**RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA"**

**Dt. 15-09-2021**

To,

Dear BA/ SI Partner

**Sub:** Expression of Interest (EOI) for Selection of Business Associate (BA) from RailTel's empanelled BAs for the requirement of customer of RailTel (CoR) for "Setup and Operation of Network Operation and Monitoring Center (Network NOC) at CoR's Location-NOIDA".

1. **Schedule of Events**

| 1 | EOI No | **RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA** |
|---|---|---|
| 2 | Publishing of EoI for empanelled SI's/BA | 15-09-2021 on 18:00 Hrs |
| 3 | Submission of EOI documents | 20-09-2021 on 09:00 Hrs |
| 4 | Opening of EOI documents | 20-09-2021 on 09:30 Hrs |
| 5 | Mode of Submission | E-Bid submission only at https://railtel.enivida.com<br><br>Single Packet System |
| 6 | EMD | 'Bid Security Declaration' in-lieu of Earnest Money Deposit (EMD) |
| *Note: This EOI complies the extant policy of Preference to Make In India. Please refer EOI for details. | | |

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

2. **Introduction:**

With reference to the above subject, RailTel Corporation of India Ltd. (RCIL) calls your attention to the Selection of Systems Integrator & Implementation Partner for "Setup and Operation of Network Operation and Monitoring Center (Network NOC) at CoR's Location-NOIDA on back-to-back basis"

a.        The rates should be inclusive of taxes, however, breakup of all the taxes charged by the BA/SI shall be shown separately. The BA/SI has to submit the breakup of all taxes at the time of submission of their "Tax invoices" also. The BA/SI has also to submit their GSTIN No. at the time of submissions of their "Tax invoices". In addition to it, the BA/SI should submit a copy of the GSTIN registration certificate for the states wherever applicable. In case of the successful BA/SI is not liable to be registered under CGST/IGST/UTGST/SGST Act, the RailTel shall deduct the applicable GST from his/their bill under RCM and deposit the same to the concerned tax authority. Vendors should file GST return and transfer credit of GST in RailTel account as per GST procedure.

b.        The offers shall be opened on above said date, in the presence of those BA/SI, who choose to be present. If the above said date happens to be a holiday, the same shall be opened on the next working day.

c.    This tender is covered under the Integrity Pact Programme of RailTel and the bidders are required to sign the Integrity Pact and submit the same to RailTel along with the bid. Tender received without signed copy of the Integrity Pact document shall be liable to be REJECTED.

## 3. Background Information:

a. No information of this document or related to this work shall be shared with anyone without permission of the RCIL-Northern Region office.

## 4. Scope of Work and Partner Selection:

**4.A:** The broad responsibility of the BA/SI under the scope of work for this EOI shall be as per ***Appendix-A***

**4.B: Interested partners needs to submit their EoI response:**

You are requested to submit the complete 'Technical and Commercial Proposal online mode only.

The offer shall be submitted for this EOI with a Lowest Cost Based Selection Criterion. The 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'.

Any document submitted must be duly signed & stamped by the bidder in each page.

The bidder should take into account any Corrigendum to this EOI document that may have been published (on RailTel website) before submitting their bids. The bid is to be submitted on-line at https://railtel.enivida.com portal on or before due date.

I.    Bidders in their own interest are advised to submit the bid well before the last date and hence to avoid any inconvenience at the last moment.

II.    The bidder may modify or withdraw its bid after submission, prior to the deadline date and time prescribed for the bid submission in this EOI. Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a validly submitted bid. No bid may be withdrawn in the interval between the bid submission last date and the expirations of the bid validity period. Withdrawal of a bid during this interval period may result cancellation of empanelment of BA/SI with RailTel.

III.    Bidder can submit only 'One Bid'. Submission of multiple bids by a bidder will lead to rejection of all of its bid.

IV.    BA/ SI shall quote in SOR provided in EOI only. In case the schedule of requirement quoted by BA/SI is incomplete with reference to EOI document, the offer is liable to be rejected. Schedule of requirement (Price Bid) is placed at Annexure-1.

V.    The rates quoted should be written both in words and figures. The unit of rates should be mentioned for each SoR item separately & shall be in metric system and as per EOI specification/schedule. In case of difference between words and figures, the rate in words will prevail. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser accordingly.

VI.    BA/SI are requested to go through all the conditions of the EOI document and note that,

by submitting the EOI documents, duly signed, they have accepted these conditions and undertake to abide by these conditions.

VII. ATTESTATION OF ALTERATION: No scribbling is permissible in the EOI documents. EOI containing erasures and alterations in the EOI documents are liable to be rejected. Any correction made by the BA/SI in his/their entries must be signed (not initiated) by him/them.

4.3 The Bidder, who have submitted lowest commercial bid for complete 'Scope of Work' will be declared 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 among the technically qualified bidder. Further, RailTel reserves the right to have negotiation with the CSP.

4.4 As of now, EoI responses from interested partners are invited considering that the selected partner will be responsible for delivering of complete 'Scope of Work' as mentioned in the EOI document. 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. 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)* financial bid of the CSP.

5. **Selection Criteria:**

    a. **Stage-I:** Sealed proposals of only those BA/SIs will be entertained who are empanelled with RCIL. The PBG for empanelment should be valid on date of opening of the bids. A copy of PBG or proof of empanelment fee should be submitted along with the technical- commercial bid along with letter of empanelment.

    b. **Stage-II:**

    **Qualification criteria:**
    1. There should not be any ongoing or past arbitration case(s) between RailTel/REL/Customer of RailTel and bidder for the past two years on the last date of submission of EOI. Self-Declaration is to be submitted in this regard.
    2. The bidder should submit 'Acknowledgment Copy' of Income Tax Returns for last three Financial Years.
    3. The bidder should have a valid Corporate Identification Number (CIN), Permanent Account Number (PAN), Goods and Service Tax Identification Number (GSTIN), on the last date of submission of EOI. Copy of documents in this regard is to be submitted.
    4. The Applicant should not be blacklisted by any State / Central Government / PSU / Autonomous Body on the last date of submission of EOI. Self-Declaration is to be submitted in this regard.
    5. Bidder must clearly identify the full title and authorization of the designated official and provide a statement of offer commitment with the accompanying

signature of the official and submit the copy of power of attorney/authority letter authorizing the signatory to sign the bid.

6. MAF in the name of RailTel is mandatory from the major original equipment manufacturing (OEM).

7. Bidder has to submit the No Deviation Certificate.

8. "The BA/SI shall submit a notarized affidavit (as per Annexure-3) on a non-judicial stamp paper stating that they meet the 100% compliance requirements & all their statements/documents submitted along with the bid are true and factual. Standard format of the affidavit to be submitted by the bidder is given in the EOI document. Non submission of an affidavit by the bidder shall result in rejection of his/their bid and it shall be mandatorily incumbent upon the BA/SI to identify, state and submit the supporting documents duly self-attested by which they/he are/is qualifying the work experience / Qualifying Criteria mentioned in the EOI Document. It will not be obligatory on the part of the EOI Evaluation Committee to scrutinize beyond the submitted document of the BA/SI as far as his qualificationfor the EOI is concerned.

9. The BA shall submit a declaration/undertaking regarding their compliance with GOI Ministry of Finance OM No. F. No. 6/18/2019-PPD, dated 23-07-2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India. Undertaking on the bidder's Letter Head duly Signed and stamped by the Authorized Signatory.

**10. Qualifying Requirements for Bidders:**

10.1 (a) The bidder should have executed the work of setting-up and managing at least One 'Network Operation Centre (NOC)' for a client covering at least 10 geographically separate locations in India on 24x7 basis for at least One Year as on the date of Techno-commercial bid opening.

OR

(b) The bidder should have executed the work of setting-up and managing at least One 'Security Operation Centre (SOC) with SIEM (Security Information and Event Management)' in India for a Client on 24x7 basis for at least One Year as on the date of Techno-commercial bid opening.

OR

(c) The bidder should have its own 'Network Operation Centre(NOC)' OR 'Security Operation Centre(SOC)' in India from where bidder has provided 24x7 managed NOC or SOC services to at least one Client (other than self) for at least One year as on the date of Techno-commercial bid opening.

OR

(d) The bidder should have executed IT / ICT works or projects successfully for desired financial figures as per Clause no. 10.2.

10.2 The bidder should have executed any one of the following work in India which includes supply and installation of "Network Management System" OR "Similar work" OR IT / ICT works in the preceding seven years as on date of opening of Techno-Commercial Bid One Work of value not less than Rs.1357 Lakhs

OR

Two works of value not less than Rs. 848 Lakhs each

OR

Three works of value not less than of Rs. 678 Lakhs each.

Note:

(a) The word "executed" means the bidder should have achieved the criteria specified even if the total contract is not completed / closed. However, supply and

installation of "Network Management System" OR "Similar work" must be included in the work executed

(b) In case of orders under execution, the value of work executed till the date of techno commercial bid opening as certified by the client shall be considered. However, supply and installation of "Network Management System" OR "Similar work" OR IT/ICT works must be included in the work executed

(c) The bidder must submit either work completion certificate of executed work or furnish contractual payment received against awarded work linked with relevant purchase orders certified by CA and should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India.

**Definition of Similar Work:** "Similar work" means at least one of the following
· Network Performance or Management System (NPM or NMS)
· IT / ICT Works or Projects
· Application and Server Management System (APM or EMS)
· NOC Setup including Video Walls
· Security Operation Services (SOC)
· Network Operation Services (NOC)
· Managed Network Monitoring Services
· SIEM (Security Information and Event Management) solution

11. DELETED

12. Bid Security Declaration and Integrity Pact (if applicable) shall be submitted in a sealed envelope separately offline/online by the stipulated bid submission closing date and time at the address given below. Any bid without an acceptable Bid Security Declaration and Integrity Pact (if applicable) shall be treated as non-responsive by the employer and shall not be opened.

13. Payment terms will be on back-to-back basis and as mentioned in the RFP document. Payment will be released on receipt of Tax Invoice for the work and after RailTel receives the payment from Customer for the same work. Acceptance certificate to be submitted along with bid by the bidder.

14. The service level arrangement will be on back-to-back and all the penalties deducted by Customer will be imposed on the selected bidder on actual basis. Acceptance certificate to be submitted along with bid by the bidder.

15. The bidders are required to submit a copy of the EOI document duly signed by Authorized Signatories as a token of acceptance of terms & conditions of contract.

16. Bidder has to submit the Integrity Pact (in 2 copies) on a non-judicial stamp paper of Rs. 100/- duly signed by the person signing the bid.

17. Bidder has to signed and submit the NDA enclosed.

18. Bidder to submit the Affidavit of Self certification regarding Minimum Local Content as per annexure- for Class 1 local Supplier.

19. Bidder has to submit the EOI cover letter.

20. Bidder has to submit a declaration for bidding exclusively with Railtel only. Bidder shall not be engaging with other partner in parallel for the said opportunity.

21. Special Financial Criteria - The average annual turnover of the bidder in the preceding three (3) completed financial years as on date of Techno-Commercial bid opening should not be less than Rs 1377.00 Lacs (Rupees thirteen Crore seventy seven Lacs only).

In case the bidder does not satisfy the average annual turnover criteria, stipulated above on its own, its Holding Company would be required to meet the stipulated turnover requirements as above, provided that the net worth of such Holding.

Company as on the last day of the preceding financial year is at least equal to or more than the paid-up share capital of the Holding Company. In such an event, the bidder would be required to furnish along with its bid,

a) Letter of Undertaking from the Holding company, supported by the Holding Company's Board Resolution as per the format enclosed in the bid documents, pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award.

c. **Stage-III:** Those BA/SIs whose PBG is in place and those are fully complying with Stage-II, will be further evaluated on Financial Parameter as per the Price Bid- Annexure-1. The BA/SIs meeting the technical compliance of RailTel's customer 100% & quoting the lowest price shall be adjudged **'Successful BA/ SI'.** No upward price revision is allowed at a later stage.

