic gland plates (tool less removable) for top panel cable entry).	Please accept to revise this clause as "Rack shall have the necessary hardware accessories ((50 each M6 cage byuts and screws), Cage nut installation tool, cable brushes / plastic gland plates (tool less removable) for top panel cable entry)"	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "Rack shall have the necessary hardware accessories ((50 each M6 cage byuts and screws), Cage nut installation tool, cable brushes / plastic gland plates (tool less removable) for top panel cable entry)"	Accepted. Kindly read as Rack shall have the necessary hardware accessories ((50 each M6 cage nuts and screws), Cage nut installation tool, cable brushes / plastic gland plates (tool less removable) for top panel cable entry).
16.	The rack should have a capability of complete knock down format for ease of transportation.	Please accept to revise this clause as "The rack should be supplied either in assembled or CKD form".,	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "The rack should be supplied either in assembled or CKD form".,	Accepted. Kindly read as The rack should be supplied

			No Changes	No Changes	No Changes	No Changes		either in assembled or CKD form
18.	Rack frame and all the sheet metal components of the rack should be powder coated black colour, RAL 7021 (80 - 120 MICRONS).	Please accept to revise this clause as "Rack frame and all the sheet metal compnents of the rack should be powder coated black colour, RAL 9005 / RAL 7021 (80-120 MICRONS)"	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "Rack frame and all the sheet metal compnents of the rack should be powder coated black colour, RAL 9005 / RAL 7021 (80-120 MICRONS)"	Accepted. Kindly read as **Rack frame and all the sheet metal components of the rack should be powder coated black colour, RAL 7021/RAL 9005 (80 - 120 MICRONS).**
21.	The Rack frame should be strong & durable, nine folded solid frame profile which can support at least 1600 kg weight static load, 1000 kg dynamic load.	Please accept to revise this clause as "The Rack frame should be strong & durable, which can support at least 1600 Kg weight static load, 1000 kg dynamiuc load."	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "The Rack frame should be strong & durable, which can support at least 1600 Kg weight static load, 1000 kg dynamiuc load."	Accepted. Kindly read as **The Rack frame should be strong & durable, which can support at least 1600 Kg weight static load, 1000 kg dynamic load.**

| 24.	Each rack should have 2 IPDUs. The IPDUs should be connected to the two different UPS sources A and B individually. The 2 IPDUs in each rack should have different chassis color for identification of UPS source.	Please accept to revise this clause as "Each rack should have 2 IPDUs. The IPDUs should be connected to the two different UPS sources A and B individually."	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "Each rack should have 2 IPDUs. The IPDUs should be connected to the two different UPS sources A and B individually."	Accepted. Kindly read as Each rack should have 2 IPDUs. The IPDUs should be connected to the two different UPS sources A and B individually.
26.	iPDU should have min. 24 numbers of hybrid outlets should be of hybrid nature which can be utilised as either C13 or C19 outlet. All outlets should provide high retention to avoid accidental dislodging of power cords.	Please accept to revise this clause as "iPDU should have min. 20 numbers of hybrid outlets should of hybrid nature which can be utilised as either C13 or C19 outlets. All outlets should provide high retention to avoid accidental disloding of power cords."	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "iPDU should have min. 20 numbers of hybrid outlets should of hybrid nature which can be utilised as either C13 or C19 outlets. All outlets should provide high retention to avoid accidental disloding of power cords."	Not accepted. This is our minimum requirement as per industrial standards.
32.	The IPDU should support the daisy chain of minimum 40 units to reduce network port requirement and ensure continuous flow of data on network to monitoring tool/BMS/DCIM even a break in daisy chain	Please accept to revise this clause as "The IPDU should support the daise chain of minimum 30 units to reduce network port requirement and ensure continuous flow of data on network to minitoring tool/BMS/DCIM."	No Changes	No Changes	No Changes	No Changes	Please accept to revise this clause as "The IPDU should support the daise chain of minimum 30 units to reduce network port requirement and ensure continuous flow of data on network to minitoring tool/BMS/DCIM."	Accepted. Kindly read as The IPDU should support the daisy chain of minimum 30 units to reduce

			No Changes	No Changes	No Changes	No Changes		
	occurs.							network port requirement and ensure continuous flow of data on network to monitoring tool/BMS/DC IM even a break in daisy chain occurs..
33.	Network communication – PDU should have two Network Ports. IPDU should support communication protocols including DHCP, HTTP, HTTPS, Ipv4, Ipv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SSL, SNMP (v1, v2, v3), Syslog and TACACS+.	Please accept to revise this clause as "Network communication - PDU should have two Network Ports. IPDU should support communication protocols including DHCP, HTTP, HTTPS, Ipv4, Ipv6, LDAP, NTP, RADIUS, SSH, SMTP, SSL, SNMP (v1, v3), Syslog."	No Chang es	No Changes	No Changes	No Chang es	Please accept to revise this clause as "Network communication - PDU should have two Network Ports. IPDU should support communication protocols including DHCP, HTTP, HTTPS, Ipv4, Ipv6, LDAP, NTP, RADIUS, SSH, SMTP, SSL, SNMP (v1, v3), Syslog."	Accepted. Kindly read as **Network communication – PDU should have two Network Ports. IPDU should support communication protocols including DHCP, HTTP, HTTPS, Ipv4, Ipv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SSL, SNMP (v1, v2, v3), Syslog.**

| 37. | 2 IPDUs and 1 combo sensors (Temp. and humidity & dew point) to be provided for each rack. | Please accept to revise this clause as "2 IPDU and 1 combo sensors (Temp. and humidity) to be provided for each rack." | No Changes | No Changes | No Changes | No Changes | Please accept to revise this clause as "2 IPDU and 1 combo sensors (Temp. and humidity) to be provided for each rack." | Clarification. Kindly read as **2 Nos. IPDU and 1 No. combo sensors (Temp. and humidity) & 1 No. dew point/ water leakage to be provided for each rack.** |

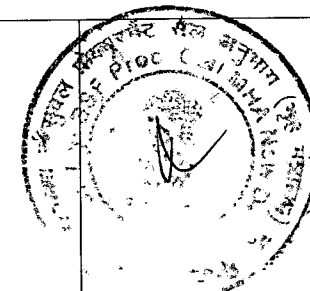## QRS/TECHNICAL SPECIFICATION OF NAC-AAA
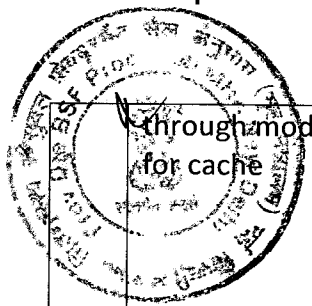
No Query from any OEM/Reseller
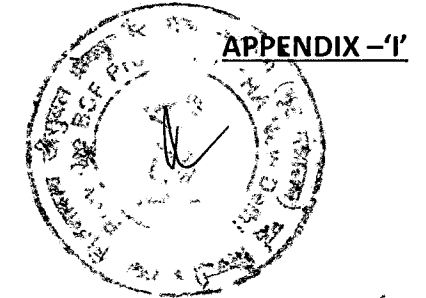
QRS/TECHNICAL SPECIFICATION OF SAN STORAGE 100 TB USABLE

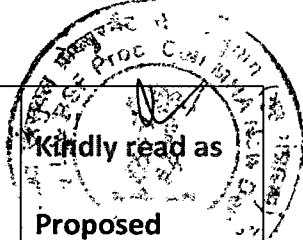| SN O	SPECIFICATION S REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s TARGUS TECH	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
1.	A hybrid storage solution with latest NVMe (200 TB usable) storage for achieving the performance. Efficiency features, namely, in-line de- duplication and compression should be available on	**Change To:** An All-Flash storage solution with latest **TLC/MLC Grade** NVMe (200 TB usable) storage for achieving the performance. Efficiency features, namely, in-line de- duplication and separate hardware-assisted compression should be available on NVMe tier. Proposed system should be able to deliver minimum of 1,50,000 IOPS on Random workload with	Please revise this to " The Storage Solution must be a latest NVME based storage with 200TB useable storage for achieving performance .Efficiency features , namely ,in-line deduplication and	Hybrid storage does not support NVMe disk, whereas capacity has been asked with All NVMe. We request to amend the clasue as	The storage solution must be a latest NVME based storage with 200 Tb usable storage for achieving performance. Efficiency features,	A hybrid storage solution with latest **TLC NVME** (200TB Usable) storage for achieving the performance. Efficiency feature, namely, inline deduplication and compression should be	**Change To:** An All-Flash storage solution with latest **TLC/MLC Grade** NVMe (200 TB usable) ● storage for achieving the performance. Efficiency features, namely, in-line de- duplication and separate hardware-assisted compression should be available on NVMe tier. Proposed system should be able to deliver minimum of 1,50,000 IOPS on Random workload with	Accepted Kindly read as **A SAN storage solution with TLC/MLC Grade NVMe (100 TB usable) storage for achieving the performance. Efficiency features, namely, in-line de- duplication and**

NVMe tier. Proposed system should be able to deliver minimum of 1,50,000 IOPS on Random workload with 70:30 Read/Write ratio with 8KB of block size with sub millisecond response time.	70:30 Read/Write ratio with 8KB of block size with sub millisecond response time.	compression should be available on NVMe tier. Proposed system should be able to deliver minimum if 150000 IOPS on random workload 70;30 Read/Write ratio with 8K of block size with sub millisecond response time ."	"A SAN storage solution with latest NVMe (200 TB usable) storage for achieving the performance . Efficiency features, namely, in-line de-duplication and compression should be available on NVMe tier. Proposed system should be able to deliver minimum of 1,50,000	namely, inline deduplication and compression should be available on NVME tier. Proposed system should be able to deliver minimum of 150000 IOPS on random workload 70:30 read / write ratio with 8k of block size with sub millisecond of response time.	available on NVMe tier, Proposed system should be able to deliver minimum of 150000 IOPS on random workload with 70:30 read/Write ratio with 8KB of block size with sub millisecond response time.	70:30 Read/Write ratio with 8KB of block size with sub millisecond response time.	compression should be available on NVMe tier. Proposed system should be able to deliver minimum of 1,50,000 IOPS on Random workload with 70:30 Read/Write ratio with 8KB of block size with sub millisecond response time.