6. **Duration of Engagement:**

(a) The contract will be governed on back-to-back basis as per the contract between RailTel and CoR.

7. **RCIL's Right to Accept/Reject Bids :**

RCIL reserves the right to accept or reject any bid and annul the bidding process or even reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected BA/SI or without any obligation to inform the affected BA/SI about the grounds of rejection by RailTel.

8. **Bidding Document**

(a) The BA/SI is expected to examine all instructions, forms, terms and conditions and specifications in the bidding documents. Submission of bids, not substantially responsive to the bidding document in every aspect, will be at the BA/SI's risk and may result in rejection of its bid without any further reference to the BA/SI.

(b) All pages of the EoI documents shall be signed in ink by the BA/SI including the closing page in token of his having studied the EOI document. Signed copy of the EOI document is also to be submitted along with the offer.

9. **Bid Validity**

Bids shall remain valid for a period of 45 days from the date of opening of the bids. RCIL shall at its own discretion reject a bid validity of shorter period. The same shall be further extended, if need be based on request from the purchaser.

10. **Bid Currency**

The prices in the bid document shall be expressed in Indian Rupees only and price figures quoted wherever will be considered as expressed in Indian Rupees only.

11. **Performance Bank Guarantee (PBG):**

10.1    On receipt of the Letter of Acceptance from the RailTel, the successful BA/SI should give a Performance Guarantee in the form of irrevocable bank guarantee from any 10.1 On receipt of the Letter of Acceptance of Tender from the RailTel, the successful BA/SI should give a

Performance Guarantee in the form of irrevocable bank guarantee from any Nationalized Bank or Scheduled Bank in the Form given in Tender document amounting to **3% of the contract value.** It is mandatory that all the Bank Guarantees submitted under this EOI must be routed through Structured Financial Messaging System (SFMS) from issuing Bank to RailTel Bank by sending IFN 760 COV Bank Guarantee Advice Message. Thereafter only physical Bank Guarantee will be acted upon. Format of PBG is as per **Annexure-09.**

10.2   The Instruments for Performance Guarantee should be valid for one year beyond the Completion period.

10.3   The successful BA/SI shall have to submit performance Security (PS a. Within thirty (30) days of the receipt of Purchase Order/Service Order from the RCIL, the Supplier shall furnish the Contract Performance Guarantee, if applicable, for due performance of the Contract(s)/Order(s) in form of DD or an irrevocable Bank Guarantee as per the RCIL standard format (Annexure 09) from any Nationalized bank / Scheduled Bank as acceptable to RCIL.

    10.3.1 Failure of the supplier to submit the above-mentioned Contract Performance Guarantee shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

    10.3.2 FOR WARRANTY PERIOD:

The successful bidder shall be required to furnish the Contract Performance Guarantee (CPG) for an amount equal to 10% of total order value. CPG should be valid for a period of three months (3 months) beyond the expiry of warranty period.

The CPG should be submitted within 30 days of placement of award.

    10.3.3 FOR AMC / CMS PERIOD:

The bidder shall be required to furnish a CPG equivalent to 5% of the total order value towards AMC/CMS valid for AMC/CMS Period plus a period of 3 months beyond the Annual Maintenance /Comprehensive Maintenance Services Contract period.

This CPG shall be furnished before the expiry date of 10% CPG submitted earlier covering the warranty period of one year.

    10.3.4 The CPG for 10% shall be released only after receipt of BG for AMC/CMS period.

10.4   A separate advice of the BG will invariably be sent by the BG issuing bank to the RailTel's bank through SFMS and only after this the BG will become acceptable to RailTel. It is therefore in own interest of bidder to obtain RailTel's bank IFSC code, its branch and address and advise these particulars to the BG issuing bank and request them to send advice of BG through SFMS to the RailTel's Bank.

10.5   Performance Guarantee shall be released after the period specified earlier.

10.6    Wherever the contracts are rescinded, the security deposit should be forfeited and the Performance Guarantee shall be en-cashed by RailTel.

10.7   The balance work shall be got done independently by RailTel.

10.8   The original contractor shall be debarred from participating in the tender for executing the balance work.

## 12. Modification and/or Withdrawal of Bids:

Bids once submitted will be treated, as final and no modification will be permitted. No correspondence in this regard will be entertained.

No BA/SI shall be allowed to withdraw the bid after the deadline for submission of bids.

If successful BA/SI withdraw or back out from the bid commitments, the BG submitted or empanelment fee in reference to empanelment shall be forfeited and all interests/claims of such BA/SI shall be deemed as foreclosed/rejected. Such BAs withdrawal may be considered for further action as may be deemed fit by RailTel.

13. **Variation in Quantity Clause:**

Variation in quantity will be governed as per the contract between RailTel and Customer of RailTel (CoR).

14. **Negotiation:**

RCIL reserves the right to negotiate with the successful BA/SI in order to make the bid competitive.

15. **Payment Terms:**

Payment terms will be back-to-back basis and on receipt of payment from the customer of RailTel.

(a)     The following procedure shall be followed for paying the BA/SI the charges for the services rendered by the BA/SI under the contract: -

(i) The payment shall be made to the BA/SI as per details mentioned in Appendix 'B'

(ii) All payments shall be made by the RailTel Northern Region, New Delhi after deducting penalties if any as deducted by the customer of RailTel

(iii) RAILTEL OR CUSTOMER OF RAILTEL reserves the right to adjust any over-payment of charges any time during the period of AMC.

(iv) It is mandatory for the firm to indicate their bank account numbers and other relevant e-payment details so that payments could be made through ECS/EFT mechanism instead of payment through cheques wherever feasible. A copy of the model mandate form prescribed by RBI to be submitted by firm for receiving payments through ECS.

(v) Declaration in relation to section 206AB of the income tax Act1962 ('the Act') and document related to labour cess.

vi) E-invoice or Declaration for non-applicability of e-invoicing as per Notification No. 05/2021 – Central Tax.

vii) Declaration for non-applicability of labour cess.
(viii) Paying Authority: Bill paying authority will be JGM-Finance /NR Delhi on submission of necessary document. Bill passing authority will be GM-Marketing/NR.

16. **Agreement & Restrictions on 'Transfer of Agreement':**

(1) An agreement shall need to be signed for successful completion of the contract at the quoted/ agreed rate as per RailTel terms & conditions.

(2) The successful BA/SI shall not assign or transfer its right in any manner whatsoever under the agreement to a third party or enter into any agreement for subcontracting and/or partnership relating to any subject matter of the agreement to any third party either in whole or in any part i.e., no subcontracting/partnership/third party interest shall be created with reference work/project assigned through this EoI.

## 17. Delivery Timeline:

22 Weeks from date of issue of LOA / LOI / Purchase Order.

## 18. Liquidated Damage (LD):

In the event of the BA/SI's failure to submit the Bonds, Guarantees and Documents, supply the stores/goods /services and conduct trials, installation of equipment, training, etc as specified in this contract, the RailTel or Customer of RailTel may, at his discretion, withhold any payment until the completion of the contract. Besides this the penalty clause as specified in Para 9, Part-I of this EOI is applicable

## 19. Liability under Agreement/EoI:

Except as provided in the EoI document, neither party i.e., RCIL and successful BA/SI shall be liable to each other party or any other party by virtue of termination of the EoI for any reason whatsoever for any claim for loss or profit or on account for any expenditure, investment, leases, capital improvements or any other commitments made by the other party in connection with their business made in reliance upon or by virtue of the EoI document.

## 20. Suspension, Revocation or Termination of agreement /EoI:

19.1 RailTel reserves the right to suspend the operation of the EoI, 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 EoI will not be a cause or ground for extension of the period of the EoI and suspension period will be taken as period spent. During this period, no charges for the use of the facility of the successful BA/SI shall be payable by RailTel.

20.2. RailTel may, without prejudice to any other remedy available for the breach of any conditions of EoI, by a written notice of Three month issued to the Successful BA/SI at its registered office, terminate/or suspend the agreement under any of the following circumstances:

19.2.1 The successful BA/SI failing to perform any obligation(s) under the agreement.

19.2.2 The successful BA/SI failing to rectify, within the time prescribed, any defect as may be pointed out by RailTel

19.2.3 The successful BA/SI going into liquidation or ordered to be wound up by competent authority.

19.2.4 If the successful BA/SI 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 suitable modifying the conditions, as it feels fit under the circumstances.

19.2.5 It shall be the responsibility of the successful BA/SI to maintain the agreed Quality of Service, even during the period when the notice for surrender/termination of 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 successful BA/SI and Performance Bank Guarantee submitted along with empanelment letter shall be forfeited, without any further notice. Also, the PBG submitted for the EoI in context shall be forfeited, without any further notice.

19.2.6 Breach of non-fulfilment of 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 BA/SI or not. The successful BA/SI shall extend all reasonable facilities and shall endeavour to remove the hindrance of every type upon such inquiry. In case of default by the selected BA/SI in successful implementation and thereafter maintenance of work as per the conditions mentioned in the Scope of work and EoI, the PBG of successful BA/SI available with RailTel will be forfeited.

## 21. Dispute Settlement:

In case of any dispute concerning this order both the successful BA/SI and RailTel shall try to settle the same amicably through mutual discussion/negotiation. 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. Arbitrator shall be appointed by Chairman & Managing Director, RailTel Corporation of India Limited.

## 21. Force-Majeure under Agreement/EoI:

If at any time, during the continuance of this agreement, the performance in whole or in any part, by either party i.e., RCIL and successful BA/SI, of any obligation under this is prevented or delayed, by reason of war, or 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 successful BA/SI, fire, floods, 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 21 Calendar days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate the agreement, nor shall either party have any such claims for damage against the other, in respect of such non-performance or delay in performance. Provided service under the agreement shall be resumed as soon as practicable, after such event comes to an end or ceases to exist. The decision of RailTel as to whether the service may be so resumed (and

the time frame within which the service may be resumed) or not, shall be final and conclusive. However, the force-majeure events noted above will not in any way cause extension in the period of the agreement.

## 22. Labour Laws to be complied by the successful BA/SI:

The successful BA/SI shall obtain a valid licence under the Contract Labour (RA) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The BA/SI shall also comply with the provisions of the Inter-State Migrant Work-men(Regulation of Employment and Conditions of Service) Act 1979.The successful BA/SI shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

## 23. EoI Submission Details:

You are requested to submit the complete 'Technical and Commercial Proposal' online using e-Procurement Portal https://railtel.enivida.com.

23.1. Single Packet Bid systems will be followed for this EOI with a Lowest Cost Based Selection Criterion. The 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'.

23.2. The bidder should take into account any Corrigendum to this EOI document that may have been published before submitting their bids. The bid is to be submitted online i.e. at RailTel's e-Tender portal (www.railtel.enivida.com). Physical / Offline submitted bid will not be entertained.

23.3. Bidders in their own interest are advised to submit the bid well before the last date and hence to avoid any inconvenience at the last moment.

23.4. The bidder may modify or withdraw its bid after submission, prior to the deadline date and time prescribed for the bid submission in this EOI. Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a validly submitted bid. No bid may be withdrawn in the interval between the bid submission last date and the expirations of the bid validity period. Withdrawal of a bid during this interval may result in the forfeiture of the bidders EMD or cancellation of empanelment of BA/SI with RailTel.