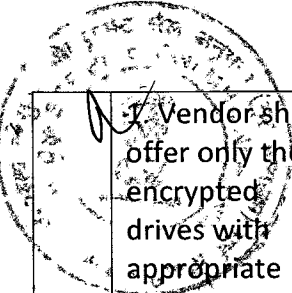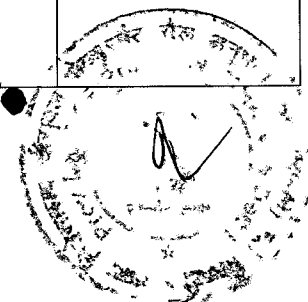|				IOPS on Random workload with 70:30 Read/Writ e ratio with 8KB of block size with sub millisecon d response time".				
2.	Minimum System Cache to be proposed 128 GB Global Protected per controller. System is offering capability to protect the write cache in case of a controller failure. Also, a faiłure of controller should not lead to write-	Change To: Minimum System Cache to be proposed 128 GB per controller. System is offering capability to protect the write cache in - case of a controller failure. Also, a failure of controller should not lead to write-through mode for cache. Both the proposed controllers should be connected to common active backplane for inter-controller communication.	Please revise this to " Minimum System Cache to be proposed 128GB protected per controller .System is offering capabilities to protect the write cache in case of a controller failure ."	No Changes	Minimum system cache to be proposed 128 Gb protected per controller. System is offering capabilities to protect the write cache in case of controller failure.	Minimum system cache to be proposed **256**GB Global protected per controller system is offering capability to protect the write cache in case of a controller failure, Also a failure of controller should not lead to write-	Change To: Minimum System Cache to be proposed 128 GB per controller. System is offering capability to protect the write cache in - case of a controller failure. Also, a failure of controller should not lead to write-through mode for cache. Both the proposed controllers should be connected to common active backplane for inter-controller communication.	**Accepted Kindly read as** **Minimum System Cache to be proposed 128 GB Protected per controller. System is offering capability to protect the write cache in case of a controller failure. Also, a**

	through mode for cache					through mode of cache.		failure of controller should not lead to write-through mode for cache.
3.	Proposed Storage system should be with 4 x 10GbE & 4 x 32 GB FC front end ports available across dual controllers and can be scaled upto 8 x 40GbE/20 x 25GbE/32 x 10GbE/ 24 x 32 Gb FC/16 x 32 GB FC	No Changes	No Changes	No Changes	No Changes	Proposed system should be with 4*10GbE and 4*32 GB FC front end ports available across dual controllers and can be scaled upto **8*32GB FC within the proposed controllers**	No Changes	Not accepted. This is our minimum requirement and changing of parameters as suggested may restrict OEM participation.
4.	Offered Storage should support block.	Change To: Offered Storage should support block (FC, iSCSI, NVME over FC, NVME over TCP) and file (SMB, NFS) protocols natively.	No Changes	No Changes	No Changes	No Changes	Change To: Offered Storage should support block (FC, iSCSI, NVME over FC, NVME over TCP) and file (SMB, NFS) protocols natively.	Not accepted. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.
8.	Proposed	Change To: Proposed	Please revise it	No	The	Proposed	Change To: Proposed	Clarification.

| | Storage system should offers No-Single-Point of Failure offering upto 100% of availability with minimum 2 Nodes/Controllers in symmetric architecture and Scale-Out to minimum 4-Nodes/Controllers. The Proposed storage system should support minimum 120 NVMe disk with proposed No. of controllers. | Storage system should offers No-Single-Point of Failure offering upto **99.9999% of availability** with minimum 2 Nodes/Controllers in **symmetric/asymmetric/load-balanced architecture** and Scale-Out to minimum 4-Nodes/Controllers." The Proposed storage system should support minimum 120 NVMe disk **with scaleout architecture (4 controller scalability).** | to " The proposed Storage system should offer NSPOF offering 99.9999% availability with minimum 2 Nodes/Controllers in symmetric architecture and scale-out to minimum 4-Nodes/Controllers in symmetric architectures and Scale-Out to minimum 8-Nodes/Controllers. | Changes | proposed storage system should offer NSPOF offering 99.9999% availability with minimum 2 nodes / controllers in symmetric architecture and scale out to minimum 4 nodes / controllers in symmetric architecture. | system should offer No single Point of Failure offering upto 100% of availability with minimum 2 node/controllers in symmetric architecture and Scale-Out to minimum 4-Node/controllers. The proposed system should support minimum 120 **TLC** NVMe disk **or 400 TB usable with** proposed No. of controllers. | Storage system should offers No-Single-Point of Failure offering upto **99.9999% of availability** with minimum 2 Nodes/Controllers in **symmetric/asymmetric/load-balanced architecture** and Scale-Out to minimum 4-Nodes/Controllers." The Proposed storage system should support minimum 120 NVMe disk **with scaleout architecture (4 controller scalability).** | **Kindly read as Proposed Storage system should offer No-Single-Point of Failure offering upto 99.9999% of availability with minimum 2 Nodes/Controllers in symmetric architecture and Scale-Out to minimum 4-Nodes/Controllers. The Proposed storage system should support minimum 100 Nos of TLC/MLC Grade NVMe disk with proposed No. of controllers.** |
| 10. | Proposed Storage system should offer:- | **Change To:** Offered FIPS 140-2 Validated encryption drives shall | No Changes | No Changes | No Changes | Proposed storage system should offer: | **Change To:** Offered FIPS 140-2 Validated encryption drives shall | **Not Accepted.** **This is our** |

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1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor shall not offer any controller based or Software based encryption. 2. Offered FIPS 140-2 Validated encryption drives shall support both KMIP 1.3 and KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key	support both KMIP 1.3 / KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key management.				1. Vendor shall offer **either the encrypted drives or controller based encryption** with appropriate encryption licenses and shall meet FIPs 140-2 - Level 2 security requirements. 2. Offered FIPs 140-2 validated encryption drive shall support both KMIP 1.3 and KMIP 1.4 for key management solution. vendor shall offer at least internal key manager engine for key management	support both KMIP 1.3 / KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key management.	**minimum requirement.**

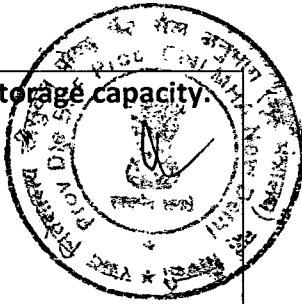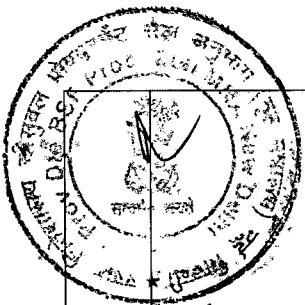|								
	management.							
11.	Proposed Storage Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	**Change To:** Proposed Storage Controllers shall be true symmetric/asymmetric/load-balanced active-active so that a single Pool/logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	No Changes	No Changes	No Changes	No Changes	**Change To:** Proposed Storage Controllers shall be true symmetric/asymmetric/load-balanced active-active so that a single Pool/logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	**Not Accepted.** **This is our minimum requirement.**

QRS/TECHNICAL SPECIFICATION OF BACKUP APPLIANCE

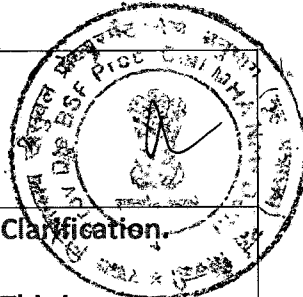| SNO	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s P.C Solutions	REPLY
1.	The proposed backup appliance should have inbuilt disk storage, required operating system for backup and media Server and network components . Backup appliance should support controller/node/CPU level redundancy.	The proposed backup appliance should have inbuilt disk storage, required OEM to certify operating system for backup and media Server and network components . Backup appliance should support controller/node with CPU level redundancy.	No Changes	We understand with this clause that Dual CPU Backup Appliance will be allowed to quote, Please confirm.	No Changes	No Changes	The proposed backup appliance should have inbuilt disk storage, required OEM to certify operating system for backup and media Server and network components . Backup appliance should support controller/node with CPU level redundancy.	Clarification. **Our requirement is very clear and Dual CPU Backup Appliance will be considered.**
3.	The proposed backup appliance shall be offered with 3PB of usable disk storage capacity.	Proposed Purpose Built Backup Appliance shall be offered with 100 TB of usable disk storage capacity. Solution should be scalable to 250TB usable whenever	No Changes	There is mismatch in Capacity of Backup appliance, Please amend the clause to accommodat	No Changes	No Changes	Proposed Purpose Built Backup Appliance shall be offered with 100 TB of usable disk storage capacity. Solution should be scalable to 250TB usable whenever	Accepted Kindly read as **The proposed backup appliance shall be offered with 250 TB of usable disk**

		required. The offered purpose-built backup appliance should be sized appropriately for backup of front-end data of 100 TB (30% DB & 70% VM & File System) as per below mentioned backup policies: a. Daily incremental backup – retained for 4 weeks in the backup appliance. b. Weekly full backup for all data types – retained for 4 Weeks in the backup appliance. c. Monthly full backup – retained for 12 months in the backup Appliance. d. Yearly full backup - retained for 5 years in the backup appliance. The offered purpose-built backup appliance		e the 100TB Upfront data. "The proposed backup appliance shall be offered with 250 TB of usable disk storage capacity".			required. The offered purpose-built backup appliance should be sized appropriately for backup of front-end data of 100 TB (30% DB & 70% VM & File System) as per below mentioned backup policies: a. Daily incremental backup – retained for 4 weeks in the backup appliance. b. Weekly full backup for all data types – retained for 4 Weeks in the backup appliance. c. Monthly full backup – retained for 12 months in the backup Appliance. d. Yearly full backup - retained for 5 years in the backup appliance. The offered purpose-built backup appliance	storage capacity.
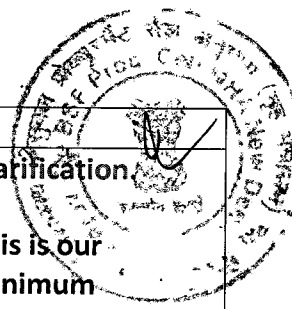
| | | | | | | should be quoted with minimum 100 TB usable capacity. The proposed purpose-built backup appliance must be sized for adequate capacity considering 2% daily data change rate for the contract period. Any additional backup storage capacity, software and any other component required as per sizing needs to be provided by the MSI and OEM at the time of bid. Bidder must provide the backup appliance sizing on OEM's letter head with seal & sign from the authorized signatory basis the backup retention policies mentioned along with Rack, Power & cooling | |

should be quoted with minimum 100 TB usable capacity. The proposed purpose-built backup appliance must be sized for adequate capacity considering 2% daily data change rate for the contract period. Any additional backup storage capacity, software and any other component required as per sizing needs to be provided by the MSI and OEM at the time of bid. Bidder must provide the backup appliance sizing on OEM's letter head with seal & sign from the authorized signatory basis the backup retention policies mentioned along with Rack, Power & cooling

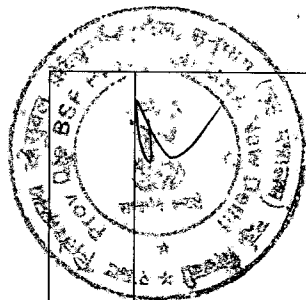|							
						requirements to run the complete infrastructure.	
5.	The proposed appliance should be offered with minimum 4 x 10/25 Gbps NIC host port. There should not be any single point of hardware failure including power supply, cooling fans, controllers/CPU, ports, etc.	The proposed appliance should be offered with minimum 8 X 10Gbps or 4 x 25 Gbe network (LAN) and 4x16 Gbps Fibre channel (SAN) ports. There should not be any single point of hardware failure including power supply, cooling fans, controllers, CPU, ports, etc:	No Changes	We understand with this clause that Dual CPU Backup Appliance will be allowed to quote, Please confirm.	No Changes	No Changes	The proposed appliance should be offered with minimum 8 X 10Gbps or 4 x 25 Gbe network (LAN) and 4x16 Gbps Fibre channel (SAN) ports. There should not be any single point of hardware failure including power supply, cooling fans, controllers, CPU, ports, etc:	Clarification. This is our minimum requirement and additional parameters as suggested may restrict OEM participation and dual CPU Backup Appliance will be considered.
6.	Proposed backup solution should have feature to configure source and target level inline data de-duplication. All necessary license should be included in solution.	Proposed backup appliance must have feature to perform source as well as target level data deduplication. All required licenses must be configured on the appliance.	No Changes	No Changes	No Changes	No Changes	Proposed backup appliance must have feature to perform source as well as target level data deduplication. All required licenses must be configured on the appliance.	Clarification. Our requirement is very clear and does not require any changes.
7.	Proposed appliance should support	Proposed appliance should support	No Changes	No Changes	No Changes	No Change	Proposed appliance should support	Clarification.

	minimum backup throughput of 30 TB/hr when enabled with source and target level de-duplication.	minimum backup throughput of 30 TB/hr when enabled with source and target level de-duplication and the published through publicly available website.				s	minimum backup throughput of 30 TB/hr when enabled with source and target level de-duplication and the published through publicly available website.	Our requirement is very clear and does not require any changes.
16.	Proposed appliance/solution should integrate with backup software to provide Enterprise File Sync and Share storage.	Proposed appliance should integrate with backup or archival software to provide Enterprise File Sync and Share storage.	Please remove this point as this is OEM specific and not relevant to Backup solution.	No Changes	No Changes	No Changes	Proposed appliance should integrate with backup or archival software to provide Enterprise File Sync and Share storage.	Clarification. Read as Proposed appliance/solution should integrate Enterprise File Sync and Share storage for backup.
18.	Proposed appliance should include backup of various Conversed Infra and virtualization technology. It should support Nutanix, vSAN, Hyperflex, VMware, Hyper-v, RHEV, Citrix, OVM agent/agentless	The proposed appliance should integrate with atleast three backup software like Veritas NetBackup, Dell NetWorker, Commvault over OST and VTL protocol.	No Changes	No Changes	No Changes	No Changes	The proposed appliance should integrate with atleast three backup software like Veritas NetBackup, Dell NetWorker, Commvault over OST and VTL protocol.	Clarification. Our requirement is very clear and does not require any changes.

	backup.						
19.	Proposed backup software should have option to filter backup of page file and swap partition from VMDK.	Proposed backup appliance must have data security feature retention lock WORM (Write Once Read Many) and which will ensure that not even system/backup administrator can delete, expire, modify backed up data before expiry of retention period from the backup appliance. ·	No Changes	No Changes	No Changes	No Changes	Proposed backup appliance must have data security feature retention lock WORM (Write Once Read Many) and which will ensure that not even system/backup administrator can delete, expire, modify backed up data before expiry of retention period from the backup appliance.	Clarification. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.
20.	Proposed appliance/Solution should support backup of MySQL, PostgreSQL, MonogoDB, Oracle, MS SQL, MariaDB.	1. OEM & SI must ensure & implement backup solution in such a way that if Backups could be wrongfully expired and eventually deleted by tampered system clocks through a compromised NTP server. In this case, the local system	No Changes	No Changes	No Changes	No Changes	1. OEM & SI must ensure & implement backup solution in such a way that if Backups could be wrongfully expired and eventually deleted by tampered system clocks through a compromised NTP server. In this case, the local system	Clarification. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.

|							
		clock would sync up based on the hacked NTP clock. This will minimize the systems clock tampering by an option which allows the security officer to set an allowed limit for the time drift between local clock & NTP server. The proposed purpose-built backup appliance must have security feature which should protect against NTP hacking/compromise in case of Ransomware or Cyber-Attacks. 2. No additional licenses must be required at DR site to maintain retention period on replicated data. 3. All required software components/ licenses to make				clock would sync up based on the hacked NTP clock. This will minimize the systems clock tampering by an option which allows the security officer to set an allowed limit for the time drift between local clock & NTP server. The proposed purpose-built backup appliance must have security feature which should protect against NTP hacking/compromise in case of Ransomware or Cyber-Attacks. 2. No additional licenses must be required at DR site to maintain retention period on replicated data. 3. All required software components/ licenses to make	

		the backup solution work as specified in this specification should be included in the solution from day-1.					the backup solution work as specified in this specification should be included in the solution from day-1.	
21.	All the required or necessary licenses, including replication, must be perpetual and should be provided for 300VMs or 100 TB front end data backup and archival to achieve all mentioned specifications.	All the required or necessary licenses, including replication,must be prepetual and should be provided for 1000VMs or 100TB front end data backup and archival to achieve all mentioned specifications.	Backup appliance has been asked with 3PB os usable capacity whereas License has been asked for 100TB front end data. These two figures are not matching. Please clarify. And furhter revise this classe to " All the required or necessary licenses, including replication, must be perpetual/subscription based and should be provided for 200VMs or 100 TB front end data backup and archival to achieve all mentioned specifications." AND Since QTY is revised in	No Changes	No Changes	No Changes	All the required or necessary licenses, including replication,must be prepetual and should be provided for 1000VMs or 100TB front end data backup and archival to achieve all mentioned specifications.	Clarification. Kindly read as **All the required or necessary licenses, including replication, must be perpetual and should be provided for 200VMs or 100 TB front end data backup and archival to achieve all mentioned specifications.**
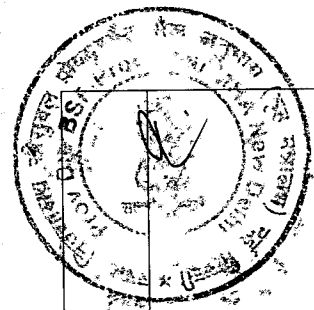
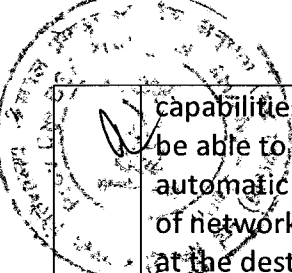|		the cloud management platform to 200 VMs, please clarify, is this also applicable here as well ?					

QRS/TECHNICAL SPECIFICATION OF BACKUP SOFTWARE

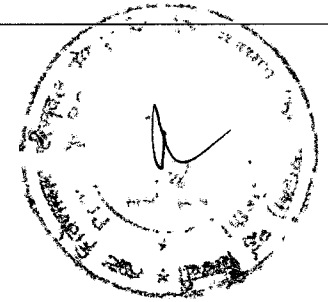| SNO	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
6.	Backup software should support agentless backups of applications residing in VMs like SQL, Exchange, Sharepoint, Oracle, MySQL, PostGre etc. with non-staged granular recovery of all these applications. It should support crash consistent VM level backup for all other workloads.	Proposed Backup solution should have agent/agentless backups of applications residing in VMs like SQL, Exchange, SharePoint, Oracle, etc. with granular recovery of all these applications. It should have crash consistent VM level backup for all other workloads.	No Changes	No Changes	No Changes	No Changes	Proposed Backup solution should have agent/agentless backups of applications residing in VMs like SQL, Exchange, SharePoint, Oracle, etc. with granular recovery of all these applications. It should have crash consistent VM level backup for all other workloads.	**Accepted.** **Kindly read as** **Backup software should support agent/agentless backups of applications residing in VMs like SQL, Exchange, Sharepoint, Oracle, MySQL, PostGre etc. with granular /non-staged granular recovery of all these applications. It should support crash consistent VM level backup for all other workloads.**
7.	Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like	Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like	No Changes	No Changes	No Changes	No Changes	Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like	**Not Accepted.** **This is our minimum requirement and additional parameters as suggested may**

	VMware, Hyper-V and support de-duplication on any storage target. It should be able to backup data to tapes (like LTO) as well for long term retention.	VMware, Hyper-V and support de-duplication on any storage target. It should be able to backup data to object storage or tapes (like LTO) for long term retention.					VMware, Hyper-V and support de-duplication on any storage target. It should be able to backup data to object storage or tapes (like LTO) for long term retention.	restrict OEM participation.
9.	Backup software should have integrated data de-duplication engine with multi-vendor storage support to save space by storing de-duplicated copies of data. The de-duplication engine should also facilitate IP base replication of de-dupe data. All necessary hardware and software required to support this functionality should be supplied along with other components	The proposed solution should have integrated data deduplication engine with proposed/multi vendor storage support to save space by storing de-duplicated copies of data. The deduplication engine should also facilitate IP based replication of de-dupe data. All necessary hardware and software required to support this functionality should be supplied alongwith other components.	No Changes	No Changes	No Changes	No Changes	The proposed solution should have integrated data deduplication engine with proposed/multi vendor storage support to save space by storing de-duplicated copies of data. The deduplication engine should also facilitate IP based replication of de-dupe data. All necessary hardware and software required to support this functionality should be supplied alongwith other components.	Accepted. Kindly read as **Backup software/solution should have integrated data de-duplication engine with multi-vendor storage support to save space by storing de-duplicated copies of data. The de-duplication engine should also facilitate IP base replication of de-dupe data. All necessary hardware and software required to support this functionality should be supplied along with other components**

11.	Proposed backup software should be able to Hardened the Linux Repository. This service will prevent backup copies of data from any corruption or ransom ware attacks.	Proposed backup software should be able to run on Linux or harden the linux repository. This service will prevent backup copies of data from any corruption ransom ware attacks.	No Changes	No Changes	No Changes	No Changes	Proposed backup software should be able to run on Linux or harden the linux repository. This service will prevent backup copies of data from any corruption ransom ware attacks.	**Not Accepted** This is our basic requirement which is clearly stated.
14.	The software should be Network-efficient, Secure backup data replication with variable-length encryption at the source, along with compression and encryption to ensure that backups are optimized for WAN transmission.	The software should be network-efficient with variable length deduplication, secure backup data replication using AES 256 bit encryption at the source, along with compression and encryption to ensure that backups are optimized for WAN transmission.	No Changes	No Changes	No Changes	No Changes	The software should be network-efficient with variable length deduplication, secure backup data replication using AES 256 bit encryption at the source, along with compression and encryption to ensure that backups are optimized for WAN transmission.	Not Accepted. This is our basic requirement which is clearly stated.
15.	Replication in the software should be a VM level replication and must replicate the VM level data with or without backing it up at the source site. It should also include failover and failback	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	No Changes	No Changes	No Changes	No Changes	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	Not Accepted. This is our basic requirement which is clearly stated.

	capabilities and should be able to perform automatic acquisition of network addresses at the destination site.							
16.	The Proposed solution should support Continuous replication at VM level. The RPO must be less than 5-15 minutes and it must deliver Application consistency.	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	No Changes	No Changes	No Changes	No Changes	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	Not Accepted. This is our basic requirement which is clearly stated.
17.	Backup and replication software must deliver maximum investment protection by supporting replication of workloads between dis-similar systems like hyper converged infrastructure to stand alone servers and storage running similar hypervisors across sites, thereby creating a Disaster recovery environment for production workloads irrespective of the underlying hardware.	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	No Changes	No Changes	No Changes	No Changes	This is a replication software functionality that is restricted to only virtual machines. Hence, not pertinent to the backup software.	Not Accepted. This is our basic requirement which is clearly stated.
19.	Should be able to publish DR drill	This is a replication software functionality	No Changes	No Changes	No Changes	No Changes	This is a replication software functionality	Not Accepted.

	reports, DR test reports and DR readiness check reports for audit and compliance purposes.	that is restricted to only virtual machines. Hence, not pertinent to the backup software.					that is restricted to only virtual machines. Hence, not pertinent to the backup software.	This is our basic requirement which is clearly stated.