23.5. An Organization / Bidder can submit only 'One Bid'. Submission of multiple bids by a bidder will lead to rejection of all of its bids.

23.6 Tenderer shall quote in SOR provided in eNivida portal only. In case the schedule of requirements quoted by the tenderer is incomplete with reference to the EOI document, the offer is liable to be rejected.

23.7 The rates quoted should be written both in words and figures. The unit of rates should be in the metric system and as per EOI specification/schedule. In case of difference between words and figures, the rate in words will prevail. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser accordingly.

23.8 BA/SI are requested to go through all the conditions of the EOI document and note that, by submitting the EOI documents, duly signed, they have accepted these conditions and undertake to abide by these conditions (unless specifically disagreed to clause wise).

23.9 ATTESTATION OF ALTERATION: No scribbling is permissible in the EOI documents. EOI containing erasures and alterations in the EOI documents are liable to be rejected. Any correction made by the BA/SI in his/their entries must be signed (not initialled) by him/them.

In reference to the above, Bid Proposal should consist of:
1. Copy of PBG submitted to RailTel in reference to their empanelment letter and LOA copy. The PBG should be valid on the date of opening of bids for the EOI in context.
2. Bid Security Declaration in place of EMD
3. The bidders are required to submit copy of the EOI document duly signed by Authorized Signatories as a token of acceptance of terms & conditions of contract.
4. Price Bid in the format as per **Appendix-1**
5. Documents as per clause 5 b.

24. **Compliance to the EoI Document:** BA/SIs should ensure compliance to all clauses of this EoI. Any deviation will lead to rejection of the bid of BA/SI.

25. **Local Content Compliance:**

1. Only 'Class-I local supplier' and Class-II local supplier', as defined under the order no.- P-45021/2/2017 -PP (BE-II) dt. 4<sup>th</sup>June 2020 issued by Ministry of Commerce and Industry and reiterated by Railway Board Order no.- 2020/RS (G)/779/2 dt.12.06.2020, shall be eligible to bid in this tender. Subsequent OM no. P-45021 dt.21.06.2017, PP-(BE-II) (E-1588) dt. July 27, 2020, OM No. P-45021/130/2020PP(BE-II)(E-435185) dt. July 9, 2020, OM No. P-45021/2/2017-PP(BE-ll) dated September 16, 2020 of Ministry of Commerce and Industry shall also be applicable.

2. Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined in the aforesaid order.

3. 'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined in the aforesaid order.

4. 'Non local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to or 20%, as defined in the aforesaid order. Any offer submitted entity shall not be considered and summarily rejected.

5. The margin of Purchase Preference to 'Class-I local supplier' shall be 20%, 'Class-II local supplier', 'Non local supplier' shall not be eligible for any purchase preference in this tender.

5(a) The Subject tender is not divisible in nature and the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non local supplier'.; Class-II local supplier' will not get any purchase preference.

5(b) The procedure to be followed in this tender shall be as per para 3 A (c) of the aforesaid order.

5(c) Verification of local content: -

The bidders are required to furnish required certificate as defined in Para-9 of the order no.- P-45021/2/2017-PP (BE-II) dt. 4ᵗʰJune 2020. Submission of the requisite certificate as defined in Para-9 as mentioned above is mandatory.

**26. Updation of Labour data on Railway's shramikkalyan Portal:**

A. Contractor is to abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/Updation of Portal shall be done as under:

(a) Contractor shall apply for one-time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.

(b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.

(c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LoA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.

(d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramik kalyan portal on monthly basis.

(e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

B. While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till _____ Month, _____ Year.

**27. Contact Details**

In case of any query/issue you may contact the following officers.

| S. No. | Officer Name | Designation | Mobile No. | E-mail ID |
|---|---|---|---|---|
| 1 | Sh. Hemant Yadav | DGM/ Marketing | 97176 44137 | hemantyadav@railtelindia.com |
| 2 | Sh. Abhishek Kumar | Sr. Mgr-Marketing | 9717644075 | abhishek.kumar@railtelindia.com |

It is advised that queries may be raised through e-mail communication for unambiguous revert cum clarification.

**Price BID**

| | RailTel Corporation of India Ltd.,<br>6th Floor, Block III, Delhi IT Park,<br>ShastriPark, New Delhi-110053<br>P:011-011-22185933,34 |
|---|---|
| | **Price BID Format** |

**EOI No. - RailTel/EOI/NR/BA/21-22/Business Delivery/RO/NTPC**

**Name of work :** Setup and Operation of Network Operation and Monitoring Center (Network NOC) at CoR's Location-NOIDA.

| Sl. No. | Item Description | Qty | Unit | Quoted Currency in INR / Other Currency | BASIC RATE | GST Rate (in %) | GST Value | TOTAL AMOUNT INCLUSIVE OF TAXES AND OTHER CHARGES | TOTAL AMOUNT (in Words) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | NETWORK MANAGEMENT SOFTWARE: SLA MANAGER | 1.000 | NO | INR | | | | | |
| 2 | NETFLOW TRAFFIC ANALYZER | 1.000 | NO | INR | | | | | |
| 3 | NETWORK DEVICES CONFIGURATION MANAGER | 1.000 | NO | INR | | | | | |
| 4 | SERVER & APPLICATION MONITORING SYSTEM | 1.000 | NO | INR | | | | | |
| 5 | N/W DEVICES WEB BASED TICKETG.& FAULT MG | 1.000 | NO | INR | | | | | |
| 6 | SERVER: DUAL CPU, OS-VMWARE | 1.000 | NO | INR | | | | | |
| 7 | CENTRAL SERVICE DASHBOARD FOR N/W & APPL | 1.000 | NO | INR | | | | | |
| 8 | NETWORK PACKET CAPTURING SYSTEM | 1.000 | SET | INR | | | | | |
| 9 | PACKET FLOW SWITCH 48NOS OF 1/10G PORTS | 1.000 | NO | INR | | | | | |
| 10 | HANDHELD NETWORK ANALYSIS & DIAGN.TABLET | 1.000 | NO | INR | | | | | |

| | | | | INR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 1 | SYNTHETIC TESTING VIRTUAL ENDPOINT DEVIC | 50.0 00 | N O | | | | | | | |
| 1 2 | NETWORK PACKET CAPTURING SYSTEM | 1.00 0 | SE T | INR | | | | | | |
| 1 3 | NETWORK PACKET CAPTURING SYSTEM | 1.00 0 | SE T | INR | | | | | | |
| 1 4 | VIDEO WALL: 55"(2X3MATRIX),1 920X1080 | 1.00 0 | N O | INR | | | | | | |
| 1 5 | NOC Operator Consoles&Workstat ion | 1.00 0 | N O | INR | | | | | | |
| 1 6 | Installation and Commisoing of NMS Syste | 1.00 0 | LP S | INR | | | | | | |
| 1 7 | Instl&Comm of Packet Capturing Sys | 1.00 0 | LP S | INR | | | | | | |
| 1 8 | Instl & Comm of Video Wall | 1.00 0 | LP S | INR | | | | | | |
| 1 9 | Install of NOC setup and erection of NOC | 1.00 0 | LP S | INR | | | | | | |
| 2 0 | Training on NMS and Packet Analysis Syst | 1.00 0 | LP S | INR | | | | | | |
| 2 1 | FMS services for NTPC NOC | 24.0 00 | QT R | INR | | | | | | |
| **Total in Figures** | | | | | | | | | | |
| **Quoted Rate in Words** | | | | | | | | | | |

**All the terms & conditions will be applicable on back-to-back basis as it is applicable to RailTel by the customer.**

SCOPE OF WORK

1. **Brief Description of Work**: "Setup and Operation of Network Operation and Monitoring Center (Network NOC) at CoR's Location-NOIDA. For in depth details refer to Scope of work and Technical Detail.pdf file attached to tender document.

2. **Description of the Project:** As per Appendix A and Scope of work and Technical Detail.pdf

3. **Completion Period:** Delivery, Installation & Configuration of the complete solution should be done within **Twenty-Four Weeks** from the date of issuance of purchase order. The warranty shall remain valid for the period of one year from the date of installation and commissioning or as specified in the Technical Specifications / SPC. The period of FMS services shall be **SIX years** from the date of handing over.

4. The system of e-tendering will be of "Two Bid System". The bidder has to submit bid online only in the prescribed format given in the e-nivida portal.

**5. Documents to be submitted by bidder/s:**

i) Bidder/s shall note that original tender documents (all pages including drawings), addendum, corrigendum issued (if any) should be submitted intact without detaching any pages at the time of submission of tender.

ii) Bidder/s has to submit all the documents required as per EOI conditions at the time of submission of bid. Documents submitted for any other EOI(s) or submitted for any other purpose and available with RailTel will not be entertained or considered against present EOI.

iii) The documents required under the EOI conditions for submission along with the EOI are listed below. The bidder/s are advised to examine the various conditions and submit their offer with following details.

iv) Statement of similar works executed during last 07 (seven) years, ending last day of month previous to the one in which EOI is invited.

v) In addition, required document as mentioned in clause 5 (Selection Criteria) above.

vi) Tender document.

vii) BOQ duly filled in all respect.

viii) Further list of documents required are listed below:

| S. No. | Particular | Document Required |
|--------|-----------|-------------------|
| 1 | Annexure 1 | Certificate for Compliance |
| 2 | Annexure 2 | Form of Acceptance of Fraud Prevention Policy |
| 3 | Annexure 3 | Declaration of Banning Policy |
| 4 | Annexure 4 | Certificate of Compliance on Qualifying Requirement |
| 5 | Annexure 5 | Details Of PAN, GST REGN |
| 6 | Annexure 6 | E.F.T. Form |
| 7 | Annexure 7 | Bid Security Declaration |
| 8 | Annexure 8 | Form of Extension of Bank Guarantee |
| 9 | Annexure 9 | Proforma for Bank Guarantee for Contract Performance |
| 10 | Annexure 10 | Bank Guarantee Verification Check List |
| 11 | Annexure 11 | List of Banks whose Bank Guarantee is acceptable for Earnest Money Deposit/Bid Security/ Contract Performance Guarantee |
| 12 | Annexure 12 | Summary of Details & Documents in Support of QR |
| 13 | Annexure 12 A | Details pertaining to Technical Qualification of Bidder |
| 14 | Annexure 12 B | Proforma of Certificate from the CEO/CFO of the company in accordance with Financial requirement criteria in cases where audited results for the last financial year as on the date of Techno-commercial bid opening are not available |
| 15 | Annexure 12 C | PROFORMA OF LETTER OF UNDERTAKING |
| 16 | Annexure 13 | Undertaking to be given by the MSE Bidder for availing benefits |
| 17 | Annexure 14 | Declaration on Local Content |
| 18 | Certificate of incorporation | Company Registration certificate / certificate of incorporation/ Partnership agreement etc |

| | | |
|---|---|---|
| 19 | Appendix A | Scope of Work |
| 20 | Appendix 1 | Price Bid |
| 21 | Appendix 2 | Non-Disclosure Agreement |
| 22 | Appendix 3 | Portal Registration |
| 23 | Appendix 4 | Manufacturer Authorization Form |
| 24 | Appendix 5 | Statement of Deviations |
| 25 | Appendix 6 | Affidavit |
| 26 | Appendix 7 | Integrity Pact Program |
| 27 | Appendix 7A | Integrity Pact |
| 28 | Documents as Scope of work and Technical Detail | |
| 29 | Any other documents required as per Tender Document | |

Note: The relevant documents shall be submitted in accordance with E-Tender Notice and as stated in Tender Documents.

# Setup and Operation of Network Operation andMonitoring Center (Network NOC) at CoR

Section - I

Technical Specifications and Scope of work.

| Cls no | Description |
|---|---|
| 1.0 | **Introduction:** |
| 1.1 | RailTel, a "Mini Ratna (Category-I)" Central Public Sector Enterprise is an ICT provider and one of the largest neutral telecom infrastructure providers in the country owning a Pan-Indiaoptic fiber network on exclusive Right of Way (ROW) along Railway track. The OFC networkcovers important towns & cities of the country and several rural areas.<br><br>RailTel was incorporated on September 26, 2000 with the aim of modernizing the existing telecom system for train control, operation, and safety and to generate additional revenues by creating nationwide broadband and multimedia network, laying optical fiber cable using the right of way along railway tracks. Presently, the optic fiber network of RailTel covers over 60000+ route kilometers and covers 6040+ railway stations across India. Our citywide accessacross the country is 18000+ kms.<br><br>RailTel operations are certified with various certifications including ISO 9001:2015, ISO/IEC 20000-1:2018, ISO/IEC 27001:2013 and CMMI Level-4 for its quality management systems, information security management systems, and service management systems, respectively RailTel has a strategic relationship with the Indian Railways and it undertakes a wide variety of projects including provision of mission critical connectivity services like IP based video surveillance system at stations, 'e-Office' services and implementing short haul connectivity between stations and long haul connectivity to support various organizations within the IndianRailways. RailTel also provide various passenger services including content on demand services and Wi-Fi across major railway stations in India. |
| 1.2 | **General Overview:**<br><br>CoR has implemented a corporate network across country, which connects to its various locations in the country. CoR has implemented its data center at Noida and disaster recovery center at Hyderabad and 3-tier SAP landscape has been established for enterprise resource planning. All external access to CoR network has been implemented with central gateways at DC, Noida and DR, Hyderabad.<br><br>Corporate IT department is operating & managing IT infrastructure for providing various services & various other enterprise applications to all the CoR sites/projects/offices<br><br>The CoR WAN Data Communication network to operate application and other services has been established by leasing BSNL and PGCIL MPLS Leased Lines. These MPSL lease lines are terminated on the Site WAN routers, and are subsequently distributed using Layer-3 CoreSwitches, Distribution and Access Layer switched at Plants and Projects.<br><br>Due to expanding services and increasing of dependencies on IT systems across organization, the services are being used by users 24 x 7. Hence availability of all communication services (i.e WAN Links, Routers, Site major Switches, DC & DR Network Equipment etc.) and response to any issues in a time bound manner all the time is very crucial. It is also required to monitor the performance of networkat DC, DR and Sites. |

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| **1.3** | **Intent of Specification:** |
| | The intent of this specification includes supply, design, Installation, implementation, testing, Training and Operation of Network Operations and Monitoring Centre at EOC Complex Sector 24, Noida along Support and warranty of 06 Years of all equipment, software Licenses, subscriptions etc. |
| | The system configuration and sizing of various systems or subsystems specified herein are the minimum to be offered by the bidder. **The bidder may offer higher configuration in order to meet the intent and requirements of providing an integrated solution covered in this specification within bidder's quoted price.** |
| | The Bidder shall be responsible for providing all materials, equipment and services, specified or otherwise, which are required to fulfill the intent of ensuring operability, maintainability, and reliability of the complete equipment covered under this specification within the quoted price. This work shall be in compliance with all applicable standards, statutory regulations and safety requirements in force of the date of award of this contract. |
| | It shall be the responsibility of the bidder to include all hardware, software components/ modules and services, whether specified or otherwise, that would be required to meet the intent and requirements of providing a total solution to CoR within his quoted price. |
| **1.4** | **Limit Of Contract:** |
| | The bidder should ensure that the solution offered is complete in every respect. The offered solution shall include all hardware, software and other components/modules that may be required to ensure operability, maintainability and availability of the solution. |
| **1.5** | **Authorization from OEM:** |
| | Authorization certificate to quote against this bid shall be submitted by the bidder from all theOEMs whose equipment is being quoted by him in his offer and later the same OEM will be required to provide MAF in name of RCIL for CoR. |
| **1.6** | **Information to be furnished by the bidder:** |
| | The Bidder must furnish complete information asked for in the bidding document, complying explicitly with all the clauses/ requirements in the bidding document. Incomplete information/ bid may lead to rejection of the bid. |
| | The Bidder must furnish the requirements/ specifications regarding the following, amongstothers, along with its bid in the specified order: |
| | ♦ A profile of the company. |
| | ♦ Data sheets of the quoted products. |
| | ♦ Details regarding the manpower, tools, instruments and infrastructure available with thebidder/ bidder's representative responsible for carrying out maintenance at site |
| | ♦ **Detailed technical literature/ catalogue** of the offered product(s) along with complete offered BoQ must be enclosed with the offer. |
| | ♦ **Clause wise Compliance to Scope of Work and technical Specifications** along with offered parameters against CoR requirement. |

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| **2.0** | **Scope of Work:**<br>The Scope of work of the successful bidder for the solution includes (but is not limited to) the following:<br>The Scope of Work by the Bidders shall be to supply, installation and related services and configuration for all Equipment, and application as per technical specifications for setup, implementation and operations of Network Management and Operations Centre as per requirement at CoR 's office. The Scope includes:<br><br>♦ Supply, transportation, delivery at site, insurance (storage & transit) till date of handing over, cabling and termination, erection, Installation and configuration of<br>    ♦ Network Management and Performance System<br>    ♦ Netflow/Jflow Traffic Analyzer System<br>    ♦ Network Traffic Monitoring (Packet Capturing and Analysis) System<br>    ♦ Packet Flow Switches along with taps and Cables<br>    ♦ Proactive/ Synthetic Network/ application testing system for sites<br>    ♦ Service Dashboard and Monitoring System.<br>    ♦ Designing setup of Physical NOC with LED Video Wall and other NOCinfra.<br><br>♦ Network NOC system complying with the technical specifications enclosed herewith, along with required software, cables, accessories, power cords and necessary documents/ manuals.<br>♦ Laying and erection of all Active and passive network components to meet the intent of this specifications and testing of the same as per technical specifications<br>♦ Configuration assistance from Central NOC (remotely) for existing switches, routers, Servers, applications, Databases and other devices etc. acroos CoR , required for monitoring shall be in the scope of the bidder (even if the same are not being suppliedunder this contract).<br>♦ Any accessories i.e. cables, connectors, whether specifically mentioned or not, but are required for implementation of the solution as a whole shall be in bidder's scope.<br>♦ For setting of Physical NOC –<br>    ♦ Removal / dismantling of existing Racks, equipment, Old PACs etc in CSES room (1st Floor NOC room at Satellite Building). Installation of the Video Wall and related hardware in the room and covering of the open floor duct with suitable material.<br>    ♦ All dismantled equipment shall be required to be carted / transported by the bidder to the same / other building in the EOC premises for storage purposes.<br>    ♦ BryAir Air Purification unit - 01 No (already installed at Proposed NOC Premises) shall be used for Air purification Purposed. Maintenance of the same shall also be inculded by the bidder in their scope along with ensuring supply and replacement of cartridges (chemical media) of the same from time to time for a period of 06 years.<br>♦ Setup of Physical NOC facility with engineering, fit-outs, console desks etc for operators<br>♦ Labeling & Dressing of cables at different racks.<br>♦ Providing Training to owner's personnel<br>♦ Submission of solution documentation<br>♦ Completion of comprehensive on-site warranty services for a period of 06 Years including all material and equipment for NOC facility etc<br>Providing Facility Management (FMS) and Support Services for a period of 06 yearsfrom the date of handover of the solution to the owner.<br><br>The bidder shall also provide all required equipment which may not be specifically statedherein but are required to meet the intent of ensuring completeness, maintainability & reliability of the total system, covered under the specification. The Bidder has to meet all therequirements as per the clauses mentioned below in this document. |

| 2.1 | Supply of the items specified in the scope of supply as detailed in clause 5 and technical requirements as detailed in Clause 15. |
|------|------|
| 2.2 | **Completeness of the Solution:**<br><br>It shall be the responsibility of the Bidder to include all items of hardware, software and services, whether specified or otherwise, that would be required to meet the intent and requirements of providing a total solution to CoR within his quoted price.<br><br>Further, it may be specifically noted that the system configuration of various hardware/ software subsystems specified herein are the minimum to be offered by the bidder, and the bidder shall review these for sufficiency and shall include all other configuration needs, if required in the opinion of the Bidder, in order to meet the intent and requirements of providinga complete solution covered under these specification within his quoted price. |
| 2.3 | **Non-Disclosure of Information:**<br>During the execution of the work, the bidder may become acquainted with information that may be sensitive in nature with regards to Network Operations, Applications, Cyber security and other information of CoR . The bidder or his representatives shall not, without CoR 's prior written consent, disclose any information about CoR system/processes/setup to any person other than a person employed by the Bidder in the performance of the work assigned to them.<br><br>The successful bidder shall be required to sign a **Non-disclosure agreement** with CoR .<br><br>The vendor shall also provide a declaration that the vendor resources deployed onsite for providing support services have also signed NDA with the bidder in individual capacity. |
| 2.4 | **Bidder's Responsibility:**<br>In addition to the above described activities , the bidder's responsibility shall specifically alsoinclude the following: |
| 2.4.1 | The complete solution including all the hardware/ components/ modules/ licenses as detailed in Clause 15 and/or as agreed upon after final bid evaluation shall be warranted and must operate at or above the availability requirements specified at Clause 11. |
| 2.4.2 | The bidder shall also be responsible for deputing qualified personnel meeting owner's approval for installation, commissioning and other services under this scope of work as per this specification. All required tools and tackles required for completing the scope of work as per the specification shall also be the responsibility of the bidder. |
| 2.4.3 | The successful bidder shall explicitly absolve CoR of any responsibility/ liability for the useofsystem software, with regard to copyright/ license violations, if any. |
| 3.0 | **Bid evaluation, Project Management and Activity schedule:** |
| 3.1 | **Bid Evaluation:**<br>Bids will be evaluated based on the total package cost (Package cost includes all supply cost,installation cost and FMS services cost). |
| 3.2 | **Project Manager:**<br>Bidder shall assign a project manager for complete implementation of the solution, who will be the single point of contact for the project implementation.<br><br>The Project Manager should have experience of leading projects of similar magnitude and nature. He should be able to proactively identify and remove critical implementation bottlenecks. |