QRS/TECHNICAL SPECIFICATION OF DR AUTOMATION SOFTWARE

Sno.		SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s BROADCOM	M/s Hitachi Vantara India	M/s PC Solutions	REPLY
2.	Licensing	1. Offered software licensing shall be based upon the number of protected VMs . Minimum 100 VMs need to be protected and license for the same has to be provided as per specifications. 2. License shall be agnostic to Virtualization platform and same offered license shall be able to protect VMs at on premise using VMware Virtualization/ Microsoft Hype-V virtualization VMs. 3. Vendor shall provide	No Changes	No Changes	No Changes	No Changes	No Changes	No Changes	**Clarification.** **Kindly read as** 1. Offered software licensing shall be based upon the number of protected VMs . Minimum 100 VMs need to be protected and license for the same has to be provided as per specifications. 2. License shall be agnostic to Virtualization platform and same offered license shall be able to protect VMs at on premise using VMware Virtualization/ Microsoft Hype-V

		the license for all mentioned functionalities (Both Primary and DR) in the RFP document.							virtualization VMs. 3. Vendor shall provide the license for all mentioned functionalities (Both Primary and DR).
3.	**Supported Virtualization Platform**	1. Offered Software shall be supported on following platform: a) VMware Virtualization - vSphere. b) Hyper V c) KVM	No Changes	No Changes	Please amend the clause for wider participation. 1. Offered Software shall be supported any one of following platform: a) VMware Virtualization - vSphere. b) Hyper V c) KVM	No Changes	No Changes	No Changes	Accepted. Kindly read as Offered Software shall be supported any of the following platform: a) VMware Virtualization - vSphere. b) Hyper V c) KVM
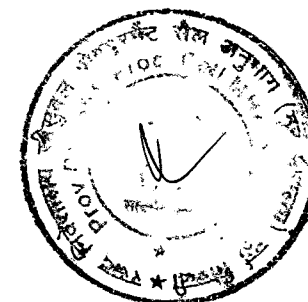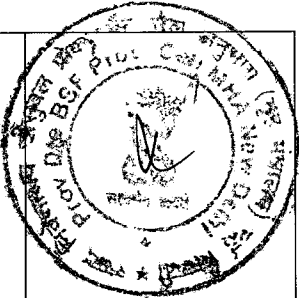
SNO.	SPECIFICATIONS REQUIRED	M/s DELL Technologies	M/s CISCO System (India) Pvt Ltd	M/s Hewlett Packard Enterprise (HPE)	M/s PC SOLUTIONS	REPLY
1.	BOQ3.csv and ATC.pdf in both of file BOQ quantity are not in SYNC, kindly clarify which table we need to refer.		Request to provide the Clarity on BOQ quantity, which BOQ we have to refer to clarify if license for 200Vms or 100TB is needed.			Clarification. "BOQ Detail Document" in excel format already uploaded with Bid and same be considered.
2.	**Suggestion**	**Please add following Security Features:** 1. The proposed array should adhere to international security standards. It should attest the integrity of the BIOS and firmware, and to ensure that there have been no malicious modifications throughout the supply chain or after installation. 2. It should support Multi Factor Authentication for both both				Clarification. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.

		local and LDAP user accounts. It must also have Role Based Access Control for users to have different privileges, which provides a means to separate administration roles to better align with skill sets and responsibilities. 3. The Storage array should support SHA-2 level security for managing user credentials, FIPS 140-2 level 2, TLS 1.2 support and RoHS. 4. Proposed storage solution should have software to automate and orchestrate application/databases data management - including but not limited to MSSQL, Oracle, Exchange, VMware etc - to create application/database consistent copy for multiple use cases including data repurposing, off-host backup, Test/Dev, Reporting etc. Any license for the same must be included from day one. 5. Proposed Storage must have features immutable/secure snapshot feature for block data so that the data is protected from deletion until the retention period expires.			

		6. Proposed Storage must have WORM (Write-Once, Read-Many) functionality for file data to protect file data from deletion or modification until a specified retention date. It must also support restricting specific file extensions from being stored on an SMB share to prevent users from storing unnecessary data which may be a security threat to the organization.			
3.	The board officers also analysed that BSF needs to procure additional hardware and software to establishing private cloud. The requirement of hardware and software is as under: 10. SAN Storage and SAN Switch, Appendix-J	**Query:** As per BOQ table mentioned on Page-1, SAN Switch requirement/specifications should be mentioned in Appendix-J. However Appendix-J has specifications for SAN Storage only. Kindly share the requirement / specification for the SAN Switches as well.			Kindly read as The OEM/Bidder needs to provide 2 nos of 24 port 32 Gbps SAN switch along with each SAN storage. Bidder also have to 100% populate all ports with 32 Gbps Optical Module and have to provide all fibre patch cords.
4.	BOQ			There is mismatch in BOQ qty. provided in Appendix N page no. 26	Clarification. "BOQ Detail Document" in excel format

				and Excel BOQ provided in GEM Tender. Please clarify the required qty.		already uploaded with Bid and same be considered.
5.	Blade Server Qty - 10 DC + 5 DR asked in Appendix N			There is mismatch in BOQ qty. provided in Appendix N page no. 26 and Excel BOQ provided in GEM Tender. In the Blade Server 1200 VCPU asked that is 600 Physical Core, with 32 core Processor it will be 10 Server will give 640 Physical cores, but asked 10 + 5 total 15 Server this will give 960 Physical cores and 1920 VCPU.		Clarification. "BOQ Detail Document" in excel format already uploaded with Bid and same be considered.

6.	Suggestion				Please add following Security Features: 1. The proposed array should adhere to international security standards. It should attest the integrity of the BIOS and firmware, and to ensure that there have been no malicious modifications throughout the supply chain or after installation. 2. It should support Multi Factor Authentication for both both local and LDAP user accounts. It must also have Role Based Access Control for users to have different privileges, which provides a means to separate administration roles to better align with skill sets and responsibilities. 3. The Storage array should support SHA-2 level security for managing user credentials, FIPS 140-2 level 2, TLS 1.2 support and RoHS. 4. Proposed storage solution should have software to automate and orchestrate application/databases data management - including but not limited to MSSQL, Oracle, Exchange, VMware etc - to create application/database	Clarification. This is our minimum requirement and additional parameters as suggested may restrict OEM participation.

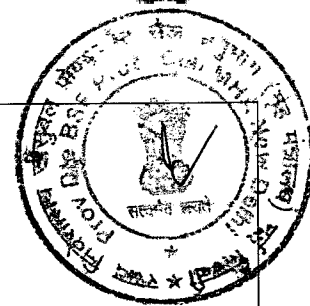|					
					consistent copy for multiple use cases including data repurposing, off-host backup, Test/Dev, Reporting etc. Any license for the same must be included from day one. 5. Proposed Storage must have features immutable/secure snapshot feature for block data so that the data is protected from deletion until the retention period expires. 6. Proposed Storage must have WORM (Write-Once, Read-Many) functionality for file data to protect file data from deletion or modification until a specified retention date. It must also support restricting specific file extensions from being stored on an SMB share to prevent users from storing unnecessary data which may be a security threat to the organization.	
7.	The board officers also analysed that BSF needs to procure additional hardware and software to establishing private cloud. The requirement of hardware and software is as under:				**Query:** As per BOQ table mentioned on Page-1, SAN Switch requirement/specifications should be mentioned in Appendix-J. However Appendix-J has specifications for SAN Storage only. Kindly share the	**Clarification.** **The OEM/Bidder needs to provide 2 nos of 24 port 32 Gbps SAN switch along with each SAN**

	10. SAN Storage and SAN Switch Appendix-J				requirement / specification for the SAN Switches as well.	**storage. Bidder also have to 100% populate all ports with 32 Gbps Optical Module and have to provide all fiber patch cord.**
8.	MII Purchase Preference - Yes GEM/2024/B/4878706	**Change To:** MII Purchase Preference - No			**Change To:** MII Purchase Preference - No	Not Accepted. MII clause is as per Government of India guidelines.

2.   All other terms and conditions of the GEM Bid will remain unchanged.

(GR Singh)
Comdt(Proc)

File No P-4/721/PC/BSF/2024/*985*   Dated. 01/08/2024

Copy to:-

1.   **IT (Wing),** ICT Dte ,FHQ BSF   : For info please.

BOARD PROCEEDINGS

1.	Proceedings of	:	A Board of Officers
2.	Held at	:	IT Wing, HQ DG BSF, New Delhi
3.	Assembled on	:	_22_, March, 2023 ✗ onwards.
4.	By the Order of	:	ICT Dte, IT Wing vide order No 48/10/2020/IT/BSF/3311-15 dated 28 April, 2022 and order No 48/10/2020/IT/BSF/2895-96 dated 22nd March, 2023
5.	For the purpose of	:	To work out the actual requirement and preparation of QR/TD for Infra of BSF Cloud.

6. **Composition of the Board**

	Presiding Officer	:	Shri Hemant Kumar Jha, Comdt (IT-Mod) now DIG, FHQ
	Members	1.	Shri Anil Rajput, DC(NIIE), FHQ
		2.	INSPR(RM) Sushil Kumar Sharma, IT Wing FHQ
		3.	ASI (RM) Vikram Singh, IT Wing FHQ

7. In pursuant to the order, the Board of Officers assembled at IT Wing FHQ to workout the actual requirement and preparation of QR/TD for Infra of BSF Cloud.

8. The Board of Officers discussed with the Server Infra Management Team of IT Wing FHQ for the detail study of the existing hardware installed FHQ DC and DRC Bangalore and also to understand the hardware and software requirement to establish Private cloud for BSF.

9. The BOO observed that no approved QRs for private cloud is available.

10. The Board of officers also analysed that BSF needs to procure additional hardware and software to establishing private cloud. The requirement of the hardware and software is as under.:-

SNO.	HARDWARE/SOFTWARE	SPECIFICATIONS	REMARKS
1.	BLADE SERVER	APPENDIX-'A'	
2.	BLADE CHASIS	APPENDIX-'B'	
3.	CLOUD MANAGEMENT PLATFORM	APPENDIX-'C'	
4.	VIRTUALIZATION & AUTOMATION SOFTWARE	APPENDIX-'D'	
5.	SPINE SWITCH	APPENDIX-'E'	
6.	LEAF ACCESS SWITCH	APPENDIX-'F'	
7.	NETWORK VIRTUALIZATION CONTROLLER	APPENDIX-'G'	
8.	SMART RACK SOLUTION	APPENDIX-'H'	
9.	NAC-AAA	APPENDIX-'I'	
10.	SAN STORAGE AND SAN SWITCH	APPENDIX-J'	
11.	BACKUP APPLIANCE	APPENDIX-'K'	
12.	BACKUP SOFTWARE	APPENDIX-'L'	
13.	DR AUTOMATION SOFTWARE	APPENDIX-'M'	
14.	BOQ AND SCOPE OF WORK	APPENDIX-'N'	

11.   **Recommendation of the BOO:-** The Board of officers recommends that, QRs of the items SNo. 1 to 14 drawn by BOO attached to this proceeding as appendix 'A','B','C','D','E','F','G','H','I','J','K','L','M' and appendix 'N' may be approved.

(14)

Presiding Officer   :   (HEMANT KUMAR JHA, COMDT (IT-MOD) NOW DIG, FHQ)

Members   1.   (ANIL RAJPUT, DC(NIE), FHQ)

2.   (INSPR(RM) SUSHIL KUMAR SHARMA, IT WING FHQ)

3.   (ASI/RM VIKRAM SINGH, IT WING, FHQ)

11.   **Recommendation of DIG (IT):-**

Recommended for.