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| **3.3** | **Delivery, Installation & Configuration schedule:**<br>Delivery, Installation & Configuration of the complete solution should be done within **TwentyFour Weeks** from the date of issuance of purchase order. |
| **3.4** | **FMS Services:**<br>The period of FMS services shall be **SIX years** from the date of handing over.Details of FMS as per Specifications |
| **3.5** | **Project Resources:**<br>The details of resources engaged in the installation and implementation activities shall be provided to CoR by the bidder before the start of installation activities. If required, the bidder can also avail technical assistance from the OEMs for their respective solutions.<br><br>Resources being deployed for the installation activities should be technically qualified having adequate training and certification/experience on the technology being implemented. |
| **4.0** | **Site Preparation** |
| **4.1** | **Facilities to be provided by CoR :**<br>CoR will provide the following facilities:<br>♦ 230 Volt AC power supply for the solution.<br>♦ Rack space in CoR data center and DR Center.<br>♦ Interfaces in Network switches, Routers and other equipment to connect the solution components to CoR internal network, DMZ and Internet links. However, any other network related requirements for achieving the functionality of the solution are in the scope of the bidder.<br>♦ Limited space at CoR premises for Bidder's personnel to maintain the System effectively. The Bidder shall specify in his bid the necessary space and facilities required by them at the time of installation of the System and other facilities required during operation etc. Further, the Bidder shall provide all other required equipment and services, whether or notexplicitly mentioned in this document, to ensure the completeness, operability and maintainability of the System.<br>♦ Space for establishment of physical NOC at CoR premises shall be provided. Establishment of physical NOC including all resources as per technical specifications shall be in Bidders Scope, including Racks, NOC furniture, NOC infrastructure cabling etc. |

| 5.0 | **Scope of Supply:** |
|------|----------------------|
| | The bidder shall supply the items as per bill of quantity. This shall include the following :<br><br>a) Network Management System application and Hardware<br>b) Network Traffic Analyzer – Netflow / jflow module for NMS<br>c) Network Device Configuration Manager<br>d) Server and Application Monitoring System<br>e) Fault Management and Ticketing System<br>f) Network and Application packet capturing and Analysis System consisting of :-<br>    ➢ Packet Flow Switches at DC & DR along with required number of Copper and Optical taps<br>    ➢ Packet Capture Hardware along with related application<br>    ➢ Handheld or Portable Network Analysis Tab at DC<br>    ➢ Synthetic Testing Virtual Node for testing of the applications from Sites<br>    ➢ Central Dashboard for analysis of the network and related issues<br><br>g) Physical NOC setup which includes following components :<br>    ➢ Setup of Video Wall with controller along with all related components and accessories<br>    ➢ Supply of NOC related Infrastructure and monitoring system which includes working stations & and sitting infra, Dual monitor Computers, Notebook Computers, Audio System and Automated Lighting system along with physical Access control System at doors(02 - 03 Nos)<br>    ➢ All Civil infra material as per approved design and scope of work.<br><br>h) Special tools and Tackles<br>The bidder's proposal shall include the list of tools comprising of following:<br>• 02 Nos of Mobile Wi Fi Notebook Computer (Metal Body/ Prof.Win OS/ i5 / 8GB RAM/256 GB SSD / Latest Version MS Office Pro) with integrated Camera<br>• Network Cable tester for UTP and Fiber with accessories for checking network linequality, length of cable etc.<br><br>and other accessories which shall be furnished with the equipment.<br><br>The bidder shall provide all interconnecting cables required to connect the hardware and communication equipment interface as provided in the technical specifications. All cables along with equipment shall be fully assembled connector pre-terminated and factory tested aspart of overall system checkout.<br><br>To meet the technical and deployment requirements of the above solutions, several other components/solutions such as Servers etc. may be required.<br><br>An indicative list of the supply deliverables is placed at Annexure-I. The bidder shall examine the technical requirements of all the solutions and offer a bid, which complies with the technical requirements and includes all required components. |
| **5.1** | |
| **5.2** | **OEM Support requirement:**<br>At the time of supply, the bidder shall submit a declaration from the OEM of the equipment that the OEM will provide back-to-back guaranteed support for the supplied items during the entire contract period. This declaration is to be submitted from all the OEMs whose products have been offered in the solution. This declaration is to be submitted at the time of supply |
| **5.3** | **Software License:** All software supplied under this package shall be licensed in favor ofCoR . |

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|---|---|---|
| **5.4** | **Power cables, System Cables & Interconnecting cables:** <br> The bidder shall provide all required cables including power cables, system cables, LAN cables and other interconnecting cables required to connect the hardware and communication equipment interface. All cables along with equipment shall be fully assembledconnector pre-terminated and tested as part of overall system checkout. | |
| **6.0** | **Onsite Inspection** | |
| **6.1** | **Inspection of Equipment on Arrival (Onsite inspection) :** <br> All supplied equipment shall be inspected onsite by CoR upon arrival at respective locationsfor physical damage and completeness. Pre-dispatch inspection is not envisaged. <br><br> The bidder's representatives shall also inspect all supplied equipment upon arrival on site. Allobserved damage to equipment should be reported to the Owner. <br><br> **RCIL reserve the rights for rejecting the material if the material is not as per Specifications mentioned in Tender Documents.** | |
| **7.0** | **Software registration with OEM:** <br> ♦ The bidder shall ensure registration of all the offered software products/ licenses with the OEM for regular update and subscription support in the name of CoR . <br> ♦ All customer-ids issued by the OEMs/ Principals manufacturers for these registrations shall be forwarded to CoR . <br> ♦ It will be the responsibility of the bidder to ensure that all software that requires subscription, enrollment has been entered and CoR has been subscribed for the sameto have continuity in Software maintenance of the offered software / services. | |
| **8.0** | **Testing, Acceptance & Handing Over** | |
| **8.1** | **Functional Tests:** <br> System functional tests will be conducted after installation and configuration to verify the operation of the system as per the requirement specified. <br><br> The intent of the functional tests shall be to demonstrate that the system performs all the functions of hardware and software (as indicated in the Data Sheets) correctly and reliably. These tests shall include testing of the supplied items for the acceptance level of various parameters for system reliability, availability and maintainability. This testing shall also includeall reasonable exercises, which the solution is expected to perform in actual usage. <br><br> The Bidder shall submit the proposed test procedure of the solution to CoR for approval. <br><br> The testing shall include all reasonable exercises, which the combination of equipment and software can be expected to form in actual usage. The test shall include but not be limited to the following: <br> a) Thorough exercising of each device/equipment supplied by the bidder as part of this Specification <br> b) Testing for completeness, proper assembly, proper operation, cleanliness and state ofphysical condition. <br> c) Demonstration of the proper functioning of hardware. <br> d) Demonstration of the proper functioning of software | |

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| **8.2** | **Availability Test:**<br>After successful completion of functional tests, availability test shall be conducted for each solution for minimum 7 (Seven) days continuously to assess the availability of the solution.<br><br>The % availability shall be defined as percentage:<br>$= \dfrac{100 \text{ (Test Duration Time - System Outage Time)}}{\text{Test duration Time}}$<br><br>The system shall be considered to be down if any portion of the solution or its' sub-system is not functioning satisfactorily. It is understood that the downtime due to components/ hardware/ software not supplied by bidder shall not be taken into account for calculation of the outage time.<br><br>The availability shall be worked out daily and shall be checked on a cumulative basis. During the 7 days of continuous testing, if this cumulative availability is less than 99% then the continuous test shall be repeated from the next day and the process repeated until 99% cumulative availability is achieved over a continuous period, to be mutually decided. |
| **8.3** | **Acceptance and Handing over:**<br>Upon successful completion of availability test, a joint availability test format shall be signed by the site EIC (Engineer-in-charge) or his authorized representative and the items covered shall be deemed to be handed over.<br><br>Such certificate shall not unreasonably be withheld nor will the Engineer delay the issuance thereof on account of minor omissions or defects, which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the bidder of any of his obligations which otherwise survive, by the terms and conditions of the Contract after issuance of such certificate. |
| **9.0** | **Training** |
| **9.1** | The Bidder shall conduct courses for extensive training of the Owner's personnel in all the equipment & Components provided in the solution to enable them to provide and use the system efficiently.<br><br>Training shall include hands on training which should be done in a proper training setup. Travel, Boarding and Lodging for CoR personnel shall be borne by CoR .<br><br>Training shall be imparted by OEM representatives or OEM authorized trainers only.<br>The training course shall be structured and supported by programmed illustrations, video, charts, etc. The Bidder shall provide extensive lecture notes, handouts and other training documentation.<br><br>The training for administrators shall be for atleast 04 Persons for 05 Days<br>Familiarization training for approx 50 Site IT persons ( in 02 Batches) at CoR Central location or Online thru VC ( as per CoR Requirement) |
| **10.0** | **System Documentation:** |
| **10.1** | The Bidder shall furnish complete technical documentation for the supplied items. This documentation shall include guides required for installation, administration and troubleshooting of the offered solution. |
| **10.2** | The system documentation shall include detailed description of the supplied items, their configuration and interconnections. |
| **10.3** | Final system documentation as delivered to the Owner shall be complete, accurate and fully representative of the supplied solution and its elements. |

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| **10.4** | One complete set of manuals, technical literature, drawings etc. shall be provided to CoR .These documents may be provided as hardcopy (on paper) or softcopy (CD/ DVD/ Media). |
| **11.0** | **OEM Warranty & Support Coverage:** |
| **11.1** | All the supplied items supplied under this contract shall be covered by OEM warranty &Support for the period of SIX years from the date of handing over. |
| **11.2** | **OEM Support Coverage:**<br>The Warranty shall cover the following:<br>♦ All supplied hardware equipment.<br>♦ All supplied software.<br>♦ Support for all Hardware and Software.<br>♦ Patch updates and version upgrades |
| **11.3** | **OEM Support Level:**<br>• The licensed OEM support shall be 24x7x365 Support allowing support calls to be raisedat any time schedule.<br>• The RMA (Return material authorization) support shall be advanced replacement andNext-business-day shipment. |
| **11.4** | The successful bidder shall have back-to-back arrangements of support contracts in the name of CoR with respective OEMs to log a call with the OEM directly for all supplied hardware, software, systems and applications. |
| **11.5** | All the support ID's from respective OEM's shall be on the name of CoR with CoR 's email IDdesignated for logging and resolution of the support case and also for any technical requirement/ queries. |
| **11.6** | The OEM(s) must have a support center facility in India. The support center must have a publically accessible website and Toll Free number for call logging (technical, administration, licensing, RMA etc.). |
| **11.7** | **Escalation matrix:**<br>The bidder shall provide complete service escalation matrix for each OEM with address andcontact person name along with contact details. |
| **12.0** | **FMS (Facility Management & Support) services:** |
| **12.1** | The FMS services shall start after solution handing over. |
| **12.2** | **Workforce requirement for FMS:**<br>The workforce requirement for FMS services is defined in Technical Specifications. |

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| **12.3** | **Competency Assessment of FMS resources:**<br>The bidder shall provide the resume of the proposed FMS resources to RCIL to assess the competence and suitability of the FMS resources.<br><br>RCIL reserves the right to interview the proposed FMS resource(s) through its representative/technical team before accepting their positioning. Any resource movement in the FMS team or out of the FMS team shall be approved by RCIL.<br><br>RCIL reserves the right to replace the resources in case of unsatisfactory performance. An intimation shall be made to the bidder for replacement of resource in case the need is felt by RCIL. The bidder shall provide the replacement resource within one month of receiving the intimation from RCIL. However, the bidder shall ensure that the services are not disrupted during this period. |
| **12.4** | **Background check & NDA (Non-disclosure Agreement) for FMS resources:**<br>The successful bidder shall provide a declaration that background verification has been carried out successfully without any adverse finding for all the FMS resources proposed to be deployed at CoR . The bidder shall also provide a declaration that all the FMS resources being deployed at CoR have signedNDA (Non- Disclosure Agreement) with the bidder.<br><br>The bidder and the deployed FMS resources shall ensure that no data/ information of CoR goes out of the premises or made public without explicit approval of RCIL. |
| **12.5** | **Service Desk and Service Management:**<br><br>The FMS resources deployed shall work in the form of a Service desk. The service desk operations shall be managed using the ITSM software.<br><br>The service requests/ incidents shall be received and recorded by the service desk and routed to the respective FMS resources who shall take appropriate actions to resolve the requests/ incidents.<br><br>The FMS team shall prepare a workflow for each type of service request/incidents being received from users and submit to RCIL for approval. An escalation matrix shall be formulated for each type of service-request/incident as part of the workflow.<br><br>Subsequent to the approval of workflow, the same shall be configured in the ITSM software and used to handle the incoming service requests and incidents. |
| **12.6** | **Summary of Requirements:**<br><br>• Support the Wide Area Network infrastructure of CoR across India<br>• Monitoring and management of WAN and LAN network using NMS tools<br>• Configuration and fault management for the routers and Network devices<br>• Co-ordination with ISPs and OEMs/ Service providers of Network equipment for early resolution of issues.<br><br>Service requests shall be received from the users for the solution components by the FMS team. These requests shall be recorded in the Service desk solution and routed according to the pre-defined approved workflow for each request type. |