(S K MISRA)
Dy Inspector General (IT)

Approved / **Not Approved**

5-04-2023

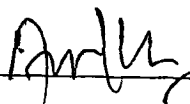Inspector General (ICT)
FHQ BSF New Delhi
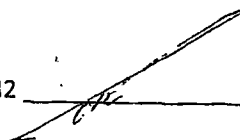
QRS/TECHNICAL SPECIFICATION FOR BLADE SERVER

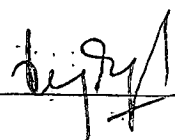| S/N	Technical Minimum Specification	Trial Directives
1.	Blade Server shall have a minimum of two (2) Intel latest 4th generation Gold Processors with minimum 2.0 GHz & 32 cores per socket. Total 1200 vCPU (considering 1:2 packing ratio p:v) to be provisioned from Day1.	BOOs will check and confirm
2.	Intel chipset compatible with the offered processors. SAS Raid Controller with RAID 0/1 with 2GB cache to be offered.	OEM to certify
3.	Server should be configured with 2 Nos 960GB SSD SFF/M.2 drives	BOOs will check and confirm
4.	Blade Chassis should have 25% slot available as free for future upgradation	OEM to certify
5.	Should have at least 32 DIMM slots per server and support minimum up to 1.5TB of DDR5 4000 MHz memory.	OEM to certify
6.	Each server should be configured with at least 12GB DDR5 with 4000MHz per physical core memory.	OEM to certify
7.	Dual port 25G (50GbE per blade bandwidth) Ethernet Adaptor or higher. Dual Port 32G (64 Gbps per blade bandwidth) or higher should be provided to SAN. OR In case the bidder decides to provide converge architecture instead of separate network and FC ports, server should provide a minimum of 100 Gbps of bandwidth with Converged network adapter ports across two or more Ports. Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.	OEM to certify
8.	Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber-attacks. Should protect against firmware which executes before the OS boots - Hardware based Root of Trust - Signed firmware updates from trusted source - Secure default passwords - Secure alerting - BIOS recovery - OS recovery. - Configuration upgrades should be only with cryptographically signed firmware and software	OEM to certify
9.	Operating System and Virtualization Support : Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux, VmWare,	OEM to certify

P.O _____ M1 _____ M2 _____ M3 _____

QRS/TECHNICAL SPECIFICATION OF BLADE CHASIS

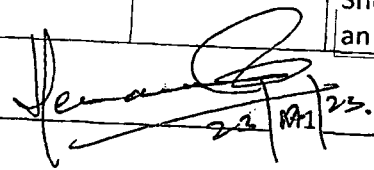| S.NO	ITEM	SPECIFICATION REQUIRED	TRIAL DIRECTIVES
1.	Enclosure	The enclosure Should occupying a max of 10RU rack height, it should support minimum 8 dual socket blades of latest 4th generation Intel Processor per blade chassis. Blade enclosure should be ready to embrace emerging technology without requiring forklift upgrades.	BOOs will check and confirm
2.	Power	The enclosure should be populated fully with power supplies of the sufficient capacity & should be energy efficient. The power subsystem should support N + N / N+1 power redundancy (where N is greater than 1) for a fully populated chassis.	BOOs will check and confirm
3.	Cooling	Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers.	BOOs will check and confirm
4.	Chassis Connectivity and Management	The blade chassis should have redundant I/O Modules/ switch bays for NW and FC connectivity. In case the bidder proposes Converged I/O Module in chassis, bandwidth should be aggregate of the total Network and FC asked in blades. If any internal/ external Switches or Interconnect module required to connect to the Chassis then same has to be quoted in redundant fashion with each chassis separately in 1:1 Non-Blocking Architecture Ethernet uplink of 200G to DC switch and 128G FC uplink to external SAN Switch in redundancy. The blade solution should support at least 6* 100Gb QSFP+ uplink ports.	OEM to certify
5.	IO Module	Each Chassis should have dedicated sufficient number of redundant Separate Ethernet & FC I/O modules to provide a minimum 50G Ethernet, 64G FC bandwidth per blade server and 25Gbps Ethernet and 32G FC sustained per blade server (with 1 module failure) for a fully populated chassis. OR Each Chassis should have dedicated sufficient number of redundant converged modules and ports to provide a minimum FCoE bandwidth of 100Gbps per blade server and 50Gbps sustained per blade server (with 1 module failure) for a fully populated chassis for converged Traffic.	OEM to certify
		Chassis should support aggregation of multiple enclosures to consolidate data centre network connections, reduce hardware and to scale network bandwidth across multiple enclosures.	OEM to certify

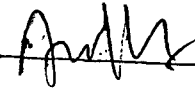P.O _____ M1 _____ M2 _____ M3 _____

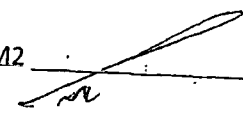|			
		the interconnects can be internal or external in either case the dedicated interconnects should be provided in redundancy and non-blocking architecture. All the modules/switches for chassis interconnectivity should be in redundancy. For internal/external interconnect switches all the switches in the chassis should be fully populated for maximum throughput & redundancy as per network architecture from day 1.	
		All Network and management modules as per solution should be populated from day 1 to ensure redundancy.	OEM to certify
6.	Future Scalability	Support for aggregation of multiple enclosures to consolidate data centre network connections.	OEM to certify
7.	Management	Blade chassis management solution may be provided internal / external to the chassis and must provide single console for managing all associated components like Blade Servers, raid settings, NIC/HBA cards, IO Modules, Power supplies, Fans. Licenses to support the features to be supplied for fully populated chassis.	OEM to certify
		Centralized Redundant Management solution should be provided so that management of all blade servers across multiple chassis within Data Center can be done from single console. If the management system runs as a virtual machine, then all hardware and software licenses to enable this should be included.	BOOs will check and confirm
		Should support integration with management software to deliver 'composable infrastructure' with a view of resources. This should be flexible and scalable solution providing IT managers with the architecture to implement their software-defined data centre (SDDC) -- and to address the changing business needs and the challenges of today's enterprise data centres. Should support Gigabit out of band management port to monitor the servers for ongoing management, service alerting and reporting. Should support UEFI to configure and boot the servers securely. System should support RESTful API integration. System management should support provisioning servers by discovering and deploying 1 to few servers with embedded Provisioning tool. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	OEM to certify
		Should support auto-discovery of resources within an enclosure and on multiple connected	OEM to certify
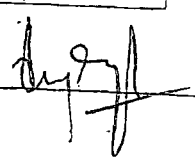
P.O _____ M1 _____ M2 _____ M3 _____

enclosures.	
Solution should support templates to quickly deploy the VM's.	OEM to certify
The management software should be used to create resource pools and have the blade resources assigned to the respective resource pools & re-assign resources to effectively utilize infrastructure	OEM to certify
Role Based Access Control users to define roles and privileges and remote management capabilities including remote KVM should be included	BOOs will check and confirm
Movement of server identity from one slot / server to another in the event of server failure. The management tool should be able to provide resource pooling and policy management to enable policy based automation.	OEM to certify
Management software should support integration with popular virtualization platform management software like vCenter, and SCVMM	OEM to certify
The Dashboard minimum should display a health summary of the following: • Server Profiles • Server Hardware • Appliance alerts	OEM to certify
1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable 2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware 3. Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote Locations 4. One-Button Secure Erase - Making server retirement and redeployment simpler. 5. Security Dashboard for Server to detect possible security vulnerabilities.	OEM to certify
1. Offered servers shall have On Premises cloud enabled monitoring and analytics engine for proactive management. All required licenses for same shall be included in the offer. 2. On Premises Cloud Enabled Monitoring and analytics engine shall have capability to provide following: a. Providing Firmware upgrade and patch upgrade recommendations proactively. b. Providing power and support entitlement status.	OEM to certify

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| | | c. Recommendations to eliminate performance bottlenecks and critical events, based on Analytics engine having capability of proactive recommendation for arresting the issues / problems.
d. Automatic creation of support cases.
e. Detection of the Service Pack for Server and notifications for any hotfixes that may be available for the Configuration.
f. Customer advisories based on their relevance to server configuration.
g. Should have continuous, proactive health monitoring and recording of required system parameters as well as diagnostic telemetry data on a 24x7 basis.
h. Should have monitoring & analytics feature for the offered server/chassis along with its sub-components to predict, prevent, and auto-resolve problems and by providing automating case creation and log file submission for the problems that can't be auto resolved. | |

P.O _____ M1 _____ M2 _____ M3 _____

QRS/TECHNICAL SPECIFICATION OF CLOUD MANAGEMENT PLATFORM

SNO.	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The private cloud orchestration and management solution shall be IaaS/PaaS solution comprising of Hardware components such as servers, network, switches and software through virtualization of compute, network, storage. The solution shall also include capabilities of cloud automation, orchestration and management, logging and monitoring.	OEM to certify
2.	The cloud platform shall include service catalogue for provisioning of services including IaaS (Infrastructure-as-a-Service), PaaS (Platform-as-a-Service), Cloud Native (Kubernetes) & Application components	OEM to certify
3.	The proposed cloud solution shall provide a single console for management of the platform to conduct activities such as managing/onboarding hosts, virtual machines, storage, and networks.	OEM to certify
4.	The solution shall support heterogeneous resource pools for services that require different capacity, performance having capability to grade and bundle resources according to the service type needed.	OEM to certify
5.	The proposed system shall provide a UI with a frontend portal to provide the view of service, product and solution offered via BSF cloud platform	OEM to certify
6.	The proposed system shall provide API interfaces to integrate with third party portals and automation tools	OEM to certify
7.	The IT division shall have ability to view all the cloud products purchased / used, total cloud spending either by organization or by services.	OEM to certify
8.	The cloud platform shall include Role based access control & offer multiple roles like admin, provider, organization specific admin, requester, approver for smooth functioning of cloud services	OEM to certify
9.	The platform should provide provisioning of IaaS, PaaS, and multi-machine blueprints in a multi-cloud environment, through an intuitive self-service catalog and auto-decommissioning post a defined interval.	OEM to certify
10.	The platform should include metering & showback to track uitlization of resources.	OEM to certify
11.	The platform should provide proactive recommendations around cost optimziation, fault tolerance, performance & security	OEM to certify
12.	The platform should provide dynamic user interface to customize service request from templates to capture configuration parameters while placing provisioning requests	OEM to certify
13.	The platform should enable dynamic process workflows to enable	OEM to certify

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	generic & custom tasks like installing machine agents, machine cloning to support parallel execution	
14.	Proposed system shall provide a landing page for end-user to register and login. The solution shall distinct individual user (local credentials) and enterprise user with different registration procedures. (LDAP, AD, SSO)	OEM to certify
15.	Proposed system shall provide a product catalog configuration function for categorizing the products, cloud services to sell on the platform	OEM to certify
16.	Proposed system shall provide a web page of all available resources for admin viewing.	OEM to certify
17.	The proposed system shall provide real-time insights with analytics, dashboards and reports.	OEM to certify

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M2

M3

QRS/TECHNICAL SPECIFICATION OF VIRTUALIZATION & AUTOMATION

SNO.	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	Virtualization software shall provide a Virtualization layer that sits directly on the bare metal server hardware with no dependence on a general-purpose OS for greater reliability and security	OEM to certify
2.	Virtualization software shall allow heterogeneous support for guest Operating systems like Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu, CentOS and Solaris x86)	OEM to certify
3.	Live migration of VM disk from one storage array to another without any VM downtime. Support this migration from one storage protocol to another eg: FC, NFS, iSCSI, DAS.	OEM to certify
4.	Proactive High availability capability that utilizes server health information and migrates VMs from degraded hosts before problem occurs	OEM to certify
5.	Migration of VMs in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software.	OEM to certify
6.	Zero downtime, Zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions.	OEM to certify
7.	The solution shall provide a single pane of glass for automated provisioning with-model-based orchestration of compute, network, storage ,applications and custom services through a unified multi-tenant IT service catalog	OEM to certify
8.	Should provide quick reboot and reduce patching and upgrade times by rebooting the hypervisor without rebooting the physical host, skipping time-consuming hardware initialization	OEM to certify
9.	Should have capability of native backup and restoration of the virtualization management server	OEM to certify
10.	The solution should be able to monitor entire inventory connecting to the virtualization solution, Network switches, 3rd party storage, blade servers etc.	OEM to certify
11.	The solution should be quoted with a software that continuously analyzes workload consumption, costs and compliance constraints and automatically allocates resources in real-time.	OEM to certify
12.	The solution should model what-if scenarios based on the real-time environment to accurately forecast capacity needs. Shall have the capability to install on multiple Hypervisor's like VMware & Hyper-V.	OEM to certify
13.	Porposed software solution shall be provided for minimum 300 virtual machines and should be scalable as required.	OEM to certify
14.	The solution shall provide a single pane of glass for automated provisioning with model-based orchestration of compute, network, storage ,applications and custom services through a unified multi-tenant IT service catalog	OEM to certify
15.	The solution shall support provisioning across multi-vendor, multi-hypervisor (eg: VMware ESX, ESXi 6.5 or higher, Microsoft Hyper-V 2016/2022, System Center 2016/2022 or higher and Red Hat hypervisors) physical x86, virtual and public cloud environments.	OEM to certify
16.	The solution should be quoted with software that provides preemptive actions to provision additional resources in case of any performance degradation	OEM to certify
17.	OEM 24x7x365 days with unlimited incident support via web, telephone and email with 30mins or less response time including the unlimited upgrades and updates.	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF SPINE SWITCH