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| **12.7** | **Incident Management:**<br><br>**Detection:** Incidents can be detected/reported to FMS team by the following methods:<br>• Discovered by System Monitoring<br>• Reporting by CoR users.<br>• Reporting by other teams working for CoR .<br><br>Once an incident is detected/reported to the FMS Team, it shall first be recorded in the Service desk solution and routed according to the pre-defined approved workflow for each incident type. Appropriate action shall be taken by respective FMS resources to resolve the incidents as per the approved workflow.<br><br>**Notification and Escalation**<br>The FMS team shall notify CoR of the incidents detected/ reported and co-ordinate for closure of the incidents. The FMS team shall perform the following:<br><br>• Escalation of open incidents, as per the escalation matrix until resolution of the same.<br>• Case Tracking, Co-ordination & Follow-up<br>• Incident Analysis<br>• Closure of Incidents<br>• Reporting<br><br>For Critical incidents, the FMS team shall also perform root cause analysis, mitigation steps and coordinate implementation of controls to prevent recurrence. |
| **12.8** | **System health monitoring & Performance management**<br><br>• The FMS team shall perform continuous monitoring of the network equipment and network activity for their full-time availability and optimum performance.<br>• In case any performance bottlenecks are identified by the FMS team, suitable rectification steps shall be implemented after obtaining approval from CoR .<br>• The FMS team shall generate regular reports on health and performance of security devices and systems deployed as per CoR requirement. |
| **12.9** | **Fault Management:**<br><br>• In case of any fault/ degradation in the performance of monitored assets (Equipment, Links and other related infra), the FMS team shall analyze and report the fault/ issue.<br><br>• In case the rectification requires escalation to another team/ OEM or Service provider, the same shall be communicated to the respective team and co-ordinate with the team for further resolution of the issue. |
| **12.10** | **Software updates, patch and release management:**<br><br>• All the supplied solution software shall be provided with updates and version upgrades as and when they are released.<br><br>• The FMS team shall inform release of patches/ updates/ upgrades/ service packs as and when they are available and implement according to the direction from the CoR EIC.<br><br>• For network equipment not supplied by the bidder, the FMS team shall co-ordinate with respective team/ group for deploying the latest upgrades, updates, patches and hotfixes as and when released by respective OEMs. |

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| **12.11** | **Change Management:**<br>A proper change management process based on industry best practices and standards e.g.ITIL/ ISO shall be formulated by the FMS team and submitted for approval to RCIL.<br><br>The approved change management process shall be followed during making any changes inany of the assets. |
| **12.12** | **Configuration Backup:**<br><br>• The FMS team shall be responsible for taking configuration backup of all the assets undertheir scope on periodic basis. |
| **12.13** | **Configuration Management:**<br><br>• The FMS team shall be responsible for managing the configuration of the assets undertheir scope and systems as per CoR requirements.<br><br>• All system configuration shall be backed up in accordance with the backup process.<br><br>• Any configuration change shall be undertaken in accordance with the approved change management process. |
| **12.14** | **Reporting:**<br>Reports shall be generated by the FMS Team on daily and monthly basis.These reports<br><br>shall detail out status of the following:<br><br>1. Service requests received<br>2. Incidents detected/reported<br>3. System health<br>4. System performance<br>5. Planned/ executed changes<br>6. Backup<br>7. Other details as required by RCIL.<br><br>In addition to the scheduled reports, the FMS team shall be responsible for generating On-demand reports, whenever required by RCIL. |
| **12.15** | **Documentation Management:**<br>The FMS team shall be responsible for creating and maintaining comprehensive documentation related to the supplied solution components as per ISO 27001 and any other applicable standards. |
| **12.16** | **Service Warranty**<br>The bidder shall warrant that its technical and consulting services will be of professionalquality confirming to generally accepted industry standards and practices. |
| **13.0** | **Support for IPv4 to IPv6:**<br>In case of rollout of IPv6 in CoR infrastructure, the bidder shall be responsible for providing support for migration from IPv4 to IPv6 and coexistence of IPv4 and IPv6 (as and when required). |

| 14.0 | **Payment Terms:** |
|------|--------------------|
| 14.1 | **Supply charges for all solutions:**<br>a) 70% will be released after completion of the following milestones<br>    ♦ Completion of supply<br>    ♦ Submission of invoice<br>    ♦ Completion of inspection<br><br>b) 30% payment after completion of the following milestones:<br>    ♦ Successful installation of Solution<br>    ♦ Successful completion of availability test and Handing over the system to CoR |
| 14.2 | **Installation Charges:**<br>• 100% of the installation charges shall be released when solutions have been successfullyinstalled and handed over to CoR |
| 14.3 | **FMS Service Charges:**<br>FMS service charges shall be released on quarterly basis at the end of each quarter of thesupport period on certification by Engineer-in-charge. |

| | **Penalty for non-performance of solution:** |
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| | ♦ In case the availability of the system is less than the as specified below, the bidder shall be liable to pay penalty for non-performance of the solution. |
| | ♦ Penalty shall be applicable as per the following calculation for each line item of purchase order. |

| % Availability during a quarter | Applicable penalty for Quarter (In %) | LD applicable on value |
|---|---|---|
| 100-99 | 0% | The deduction shall be applicable on prorate basis for the system which is notavailable. Value calculated shall be Cost of Equipment divided by 24 Qtrs (06 Years). |
| 98 | 2% | |
| Less than 98 (n) | 2 (99-n)% e.g. for 90% : The penalty shall be 2x(99-90)%= 18% | |

For Example, in case service downtime of one system exceeds service level requirement, thequarterly supply value of that system shall be worked out by dividing the total supply cost (without taxes) of that system by 24 (Number of quarters) and penalty shall be applicable according to the above table on this value.

**14.4**

- The penalty will be deducted from the RA Bills/ FMS bills of the bidder. The total amount of liquidated damages on this account shall be limited to ten (10) percent of supply portionof total purchase order value.

- The penalty for non-performance as mentioned above are independent of LD leviable as per the general purchase conditions.

- ♦ In case the service availability of a solution component is less than 95% in two consecutive quarters, CoR reserves the right to reject the involved solution component.

  In the event of rejection of a solution component, the bidder can offer to replace the affected solution component with an equivalent solution complying with the technical specifications specified in this document.

  In case the bidder fails to provide a replacement solution or fails to meet the service availability requirement even after providing a replacement solution, then CoR reserves the right to reject the entire solution. In this case, the bidder shall arrange to remove all his equipment from site after payment of the complete amount received from CoR , and all other expenses incurred by the CoR .

**14.5**

**Penalty for Non-availability of FMS resource:**

In case the non-availability of any FMS resource at deployment site of CoR without the permission of the EIC or without suitable replacement being provided by the bidder, penalty shall be applicable per day per resource which shall be calculated on prorate basis.

- These penalties shall be deducted from the quarterly FMS services payment.

- This penalty for non-availability of resource as mentioned above are independent of LD leviable as per the general purchase conditions and the penalty for non-performance as mentioned in the previous clause.

| 15.0 | **Technical Specifications:** |
|-------|-------------------------------|
| **15.1** | The bidder shall submit product data-sheets/ documents for verifying the compliance of thesolution offered to the requirement specified by CoR . |
| **15.2** | **End of Sale:**<br>The OEM end-of-sale notification should not have been released for the offered products atthe time of technical bid opening. |
| **15.3** | All the products offered should be enterprise class equipment and designed for round-the- clock operation. Further, all the required features/ parameters must be available on the Bid opening date. Features proposed to be available in near future/ on roadmap will not be considered. |
| **15.4** | **Environmental Conditions:**<br>All hardware offered shall operate without any deviation in quality or degradation of system performance in the following environmental conditions.<br>• Operating Temperature: 10 degree C to 35 degree C. |
| **15.5** | **Power Supply requirements:**<br>• CoR will provide Two UPS Power Supply sources for the system in the Data Center/ DRCenter with power point at each of the locations.<br>• Distribution of this power to the various equipment's shall be responsibility of the bidderfor which necessary power strip, cable etc. shall be provided by the bidder.<br>• The total Power requirement shall be calculated by the bidder for the offered equipmentand shall be submitted along with the bid. |
| **15.6** | **OEM Compliance to technical requirements:**<br>The bidder is required to submit the compliance to the technical requirements duly certified bythe representative of the respective OEMs whose solution is being offered as part of the bidders' offer. |
| **15.7** | • During the technical evaluation process, if required, CoR may ask the bidder to demonstrate the functioning of one or more of the offered solution components and its' compliance to the technical requirements specified in this document.<br>• In such case, it shall be the responsibility of the bidder to carry out this demonstration of functionality and compliance within 15 days of receiving intimation from CoR . If the bidder fails to demonstrate the functionality within this time-period, CoR reserves the right to reject the bid.<br>• This activity shall be carried out without any cost implication to CoR . |

## Annexure-I: Indicative List of Documents to be furnished by the bidder.

The Bidder must furnish the following documents, in addition to the other required documents, along with the bid:

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| 1 | A profile of the company. |
| 2 | Copy of documents / valid Certificate for NOC / SOC |
| 3 | Details of persons holding Network related certifications on rolls of the company |
| 4 | QR Related documents: Purchase order copies, Financial reports and other related documents to verify compliance to qualifying requirements |
| 5 | Technical Solution document: This shall include technical details and architecture of the proposed solution(s), features of offered components and other related information. <br><br> Following details shall be provided <br> 1. Components offered against each line item with Make/Brand of items offered <br> 2. Brochures/ Data sheets of the quoted products |
| 6 | OEM Authorization (from all the OEM's whose products/solutions are being quoted) |
| 7 | Compliance to the technical requirements for solution components duly certified by the respective OEMs. |
| 8 | Site preparation requirements such as power Supply requirements, Rack Space requirements etc. for the installation of supplied items. |
| 9 | Bill of Materials (Without Prices) |

# Technical Specifications for the Solution

## General Solution Requirements

- The technical requirements specified herein are for the complete solution. The bidder can opt to offer the functionality of one or more device integrated in some other device or may offer any other standalone/ integrated devices to meet the solution requirements without any loss of functionality
- All offered Data Centre Hardware should have redundant power supply.
- All offered Hardware, Software, Application Subscriptions etc. should be for at least 06 Years onsite (NBD) warranty from the Date of Handing over to CoR. Confirmation from OEM shall be required in this effect.