⑨

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The Switch should support non-blocking Layer 2 switching and Layer 3 routing with complete STACK of IPv4 and IPv6 services.	OEM to certify
2.	There switch should not have any single point of failure like power	OEM to certify
3.	Supplies and fans etc. should have 1:1/N+1 level of redundancy. Switch shall support 6.4 Tbps switching capacity.	OEM to certify
4.	**Interface requirement**	
4.1	Switch shall have 32 *40/100G QSFP28 ports loaded with 32 nos. of multimode 100G Transceivers.	OEM to certify
4.2	Switch must have VXLAN Switching, VXLAN Routing, EVPN without any performance degradation (from day 1)	OEM to certify
5.	Switch should support VXLAN and EVPN control plane. 250 VRF instances with route leaking functionality	OEM to certify
6.	Switch must have necessary licenses for Dynamic Routing Protocols: OSPF, OSPFv3, BGP, BGP4, MP-BGP, PBR, LLDP,EVPN/ISIS and PIM.	OEM to certify
7.	The Switch should have minimum 16 GB RAM and 64GB SSD/ 8GB Flash	OEM to certify
8.	The Switch should have minimum 32 MB packet buffer size per port.	OEM to certify
9.	The switch should have MAC Address table size of 90k, 100k IPv4 LPM routes, 4K multicast routes, 3000 VLANs.	OEM to certify
10.	Switch should support Jumbo Frames up to 9K Bytes on north and southbound ports	OEM to certify
11.	All Functionalities of Switch shall be IPv6 compliant and it should work on IPv6 Platform without any additional hardware/ software.	OEM to certify
12.	Switch / Switch OS should be EAL / NDPP/FCC or equivalent and IPv6 ready from day-1	OEM to certify
13.	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source.	OEM to certify
14.	The switch should be manageable from On-premises NMS solution.	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF LEAF ACCESS SWITCH

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The Switch should support non-blocking Layer 2 switching and Layer 3 routing with complete STACK of IPv4 and IPv6 services.	OEM to certify
2.	There switch should not have any single point of failure like power	OEM to certify
3.	Supplies and fans etc. should have 1:1/N+1 level of redundancy.	OEM to certify
4.	**Interface requirement**	OEM to certify
4.1	32 x 1/10/25 G, loaded with 32 x 10G SR module from Day 1	OEM to certify
4.2	4 x 40/100GbE QSFP28 ports populated with 4 * 100 G Multi Mode transreceivers	OEM to certify
5.	Switch must have VXLAN Switching, VXLAN Routing, EVPN without any performance degradation (from day 1)	OEM to certify
6.	Switch should support VXLAN and EVPN control plane. 250 VRF instances with route leaking functionality	OEM to certify
7.	Switch must have necessary licenses for Dynamic Routing Protocols: OSPF, OSPF, OSPFv3, BGP, BGP4, MP-BGP, EVPN/ISIS and PIM.	OEM to certify
8.	The Switch should support 32MB packet buffer size, 16GB RAM 8GB flash.	OEM to certify
9.	The switch should have MAC Address table size of 90k, 100k IPv4 LPM routes, 4K multicast routes, 3000 VLANs	OEM to certify
10.	Switch should support minimum 3.2 Tbps.	OEM to certify
11.	Switch should support Jumbo Frames up to 9K Bytes on north and southbound ports	OEM to certify
12.	All Functionalities of Switch shall be Ipv6 compliant and it should work on Ipv6 Platform without any additional hardware/ software.	OEM to certify
13.	Switch / Switch OS should be EAL / NPDD/FCC or equivalent and Ipv6 ready from day-1	OEM to certify
14.	The switch shall support distributed stateful segmentation, east-west firewalling with minimum of 800Gbps performance, NAT, encryption, and telemetry services-all delivered inline from day-1. This feature should be inbuilt internal or additional external hardware device from day-1.	OEM to certify
15.	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source.	OEM to certify
16.	The switch should be manageable from On-premises NMS solution.	OEM to certify

P.O _____ M1 _____ M2 _____ M3 _____

QRS/TECHNICAL SPECIFICATION OF NETWORK VIRTUALIZATION CONTROLLER

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	Offer layer should support Network Virtualisation using Virtual Over Lay Network using VXLAN	OEM to certify
2.	Switch should support VXLAN and EVPN symmetric IRB for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center	OEM to certify
3.	The solution must be supplied with a Central management solution and associated licenses for managing, monitoring and provisioning the entire Fabric from Day-1 from same OEM of Switch.	OEM to certify
4.	Solution must provide a single GUI tool for centralized management system with role based access control.	OEM to certify
5.	Centralized management appliance or SDN Controller should not participate in Data plane and control plane path of the fabric.	OEM to certify
6.	Solution should provide management of complete fabric with VxLAN EVPN Architecture or VxLAN IS-IS Architecture.	OEM to certify
7.	Solution should provide per-switch configuration deployment history of underlay, overlay, and interface configurations.	OEM to certify
8.	Solution should provide Overlay network provisioning for leaf and borders switches, including external connectivity.	OEM to certify
9.	Configuration compliance that constantly monitors the fabric to ensure fabric consistency.	OEM to certify
10.	Provides last-24-hours summary of events	OEM to certify
11.	Provides general visibility into Layer 2 network connectivity mapped on the physical topology view.	OEM to certify
12.	Tracks the details and connectivity of servers (hosts) that are connected to Switches (HCI "VMware or Nutanix"	OEM to certify
13.	Does not require any external database or database administrator to manage large installations.	OEM to certify
14.	End Point group	
15.	Solution must integrate with VMware vCenter compute for topology view (virtual machines, vSwitch/DVS, port group, vNIC, VMNIC)	OEM to certify
16.	Solution should provide topology and Endpoint Visibility, End to End Flow Visualization and Network Health Monitoring.	OEM to certify
17.	Solution should enables integration with third-party or custom orchestration tools. Should supports orchestration through REST API. Should includes Python support for complex policy templates.	OEM to certify
18.	Solution should provides detailed visibility into real-time and historical performance/ logs/statistics in the data center.	OEM to certify
19.	Solution should provides insight into port and bandwidth use, error count, traffic statistics, etc.	OEM to certify
20.	Solution should provides reports using predefined templates/Wizard, including inventory, use, and health reports.	OEM to certify
21.	Solution should be in high availability mode. Bidder should supply hardware/software in 1+1 or N+1.	

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QRS/TECHNICAL SPECIFICATION OF SMART RACK SOLUTION

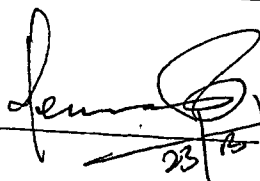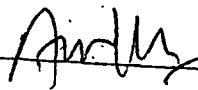| SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	42U Network rack with dimension (HWD) 2000mmX800mmX1200mm	OEM to certify
2.	The design of the rack should be in accordance with the following agency standards or certifications. · EIA-310 standard for IT rail hole spacing · CE/UL · RoHS, REACH	OEM to certify
3.	The rack frame shall be constructed as a welded steel/ bolted frame and frame shall have the depth marking for ease of EIA rail installation.	OEM to certify
4.	All 19" rails should be made of 1.5mm steal with minimum 14 times folded for maximum rigidity and must have EIA-310 standard hole-mounting pattern with U marking on front and rear of each rail for ease of installation.	OEM to certify
5.	EIA rails two sets should be fully depth adjustable within 980mm use space area. 19" Rails should accept tool less Cable Management Accessories.	OEM to certify
6.	Rack should have single front door and split rear door of 1.5 mm sheet steel with min 75% perforation to provide the maximum airflow eliminating the need of additional FHU in the rack.	OEM to certify
7.	Doors shall be tool-less lift off and field reversable design and must allow 135° door opening for ease during maintenance activity.	OEM to certify
8.	Rack should have side panels with slam latch for quick and easy installation and maintenance, single person removal and installation eliminates the manpower dependencies.	OEM to certify
9.	The roof of the racks should be removable from the interior of the enclosure with/without tools and should have cable entry holes to allow up to 1800 cat cables or 60A PDU plug.	OEM to certify
10.	Every rack should have 2 pair of IPDU/cable management bracket shall include button-mount keyhole throughout to accommodate button mounted PDU's of various size.	OEM to certify
11.	All rack components door, side panel, top panel, 19" rail, iPDU bracket shall be directly grounded to the frame to eliminate any external grounding wire and frame must have provision of grounding points to ground each rack to the building ground.	OEM to certify
12.	The frame shall come with castor wheels/levelling/base frame to meet the load of 1000 Kgs.	OEM to certify
13.	Rack shall have the necessary hardware accessories ((50 each M6 cage nuts and screws), Cage nut installation tool, plastic gland plates (tool less removable) for top panel cable entry).	OEM to certify
14.	Every rack should have the baying kit to help seal the gap between the racks to maintain proper air circulation.	OEM to certify
15.	Every rack should have bolt down bracket kit used to secure rack to datacenter floor.	OEM to certify
16.	The rack should have a capability of complete knock down format for ease of transportation.	OEM to certify
17.	Each rack should have provision to seal the space between the 19" rail and the side panels to prevent air recirculation within the rack.	OEM to certify
18.	Rack frame and all the sheet metal components of the rack should be powder coated black colour, RAL 7021 (80 - 120 MICRONS).	OEM to certify
19.	Each Rack shall have Air flow management Appliance that must be able to Provide a path for cool air to flow to the intake of network switch equipment.	OEM to certify

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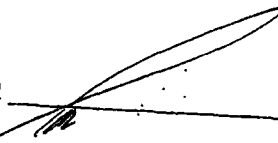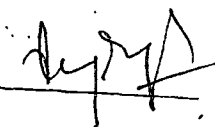| 20.	Air flow Appliance must be able to regulate the air intake for effective cooling.	OEM to certify
21.	The Rack frame should be strong & durable, nine folded solid frame profile which can support at least 1600 kg weight static load, 1000 kg dynamic load.	OEM to certify
22.	Each rack should have 2 Smart PDUs. The PDUs should be connected to the two different UPS sources A and B individually.	OEM to certify
23.	Rack and PDU must be from same OEM for smooth support, service and operations	OEM to certify
IN- RACK POWER & ENVIRONMENT MONITORING Specifications		
24.	Each rack should have 2 IPDUs. The IPDUs should be connected to the two different UPS sources A and B individually. The 2 IPDUs in each rack should have different chassis color for identification of UPS source.	OEM to certify
25.	All the iPDU should have vertical form factor having input rating of 32A, 230V for single phase. Input cable of the PDU's must be minimum 3-meter-long, and the input industrial plug should be IEC60309, Splash proof IP44.	OEM to certify
26.	iPDU should have min. 24 numbers of hybrid outlets should be of hybrid nature which can be utilised as either C13 or C19 outlet. All outlets should provide high retention to avoid accidental dislodging of power cords.	OEM to certify
27.	Monitoring parameters – The IPDU should have monitoring capability at the Strip level and Circuit/ Breaker monitoring. Following monitoring parameter should be available at total and phase wise. a. Voltage (V) b. Current (A) c. Power factor d. Active power (W) e. Apparent power (VA) f. Energy consumption (kwh)	OEM to certify
28.	The metering accuracy should be +/- 1% compliant at 1% Accuracy Class Requirements for strip level.	OEM to certify
29.	IPDU should have 2 numbers 16A magnetic circuit breakers for overcurrent protection in single phase PDU.	OEM to certify
30.	All the single phase IPDU should have outlets as per OEM design. All the three phase PDU should have outlets as per OEM design (if 3 phase PDUs required).	OEM to certify
31.	The IPDU shall have rotatable display, to easily read the displayed values when PDU is mounted upside down, based on the site requirement.	OEM to certify
32.	The IPDU should support the daisy chain of minimum 40 units to reduce network port requirement and ensure continuous flow of data on network to monitoring tool/BMS/DCIM even a break in daisy chain occurs.	OEM to certify
33.	Network communication – PDU should have two Network Ports. IPDU should support communication protocols including DHCP, HTTP, HTTPS, Ipv4, Ipv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SSL, SNMP (v1, v2, v3), Syslog and TACACS+.	OEM to certify
34.	IPDU should support High Operating temperature of 60°C to take care of high operating temperature at back of Rack.	OEM to certify
35.	IPDU should have USB support for firmware upgrade, backup, restored device configuration or expand logging capacity via USB storage device or as per OEM Design of IPDU	OEM to certify
36.	IPDU should proactively monitor environmental conditions within the cabinet to ensure optimal operating conditions. IPDU must support temperature, humidity, sensors.	OEM to certify
37.	2 IPDUs and 1 combo sensors (Temp. and humidity & dew point) to be provided for each rack.	OEM to certify
38.	The IPDU should have approvals form RoHS, CE/UL, IEC.	OEM to certify
39.	PDU should support integration with Power Management Software/DCIM for providing periodical data of power consumption.	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF NAC-AAA