The offered solution should be licensed for following capabilities : -

**1. Technical specifications for Network Management and Performance Monitoring System**

| S No | Feature | Description |
|------|---------|-------------|
| 1. | License Requirements | • The Solution shall be licensed for at least **2500** Devices (Routers, Switchesetc.). |
| 2. | Central Management & Dashboard | • The solution shall provide a Configurable Management dashboard to manage the NMS System.<br>• Must provide single pane of glass, management is capable of fully managing network access control and applications analytics solution, as well as wired and wireless devices<br>• Must provide an easy to use web GUI interface.<br>• Must provide the ability for analysts to be able to easily tailor the dashboard views to present the information in their preferred format etc.<br>• Solution should manage all the configuration functionalities using graphical user interface<br>• Solution should support local authentication for users |
| 3. | Hardware for On-Premise Solution | Server hardware to be deployed at DC/DR and central management system isin the scope of the bidder. Technical specifications of Server to be used in thiscase are specified in Server Section of this specifications |

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| 4. | Monitoring Devices Requirement | Solution should monitor all elements of following types devices (2500 Devices)on wired/ wireless networks<br>• Router and Switches<br>• Wireless Controller and Access Points<br>• Devices including servers, VCenter, Hypervisor and Virtual Machines<br>• Firewall etc |
| 5. | Network Discover y | • It should automatically discover TCP/IP networks, display and buildnetwork topologies maps.<br>• It should also correlate and manage events and SNMP traps, monitor network health and gather performance data.<br>• Colour codes should be used to indicate realtime device status. |

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| 6. | API Integration | The solution shall provide an open API for third-party application integration. All License and documentation required for usage of API shall be included with the solution |
| 7. | IP Address Manager | • Automated IP address Discovery in Organization<br>• Centralized Monitoring and Management of IP address<br>• IP address Management for VMs<br>• IP address provisioning<br>• Can Manage IPv4 and IPv6<br>• Monitor and Troubleshoot DNS Records<br>• Monitor IP capacity and receive alerts on IP depletion<br>• Identify and resolve IP address conflicts<br>• Solution should do auto discovery with defined IP Pool and categorize infrastructure elements throughout the Enterprise<br><br>This feature shall be available to manage a complete /8 subnet |
| 8. | User & Device tracking | User & Device tracking<br>The solution shall provide the following features to track users and devices on the network: -<br>• Mapping of switch ports to connected devices<br>• Status of used and free ports on network switches<br>• Track devices by IP or MAC address, or hostname<br><br>This feature shall be available for at least 25,000 (twenty-five thousand) network ports. |
| 9. | Performance Management<br><br>And<br><br>Health Checks | • Solution should provide information regarding capacity utilization and error statistics for Links<br>• The tool should monitor for each sites bandwidth utilization, network latency, throughput, errors, percentage utilization of the network etc.<br>• The system should provide current and historical data and should generate threshold-crossing alerts.<br>• Solution should be able to do network performance test to ensure network is performant with continuous monitoring of key metrics such as bandwidth, loss, latency, and jitter<br>• The system should provide the real-time network bandwidth consumption<br>• Solution should provide for data collection and thresholding of network devices ports, virtual interfaces and to provide data on Bytes in, Bytes Out, Discards, Errors and Network delay.<br>• Solution should monitor CPU, Memory, Buffers and error statistics of the network devices<br>• Solution should monitor CPU, Memory, Disk Utilization along with Disk,Network I/O and top process of devices including Server for a selected period.<br>• Solution should monitor the CPU, Memory Utilization of WirelessController along with top Syslog events from the device |

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| | | • Solution should support monitoring the health status of each sites and Devices<br>• Solution should support alarm notifications or SNMP traps<br>• Solution should provide TOP interfaces with highest number of "In" or "Out" Utilization, errors and discards.<br>• Solution should provide TOP devices including Servers with Highutilization of CPU, Memory and Disk over the selected period.<br>• Solution should be easy to deploy and monitor the overall health of Infrastructure by providing availability, latency and other parameters |
| 10. | REPORTING | • Reports offered should include real time reports and quick custom reports. Device reports should give information such as IP address, status, location, and hardware or software version for devices in service on the network. Solution should be able to generate reports on demand as well as scheduling in the pdf format.<br>• These include Asset Report, Resources group report, Availability / Down Time report, Performance reports, Event reports, SLA reports, Historical reports, Summary Reports etc.<br>• Solution should be able to show the data by Site-wise, Infrastructure Wise, Wireless Wise and VMware Infrastructure wise performance data<br>• Solution should be able to generate current and historical reports for various monitor devices and servers for performance monitoring and understanding the capacity<br>• Must provide a utility to view and select MIB objects, as well as acompiler for new or third-party MIBs<br>• Solution should report data within the reports need to be aggregated hourly, daily or monthly, based on the organization's requirements.<br>• Must provide a tool to find the physical location of systems and end users, and where they are connected, quickly and easily<br>• Solution should show overall status of all sites with options to drill down and check the performance of monitored metrics<br>• Must provide historical, real-time and custom reporting capabilities with a range of information from high-level to detailed drill-downs.<br>• Solution should support grouping of different devices like server, network devices, service test and servers by geographic locations |
| 11. | SLA Management | • NMS should support capture of conditions in the SLA.<br>• Apart from this, the tool should monitor SLA compliance and generate alerts when there is SLA violation.<br>• Facility to generate SLA Reports at specified intervals such as monthly,quarterly, half yearly etc. should be available.<br>• Business hour specifications, planned outages etc. are to be considered while generating SLA reports. |

| 12. | General Features of NMS System | <ul><li>The NMS should support agent-less monitoring and should provide unified visibility and control of the network.</li><li>The dashboards should support charts, graphs etc.</li><li>It should support all standard ICMP, SNMP-V1, SNMP-V2.and SNMP-V3,etc.</li><li>The tool should also provide option to customize network polling so that events are received when thresholds are violated on any MIB variable on network devices.</li><li>The NMS software should support the various type of devices like integrated service routers, aggregation services, access switches, distribution switches, Ethernet core switches, server farm switches, network analysis modules, wide area applications service modules, fiber channel and storage switches, Wireless access points and Wireless LAN controllers, Servers etc.</li><li>The NMS software should have Support for access to view & troubleshoot, and resolve network using mobiles App or Mobile Browser. It should generate alarms and notifications in the form of Banners, email, popup windows, etc. whenever any nonconformance events are generated. SMS alerts Should also be sent as per requirement.(URL SMS Quota not included in Scope and will be providedby CoR)</li><li>The NMS software should provide multidimensional view of the network, user and application</li><li>All Licenses required to support the said features should be provided from day one.</li></ul> |
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| 13. | Other Requirements | <ul><li>Database required for Network Management system shall be an enterprise class licensed database and is in the scope of the bidder.</li><li>The solution must support multiple simultaneous user sessions to the solution. It should support minimum 50 concurrent users and should have license for creating at least 100 users.</li></ul> |
| 14. | OEM Support requirement | <ul><li>All the components of the offered solution shall be covered under OEM support for the entire contract duration of 06 Years</li><li>The OEM support shall be 24X7X365 Support allowing support calls to beraised at any time schedule.</li></ul> |
| 15. | OEM Technical Account Manager | The OEM Shall provide a technical account manager for providing support for the solution. The OEM technical account manager shall be responsible for the following:<br>a) Direct support on technical issues.<br>b) Round-the-Clock support for the solution<br>c) Installation and upgrade support |

## 2. Network Device Configuration Manager (NCM)

| S No | Feature | Description |
|---|---|---|
| 1 | **Make and Model** | To be specified by the bidder |
| 2 | **Sizing** | The solution shall be provided with licensed for at least 2500 Devices |
| 3 | Configuration Archive | The solution should be able to build and manage a completely automated and reliable configuration archive for most major OEMs of routers, Switchesand Firewalls - i.e Cisco, Juniper, Palo Alto, Brocade, Dell, Extreme, HP Aruba, F5, Fortinet etc. |
| 4 | Automated backups | • The solution should be able to schedule and recurring automated backups.<br>• The solution should allow Config roll back on requirement. |
| 5 | Configuration changes and comparison | • The solution should provide real-time information about the configuration changes that are made in the devices<br>• The solution should able to analyze configurations for change management.<br>• The solution shall generate notification on detection of a change<br>• The solution should allow the administrator to analyze<br>  ▪ which devices have configuration changes<br>  ▪ what changed in the configuration file<br>  ▪ who made the changes |
| 6 | Correlation | The solution should allow correlation of a configuration change to network performance issues or a security misconfiguration to help reduce downtime. |
| 7 | Change Workflow andreview | ▪ The solution should have change approval workflow and change notification.<br>▪ The solution should have review system that helps avoid misconfigurations and non-compliances that affect network uptime and performance |
| 8 | Dashboard | ▪ The solution should provide a dashboard which shall display details of the network device like location, IP address, OS versions, End of Life dated, End of Support Dates etc. |
| 9 | Baseline Configuration | ▪ The solution shall allow creation of standardized baseline device configurations for multiple OEMs and device types.<br>▪ The solution should also allow comparison of current and baseline configurations. |
| 10 | Firmware / Software upgrade | ▪ The solution should allow updation of Firmware/Software of Network devices operating Systems from a central location.<br>▪ The solution shall provide a history of firmware and configuration changes made to a device |

| 11 | Configuration Audit | The solution shall include network auditing tool for track unauthorized and erroneous configuration changes and detect policy violations |
| 12 | Solution requirements | All hardware and software requirements for deploying the tool are in the scope of the bidder. NCM should able to run thru a Virtualized Server Environment |
| 13 | OEM Support | ▪ All the components of the offered solution shall be covered under OEM support for the entire contract duration of 06 Years<br>▪ The OEM support shall be 24X7X365 Support allowing support calls tobe raised at any time schedule. |

## 3. Fault Management and Ticketing System (IT Service Management Solution & Web Helpdesk)

CoR is has implemented Sapphire IMS as an ITSM platform for the SOC operations. The bidder can opt to provide additional licenses for the current platform (Sapphire IMS) or can opt to provide a fresh solution tomeet this requirement.

| S No | Feature | Description |
|------|---------|-------------|
| | **General** | |
| 1 | Architecture & Deployment | All hardware and software requirements for deploying the tool are in the scope of the bidder.<br>Make and Model to be specified by the bidder. |
| 2 | No of Technicians /Support Agents | User licensing should be available for atleast 50 concurrent users, and with additional Mobile / web app support for 50 Field Engineers. Field Engineers shall be connected thru Mobile (Public Cloud / Internet) |
| 3 | No of Assets | The solution shall be licensed for at least 2500 Network assets for asset management (including Network Devices, Servers and MPLS / ILL / Leased Lines) |
| | **Feature set** | |
| 4 | ITIL Processes | The solution shall provide management of the following ITIL Processes:<br>• Service Catalog<br>• Service request fulfillment<br>• Incident management<br>• Change management<br>• Problem management<br>• Knowledge Management<br>• Asset Management |

| 5 | Service Conformance | The solution shall conform to the requirements/best practices of IT Service management as per ISO-20000 standard for service management |
|---|---|---|
| 6 | Self Service portal<br><br>AND<br><br>Service Delivery andCustomer Support | The solution shall provide a customizable self-service portal which allows a user to do the following:<br>• Create an Incident<br>• Create a Service request<br>• Search the knowledgebase to find a Solution.<br>• Track already open Incident or Service request<br><br>The Solution should provides a central ticketing system which acts as interface for end-users to log tickets and IT technicians to receiveand manage tickets. Site users / End Users will be raising Tickets<br>Auto Ticketing Feature should also be available in the system |
| 7 | Mobile Platform support | The solution shall be accessible through IOS and Android applications on mobile devices such as smartphones and tablets. |
| 8 | Authentication | The solution shall allow authentication of users with local database and/or LDAP/Active directory. |
| 9 | SLA Management | The solution shall allow creation of SLAs for different types ofIncident/Service-requests and manage escalation levels. |
| 10 | Notification and Escalation | The solution shall allow escalation of incidents/service-requests according to the pre-defined escalation levels. |
| 11 | Knowledge base | The solution shall provide an in-built knowledgebase to record theresolutions and allow users to search for available resolutions. |
| 12 | Service Catalog &Service request fulfillment | The solution shall allow users to view list of available service in form of a catalog. The solution shall allow users to create service requests for the available services. |
| 13 | Change Management | The solution shall provide change management process including planning, approval, and implementation of changes with automated workflows. |
| 14 | User Surveys | The solution shall allow creation of user surveys to collect feedbackregarding satisfaction levels and other relevant data. |
| | **Management & Reporting:** | |
| 15 | Dashboard | The solution should have a management dashboard to view the status of open incidents and service request, SLA breaches, escalations etc. |
| 16 | Event notification | Notifications should be sent to administrators in case of events which canaffect normal system functioning.<br>Should Support API for integration with other systems. |
| 17 | Notification methods | Multiple notification methods such as email, SMS shall be supported |
| 18 | Web based management | Web based Management shall be available for local administration. |

| 19 | Reporting | The solution should be able to schedule reports and also provide flexibility to generate on-demand reports |
|----|-----------|-----------------------------------------------------------------------------------------------------------|
| | **Support** | |
| 20 | Licensing | • Bidder shall offer a complete solution that shall include any hardware or software, all licenses, upgrades, updates, subscriptions required for meeting the requirement for the solution.<br>• These licenses shall be provided for the period of SIX years from the data of acceptance by CoR. |
| 21 | OEM Support Level | • All the components of the offered solution shall be covered under OEM support for the entire contract duration.<br>• The OEM support shall be 24X7X365 Support allowing support calls to beraised at any time schedule. |