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The Solution should provide a highly powerful and flexible attribute-based access control solution that combines authentication, authorization, and accounting (AAA); profiling; posture/health check; BYOD, and guest management services on a single platform.	OEM to certify
2.	It should allow organisation to authenticate and authorize users and endpoints via wired, wireless, and VPN with consistent policy throughout the organisation. Should help organisation to identify the number of endpoints that have a specified application installed and these applications should be classified into various categories	OEM to certify
3.	Should enforces security policies by blocking, isolating, and repairing non-compliant machines in a quarantine area without requiring administrator attention	OEM to certify
4.	Should support Identity source sequences which defines the order in which the solution will look for user credentials in the different databases. Solution should support the following databases: •Internal Users, Internal Endpoints, Active Directory, LDAP, RSA, RADIUS Token Servers, Certificate Authentication Profiles	OEM to certify
5.	Supports a wide range of authentication protocols, including PAP, MS-CHAP, Extensible Authentication Protocol (EAP)-MD5, Protected EAP (PEAP), EAP-Flexible Authentication via Secure Tunneling (FAST), and EAP-Transport Layer Security (TLS).	OEM to certify
6.	Provides a wide range of access control mechanisms, including downloadable access control lists (dACLs), VLAN assignments, URL redirect	OEM to certify
7.	Solution should have capability to establish user identity, location, and access history, which can be used for compliance and reporting.	OEM to certify
8.	Solution should support the following endpoint checks for compliance for windows endpoints: Check process, registry, file & application Check operating system/service packs/hotfixes Check firewall and Services check for Antivirus installation/Version/ Antivirus Definition Date check for Installed Applications Check for windows update running & configuration USB Control and Disk Encryption Virtual Machines Network Connections	OEM to certify
9.	Should be a persistent client-based agent or clientless to validate that an endpoint is conforming to a company's posture policies.	OEM to certify
10.	Includes a built-in web console for monitoring, reporting, and troubleshooting to assist help-desk and network operators in quickly identifying and resolving issues. Offers comprehensive historical and real-time reporting for all services, logging of all activities, and real-time dashboard metrics of all users and endpoints connecting to the network.	OEM to certify
11.	Solution should have inbuilt Radius and TACACS+ capabilities. Solution should have inbuilt Certificate Authority (CA) functionality capabilities	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF SAN STORAGE 200 TB USABLE

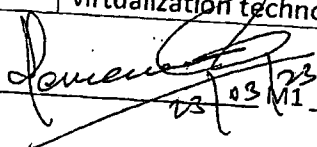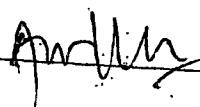| SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	A hybrid storage solution with latest NVMe (200 TB usable) storage for achieving the performance . Efficiency features, namely, in-line de-duplication and compression should be available on NVMe tier. Proposed system should be able to deliver minimum of 1,50,000 IOPS on Random workload with 70:30 Read/Write ratio with 8KB of block size with sub millisecond response time.	OEM to certify
2.	Minimum System Cache to be proposed 128 GB Global Protected per controller. System is offering capability to protect the write cache in case of a controller failure. Also, a failure of controller should not lead to write-through mode for cache	OEM to certify
3.	Proposed Storage system should be with 4 x 10GbE & 4 x 32 GB FC front end ports available across dual controllers and can be scaled upto 8 x 40GbE/20 x 25GbE/32 x 10GbE/ 24 x 32 Gb FC/16 x 32 GB FC	OEM to certify
4.	Offered Storage should support block.	OEM to certify
5.	Management and reporting of above infrastructure and efficiency features, along with policy based management of block storage, should be done through a single tool.	OEM to certify
6.	Storage solution should be delivering the best investment protection with the ability to add additional controllers to the existing storage system and expand storage resources, both in capacity and performance	OEM to certify
7.	Storage should be replicating the setup to an alternate site for DR with all necessary software and hardware included	OEM to certify
8.	Proposed Storage system should offers No-Single-Point of Failure offering upto 100% of availability with minimum 2 Nodes/Controllers in symmetric architecture and Scale-Out to minimum 4-Nodes/Controllers. The Proposed storage system should support minimum 120 NVMe disk with proposed No. of controllers.	OEM to certify
9.	Proposed storage array should also supports data at rest encryption managed by On-board Key Manager or External Key Manager offering industry standard certification/compliance by using a cryptographic security module supporting FIPS 140-2 level encryption.	OEM to certify
10.	Proposed Storage system should offer:- 1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor shall not offer any controller based or Software based encryption. 2. Offered FIPS 140-2 Validated encryption drives shall support both KMIP 1.3 and KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key management.	OEM to certify
11.	Proposed Storage Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	OEM to certify

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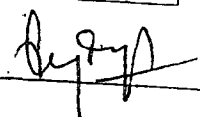# QRS/TECHNICAL SPECIFICATION OF BACKUP APPLIANCE

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The proposed backup appliance should have inbuilt disk storage, required operating system for backup and media Server and network components. Backup appliance should support controller/node/CPU level redundancy.	OEM to certify
2.	The proposed disk appliance solution should be compatible with different version of Windows, Linux and UNIX platform to performs backup.	OEM to certify
3.	The proposed backup appliance shall be offered with 3PB of usable disk storage capacity.	OEM to certify
4.	Proposed solution should be offered in RAID-6 or equivalent with SAS/SATA/NL-SAS disk drives with industry best practice of data and paity raid groups.	OEM to certify
5.	The proposed appliance should be offered with minimum 6 x 10Gbps NIC host port. There should not be any single point of hardware failure including power supply, cooling fans, controllers/CPU, ports, etc.	OEM to certify
6.	Proposed backup solution should have feature to configure source and target level inline data de-duplication. All necessary license should be included in solution.	OEM to certify
7.	Proposed appliance should support minimum backup throughput of 30 TB/hr when enabled with source and target level de-duplication.	OEM to certify
8.	Proposed backup appliance shall support 256-bit AES encryption functionality with inbuilt key Management.	OEM to certify
9.	The proposed solution should support GUI and CLI based management and should be provided with a common GUI based management console.	OEM to certify
10.	Offered backup solution shall support data compression functionality.	OEM to certify
11.	Backup appliance system should have alert mechanism.	OEM to certify
12.	Proposed backup appliance should have auto data rebalancing feature whenever disk enclosures are added or removed for smooth operation during capacity addition or EOL.	OEM to certify
13.	Backup solution must have network resilience feature with WAN optimization/network throttling, which can be used for remote site backup in case of low bandwidth.	OEM to certify
14.	Proposed appliance/solution should support backup of VMware and database instances with granular recovery. It solution should have feature to archive non accessed/idle VMs to backup storage to free up the primary storage.	OEM to certify
15.	Proposed backup appliance/solution should support direct access of vmdk from backup storage.	OEM to certify
16.	Proposed appliance/solution should integrate with backup software to provide Enterprise File Sync and Share storage.	OEM to certify
17.	The proposed backup solution should be fully certified for all supported protocols to virtualized application environments. The proposed disk based backup appliance should support VTL,NFSv3, CIFS/ NDMP, or equivalent protocols to perform backups.	OEM to certify
18.	Proposed appliance should include backup of various Conversed Infra and virtualization technology. It should support Nutanix, vSAN, Hyperflex,	OEM to certify

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		VMware, Hyper-v, RHEV, Citrix, OVM agent/agentless backup.	
19.		Proposed backup software should have option to filter backup of page file and swap partition from VMDK.	OEM to certify
20.		Proposed appliance/Solution should support backup of MySQL, PostgreSQL, MonogoDB, Oracle, MS SQL, MariaDB.	OEM to certify
21.		All the required or necessary licenses, including replication, must be perpetual and should be provided for 300VMs or 100 TB front end data backup and archival to achieve all mentioned specifications.	OEM to certify
22.		Proposed appliance should support bi-directional, many-to-one, one-to-many, and one-to-one replication.	OEM to certify
23.		Software updates and patches: For the period of minimum 5 years.	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF BACKUP SOFTWARE

SNO	SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	The proposed Backup software must offer host based licenses with no restrictions on type of arrays and Hyper converged solutions, front end production capacity or backup to disk target capacity restrictions. Licenses and associated hardware should be supplied for both DC and DR site.	OEM to certify
2.	Licenses supplied should have licenses for Backup and Replication workloads. DC & DR to work as Active-Passive sites.	OEM to certify
3.	Backup software should have Capability to do trend analysis for capacity planning of backup environment, extensive alerting and reporting. Any specialized modules and resources needed must be quoted along with Backup solution to achieve this functionality.	OEM to certify
4.	Proposed solution should support 24x7 real-time monitoring, with at-a-glance and drill-down views of health, performance and workload of the virtual hosts.	OEM to certify
5.	Proposed solution should support automated action for popular alarms (automated or semi-automated), with at-a-glance and drill-down views of health, performance and workload of the virtual hosts.	OEM to certify
6.	Backup software should support agentless backups of applications residing in VMs like SQL, Exchange, Sharepoint, Oracle, MySQL, PostGre etc. with non-staged granular recovery of all these applications. It should support crash consistent VM level backup for all other workloads.	OEM to certify
7.	Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware, Hyper-V and support de-duplication on any storage target. It should be able to backup data to tapes (like LTO) as well for long term retention.	OEM to certify
8.	Backup software should support file level recovery from any backup of any VM or physical server. It should support a full system recovery in case of a system crash, either on a physical system or virtual machine.	OEM to certify
9.	Backup software should have integrated data de-duplication engine with multi-vendor storage support to save space by storing de-duplicated copies of data. The de-duplication engine should also facilitate IP base replication of de-dupe data. All necessary hardware and software required to support this functionality should be supplied along with other components	OEM to certify
10.	Backup software should provide Backup and Replication capabilities in one console only and also allow users to integrate with RBAC capabilities of the hypervisor, so that users can initiate backup and restore only those VMs to which they have access, without administrator intervention, thereby delivering self serve capabilities.	OEM to certify
11.	Proposed backup software should be able to Hardened the Linux Repository. This service will prevent backup copies of data from any corruption or ransomware attacks.	OEM to certify
12.	The proposed Backup software must Support Seamless Integration with Point-in-time storage snapshots in the environment to perform faster LAN Free backup without any overhead to Hypervisor Compute Layer, allowing recovery at the application level, the file level, and the VM level.	OEM to certify

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13.	Backup software should provide Recovery of Application Items, File, Folder and Complete VM recovery capabilities from the image level backup within 15Mins RTO.	OEM to certify
14.	The software should be Network-efficient, Secure backup data replication with variable-length encryption at the source, along with compression and encryption to ensure that backups are optimized for WAN transmission.	OEM to certify
15.	Replication in the software should be a VM level replication and must replicate the VM level data with or without backing it up at the source site. It should also include failover and failback capabilities and should be able to perform automatic acquisition of network addresses at the destination site.	OEM to certify.
16.	The Proposed solution should support Continuous replication at VM level. The RPO must be less than 5-15 minutes and it must deliver Application consistency.	OEM to certify
17.	Backup and replication software must deliver maximum investment protection by supporting replication of workloads between dis-similar systems like hyper converged infrastructure to stand alone servers and storage running similar hypervisors across sites, thereby creating a Disaster recovery environment for production workloads irrespective of the underlying hardware.	OEM to certify
18.	The proposed solution should be able to publish Disaster recovery plans and update them through automated discovery whenever prompted after changes in infrastructure.	OEM to certify
19.	Should be able to publish DR drill reports, DR test reports and DR readiness. check reports for audit and compliance purposes.	OEM to certify
20.	The proposed Backup software must offer host based licenses with no restrictions on type of arrays and Hyperconverged solutions, front end production capacity or backup to disk target capacity restrictions. Licenses and associated hardware should be supplied for both DC and DR site.	OEM to certify

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QRS/TECHNICAL SPECIFICATION OF DR AUTOMATION SOFTWARE

Sno.		SPECIFICATIONS REQUIRED	TRIAL DIRECTIVES
1.	Key Capability	1. Offered software shall be based upon the foundation of Continuous Data Protection while supporting both local and remote data Protection. 2. Offered software shall support both Backup and disaster recovery capabilities at on premise, at on premise DR location. 3. Offered software shall be an IT Resilience Orchestration and Automation software and shall be able to provide SLA reports and RPO monitoring at all the times. 4. Offered software shall provide automated failover and failback after initiating the DR execution as per defined policies. 5. Offered software shall be able to generate automated alert if RPO level increases beyond the prescribed limit.	OEM to certify.
2.	Licensing	1. Offered software licensing shall be based upon the number of protected VMs . Vendor shall provide the license for **100 Protected VMs.** 2. License shall be agnostic to Virtualization platform and same offered license shall be able to protect VMs at on premise using VMware Virtualization/ Microsoft Hype-V virtualization VMs. 3. Vendor shall provide the license for all mentioned functionalities (Both Primary and DR) in the RFP document.	OEM to certify
3.	Supported Virtualization Platform	1. Offered Software shall be supported on following platform: a) VMware Virtualization - vSphere. b) Hyper V. c) KVM	OEM to certify
4.	Always On Replication	Offered Software shall have in-built native capability of Always on Replication instead of using Snapshot / Clone technology for both local as well as DR data protection.	OEM to certify
		Offered Software shall not have any software agent within the given production virtual machines.	
		Offered software shall have flexibility for delivering less than 10 second RPO for both Local data Protection as well as remote data Protection after excluding the link latency.	
		Offered software shall be able to create thousands of checkpoints, separated out by less than 10 seconds, for minimal RPO and RTO using Journal based or equivalent technology	
5.	Data Protection across Platforms	Offered Software shall be true virtualization agnostic so that Protected VM can be VMware vSphere based and Recover VM can be either Hyper-V, VMware or any cross-combination of listed platforms.	OEM to certify
		Offered software shall be true storage agnostic so that Primary copy and Backup / DR protection can be on heterogeneous	

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			storage.	
6.	Applicatio n consistenc y		Offered Software shall have capability for creating Application consistent group for multi-VM application for data consistency during backup and recovery.	OEM to certify
			Offered software shall have capability for defining the boot order of the VMs within the application consistent group during the failover operation for reducing the overall RTO.	
			Offered software shall not put any limitation on the number of Application consistent groups or vendor shall support at-least 256 number of application consistent groups for data consistency.	
			Offered Software shall not put any limitation on the number of VMs within the Application consistent groups or vendor shall support at-least 2048 VMs within application consistent groups for data consistency.	
			If required - Customer shall be able to replicate the VMs within the application consistent group to multiple Application consistency groups for better data protection. It shall be possible for both Local data Protection as well as remote data protection.	
			Offered software shall be able to prioritize the replication of VMs traffic within the application consistency group as per orgainization need at low, medium and high level and shall do automatic bandwidth usage.	
			Application consistency group shall allow adhoc backup support (One time backup) either for entire consistency group or selected Virtual machines within the group.	
7.	WAN Optimizati on		Offered software shall also support WAN optimization technologies like compression when protecting the information at DR location.	OEM to certify
			Offered software shall also have capability to switch ON / OFF the WAN optimization technology depending upon the type of VMs or application consistent group.	
8.	Long Term Retention		Offered Software shall support Backup and long term retention, as per customer data retention and backup policies to various media.	OEM to certify
			It shall support High speed SSD / NVMe drives enabled datastore for short-term backups (Daily and weekly).	
			Offered Software shall provide the scheduling engine for Daily, weekly, monthly and yearly backup.	
			For yearly backups, offered software shall allow to select the first day or last day of month along with number of years for backups. Offered software shall have capability for storing the yearly backup at-least for 10 years.	
9.	Disaster Recovery (Failover)		Proposed Software shall have capability for doing Failover from Primary location to DR location in automated mode so that there shall no need to create the VM manually at DR location	OEM to certify
			Proposed software shall have capability for selecting the restore point or check-point, as per organization requirement, while doing the failover from Primary location to DR location.	
			Proposed software shall have capability for selecting the boot order of VM at DR location during failover process for minimizing the overall RTO	

			Proposed software have capability for configuring the reverse protection (DR to Primary location) after successful failover from Primary location to DR location.	②
			Proposed software shall have flexible commit policy so that environment can be rolled back to Primary location if planned DR failover is not successful due to unforeseen event or any unknown reason.	
			Proposed software shall also have flexible commit policy in minutes to hours so that after failover operations can be thoroughly checked before announcing the successful failover.	
			For planned failover - Failover policy shall provide the flexibility to customer for shutting down the primary site virtualized environment for minimal RPO.	
	10.	DR Drill (Test Failover)	Proposed Software shall have capability for doing DR Drill (Test Failover) from Primary location to DR location in automated mode so that there shall no need to create the VM manually at DR location	OEM to certify
			Proposed software shall have capability for selecting the restore point or check-point, as per organization requirement, while doing the test failover from Primary location to DR location.	
			Proposed software shall have capability for selecting the boot order of VM at DR location during test failover process for minimizing the overall RTO	
			Proposed software have capability for selecting and configuring the separate test network at DR location for DR Drill operations.	
			Proposed software shall have capability for cleaning up the DR location after successful completing the DR Drill operations. There shall be no manual task at DR location for cleaning operations.	
			Software shall provide the drop down to customer for acknowledging the successful completion of DR drill.	
			Organisation shall have flexibility for doing the DR Drill operations for an individual VM inside the application consistency group instead of doing it for all VMs within the consistency group.	
	11.	Bandwidth Throttling	Offered software shall automatically adjust the bandwidth usage across sites for given application consistency groups depending upon the defined prioritization level.	OEM to certify
			Offered software shall be able to throttle the bandwidth between Primary and DR location from the overall available bandwidth.	
			Offered software shall also be able to throttle the bandwidth for a specific period of time.	
			Offered software shall also have bandwidth regulation mechanism for troubleshooting.	
	12.	Ransomware Protection	Offered software shall have strong mechanism for ransomware protection and shall be achieved with minimum RPO.	OEM to certify
			Offered software shall have capability for creating the checkpoint at every 5 second of data protection so that customer can select the required checkpoint while restoring the files during the ransomware attack and can achieve lowest RPO.	
			Offered software shall have capability for storing the latest data information, at-least for a month, on the faster storage devices of	

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		NVMe or SSD and remaining day information on slowest media automatically. This is to ensure that recovery from ransomware attack is really quick.	
13.	File / Folder restore	Offered software shall allow the restoration of selected files from the good known backups / checkpoints without restoring the full virtual machine.	OEM to certify
		Offered software shall provide the flexibility to restore the files at original location and shall provide the flexibility to administrator for downloading the selected files so that it can be restored at required location / system.	
14.	VM / Application consistency group restore	Offered software shall provide the flexibility for restoring the selected VM and Deleted VMs	OEM to certify
		While restoring the VMs / Deleted VMs - restore engine shall provide the flexibility for changing the IP address either using Static IP or DHCP IP scheme .	
		VM restoration engine shall provide the flexibility for changing the network setting during the restoration process.	
		Offered software shall also provide the flexibility for restoring the complete application consistency group	
15.	Reporting	Offered Software/Solution shall have in-built reporting engine and shall provide at-least following reports:	OEM to certify
		Application consistency group performance reports - It shall clearly show the over data protection SLA (RPO) being achieved by the Application throughout the day along with IOPS, Throughput and wan bandwidth consumption.	
		Recovery reports - It shall allow administrator to have recovery reports for Failover, failback, DR-drill, Successful backup and recovery, failed backups and recovery.	
		Resources report - It shall provide the resource reports consumed by VMs within the application consistency group	
		Data Protection Report - It shall provide the complete data protection report over a period of time.	
16.	Management	Offered software shall have GUI based management which shall shows critical parameters of Average RPO for the complete site, Number of VMs being protected, Number of Application consistency groups along with their status and health, Site topology, IOPS, WAN traffic, Compression, events and running tasks etc.	OEM to certify

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DELIVERY BY THE VENDOR (BOQ):- Technical parameter for all required items are mentioned in technical specification and all should be complied technically. Required BOQ as per table below: -

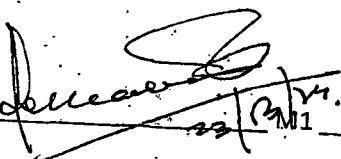| SNO.	NAME OF ITEM	UNIT	QTY	REMARKS
1.	BLADE SERVER	NOS	15	DC-10, DRC-5
2.	BLADE CHASIS	NOS	3	DC-2, DRC-1
3.	CLOUD MANAGEMENT PLATFORM FOR 300 VMS	LOT	1	
4.	VIRTUALIZATION & AUTOMATION SOFTWARE(HYPERVISOR)	NOS	30	DC-20, DRC-10
5.	SPINE SWITCH	NOS	4	DC-2,DRC-2
6.	LEAF ACCESS SWITCH	NOS	8	DC-4,DRC-4
7.	NETWORK VIRTUALIZATION CONTROLLER	NOS	1	
8.	SMART RACK	NOS	8	DC-4, DRC-4
9.	NAC-AAA	USERS	200	
10.	SAN STORAGE 200 TB	NOS	1	
11.	BACKUP APPLIANCE	TB	200	100 TB EACH DC AND DRC
12.	BACKUP SOFTWARE	NOS	2	DC-1, DRC-1
13.	DR AUTOMATION SOFTWARE	NOS	1	
14.	MICROSOFT SERVER 2022 STANDARD EDITION (16 CORES EACH)	NOS	40	
15.	PASSIVE ITEMS (AS PER SOLUTION REQUIREMENT)			As per site requirement

Project warranty and support Duration (warranty)

1. The entire project warranty and support duration will be Five (05) years and OEM/bidder will offer quotes for another three (03) years for CAMC.
2. L1 will be decided purely on the rates of initial project cost including Five (05) years warranty.
3. Project shall be on Turnkey basis.

Additional work under Bidders scope: -

1. All the migration job of shifting of entire hardware and equipment from older racks to the new racks is in the bidder's scope.
2. Bidder has to bear all the expenses to shift all network as well as electric cabling including optical fibre.
3. Bidder has to complete all the work in a live environment with having zero downtime.

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