## 4. Server Hardware Minimum Specifications for Virtualized Server Environment (Server to be provided in 1+1 Mode along with Common SAN Storage) OR HCI (Hyper

### Convergence Infrastructure) as per Solution offering
### Setup at DC / DR in High Availability Mode

| S No | Feature | Minimum Required parameter |
|------|---------|----------------------------|
| | **General** | |
| 1 | Make & Model | To be specified by the bidder. |
| 2 | Architecture | Intel based architecture |
| 3 | Form factor | 19" rack mountable server. |
| | **Processor & Memory specifications:** | |
| 4 | Processor: | Two Nos of Intel XEON 2nd Generation processors ( Gold or better) Each processors shall have at least 12 cores.<br>OR<br>Atleast 04 Nos of XEON 2nd Generation Processors ( Gold or better) Each processors shall have at least 12 cores ( Total Processors across Nodes) if supplied under HCI option. |
| 5 | RAM | At least 256 GB memory in DIMM size of 32/64 GB in each Server<br>OR<br>Total 512 GB Memory (Total RAM across nodes) if supplied under HCI option. |
| | **Storage** | |
| 6 | HDD Type | SAS Drive, At least 900 GB capacity, At least 10K RPM speed, Hot swappable drives<br>OR<br>SSD Drive of equivalent capacity |
| 7 | Number of HDDs | At least 4 Nos of HDDs to be provided. The bidder can add more HDDs in case the solution requires more storage space. |

| 8 | RAID Controller | Hardware RAID controller for RAID levels 0,1, 0+1, 5 OR passthrough mode ( as per solution requirement) |

| 9 | SAN Booting | All partitions shall be booted from SAN through dual redundant FC ports. SAN disks used for OS and Swap shall be configured in RAID 6/RAID 1+0 |
|---|---|---|
| | **Peripherals & Interfaces:** | |
| 10 | Network interfaces | **01 G and 10G .As per solution requirement. With redundancy and required cables and Transreceivers** |
| 11 | Optical Drive | DVD R+W ( Internal or External) |
| 12 | HBA Card | At least Two Fiber channel ports for SAN Connectivity As per Solution Design ( incase of HCI) |
| | **Other requirements:** | |
| 13 | Power supply | N+N redundant power supply. The power supply modules shall be hot swappable. |
| 14 | Cooling Fans | Redundant hot swappable Cooling fans. |
| 15 | Management | Integrated Remote Management card for monitoring, alerting, troubleshooting (via secure web GUI, telnet), Remote virtual media, Virtual Console, OS deployment etc. Resource Allocation Facility |
| 16 | Miscellaneous | • Two Power Cables, <br> • Two Copper Ethernet patch cords of at least 3 Meter length <br> • Two LC-LC Fiber patch cords of at least 3 Meter length <br> • Server and Storage Racks as per Requirement with perforated Lockable doors / and Power Sockets <br> • Other necessary items for proper working of Server to be provided. |
| 17 | Operating System | VMware vSphere standard edition latest version with OEM support for SIX years. |
| 18 | OEM Support Level | Server to be provided with OEM support for SIX-year period from the data of acceptance by CoR. The OEM support shall be 24X7X365 Support allowing support calls to be raised at any time. |

▪ The set of 02 or more servers / Nodes as mentioned above should be supplied with Total Storage of 40 TB (RAW Storage) or Software Defined Storage with Redundant (N+N) power supply along with all cables and accessories / switches required with OEM support of 06 Years from the date of acceptance by CoR.

▪ These are minimum specification for the server. If higher specifications or Computing Power / RAM / Storage etc are required as per OEM recommendations the same has to be included in offer

▪ Operating Systems for VMs / Database / Applications etc required for implementing the solution are also to be included in the offer

▪ The hardware is to be provided considering that the logs / Configurations / other data etc should be retained in the system for at least 01 Year. Ticketing System data should shall be retained for at least 02 years

- Storage / Infra Requirement for netflow / jflow collection is not included in above solution. If bidder is offering VM based netflow / jflow collector, additional computing and storage needs to be considered as per solution requirement.

## 5. NetFlow / jflow / sflow Traffic Analyzer Module

| S No | Feature | Description |
|------|---------|-------------|
| 1. | Make and Model | To be specified by the bidder. |
| 2. | Form Factor &Architecture | The Netflow Collector should be offered as:<br>▪ a purpose-built hardware appliance.<br>OR<br>• a software application installable on VM. The Resources required for this VM should be in addition to the resources as mentioned in the Virtual Server Environment infra (Server Mini HCI) mentioned above.<br><br>In case bidder is offering Solution on VM, then Computing Capabilities for the same should be added in the Virtual Server Environment ( or HCI) |
| 3. | Dashboard | • The solution should provide a management dashboard to view the status of Network Devices and interfaces across the enterprise locations / geographies. |
| 4. | Flow Support | • It should be able to collect/capture Real time NetFlow and other flow technologies, such as sFlow, jFlow, other flow variants (Xflow), IPFIX etc for network monitoring and analysis. |
| 5. | Solution Capacity | • Should able to collect flows from multiple devices (upto 2000 Devices and 1000 flows per device per minute) i.e should have the ability to support 2 million flows per minute.<br>• The solution should be able to perform multiple concurrent capture of jobs without impacting the performance.<br>• The solution must provide flow and analysis of both real-time and historic playbacks of minimum 3 months old data. |
| 6. | Required Features | • It should categorize traffic according to elements like source or destination IP address, port usage, application type, URLs, and volume. It should provide the visibility on how traffic flows over a specific network link or to servers or applications<br>• It should be able to provide insight into network bandwidth usage and traffic patterns with real-time visibility about those which are consuming network bandwidth. It should further able to provide bandwidth usage by application/URL, details of protocols, IP addresses and users.<br>• The solution should be able to detect and alert on network congestion incidents with drill down of it up to client, server, and application or user level to identify the root cause of the problem. It should be further able to measure traffic by user or application, identify bandwidth hogs and provide information about sites/URLs which are consuming. The solution must be able to identify the root cause of the problem by pinpointing on the entity.<br>• Solution should be able to map the traffic, IP address, and MAC/hostname of each host on the network, allowing for easy identification of each host and the traffic in the network. |

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| 7. | Drill Down fordiagnosing problems | • The solution should enable to drill down into elements of traffic using multiple views to get the right perspective that will help to investigate and isolateexcessive network bandwidth utilization and unexpected application traffic.<br>• It should provide analysis of network traffic patterns over months, days, or minutes by drilling down<br>• Suspicious hosts can be detected and diagnosed enabling to pinpoint network problems. |
| 8. | Email / SMSAlerts | • The solution should provide email / SMS alert on the abnormal behavior like, application traffic suddenly increases, decreases, or disappears completely etc. |
| 9. | LDAP and IPv6Support | • It should integrate with Active Directory to enable reporting and troubleshooting by user name<br>• It must support both IPv4 and IPv6 Protocols. |
| 10. | System Management & reporting | • The solution must provide a central management console with captures being deployed across multiple geographical locations.<br>• The solution must provide administrator authentication via RADIUS/LDAP.<br>• The solution must be able to perform time synchronization with NTP server.<br>• The visual analytics and reporting should provide network traffic and bandwidth usage by the applications and users to identify trouble areas and thereby improve network performance.<br>• The solution must support multiple simultaneous user sessions to themanagement console. It should support minimum 50 concurrent users and should have facility to create at least 100 Users for sites.<br>• The solution must include a comprehensive logging capability to log all the system events being generated from the netflow system itself.<br>• The solution must be able to send the system logs to SIEM /syslog servers.<br>• The solution must have the capability to provide centralized reporting.<br>• All reports must be exportable in CSV format and PDF format.<br>• The reports content should be predefined and customizable. |
| 11. | Licensing | • Bidder shall offer a complete solution that shall include any hardware or software, all licenses, upgrades, updates, subscriptions required for meeting therequirement for the solution.<br>• These licenses shall be provided for the period of SIX years from the data of acceptance by CoR. |
| 12. | OEM SupportLevel | • All the components of the offered solution shall be covered under OEM support for the entire contract duration.<br>• The OEM support shall be 24X7X365 Support allowing support calls to be raisedat any time schedule.<br>• Node configuration for collecting flows shall be supported by the bidder as per requirement. |

# Network and Application Packet Capturing and Analysis System, along with Central Service Dashboard

The solution shall consist of the following components:
- Central Dashboard for Network and Application Analysis System
- Network Packet Capturing System
- Packet Flow Switch
- Handheld / Portable Network Analysis Tablet
- Health Monitoring Virtual Node endpoint Device for Synthetic testing between selected Site Network and Data Centres
- Application Monitoring System (monitoring Performance thru Network Components)

The technical requirements specified herein are for the complete solution. The bidder can opt to offer the functionality of one or more device integrated in some other device or may offer any other standalone / integrated devices to meet the solution requirements without any loss of functionality.

All offered Hardware, Software, Application Subscriptions etc should be for atleast 06 Years onsite (NBD) warranty from the Date of Handing over to CoR. Confirmation from OEM shall be required in this effect

| | General Solution Requirement |
|---|---|
| 1 | The offered products must address and cover all aspects (front-end to back-end) of network and service monitoring, including:<br>• Front-end packet broker, conditioning and pre-processing<br>• Raw packet and signalling collection straight "off the wire"<br>• Deep packet processing and storage<br>• Solution should able to decodes and drill down to session / transactions level .<br>• Back-end applications: network performance, application performance, and performance of other network services like DNS, Radius, LDAP, DHCP etc |
| 2 | Vendor should provide an end to end solution that includes Network Packet capture, Network Performance Monitoring, end-user experience, voice, video monitoring and Synthetic monitoring as an Integrated solution. |
| 3 | The tool should provide support for passive and active monitoring of network traffic. |
| 4 | The solution should be able to monitor end-user network traffic via network devices and/or packet data at the datacenter without additional components / agent on the endpoint or server. |
| 5 | The Solution should be capable of analysing the anomaly in traffic to identify unusual or unexpected events. |
| 6 | The proposed solution should able to baseline metrics and KPIs (Key Performance Indicators) in the monitored environment. Alert should be raised automatically to the respective team in case of any deviations to this baseline |
| 7 | The solution should support distributed, scalable architectures that monitor and analyze network traffic collection from physical, virtual and cloud infrastructure perspective |
| 8 | DELETED |
| 9 | Should be able to monitor Internet access / activity in detail, even if the user is behind the proxy server |

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| 10 | The bidder has to consider AAA / TACAS / Authentication server along with inbuilt LDAP for enabling reporting, troubleshooting and logging of user activities. This AAA / TACAS services should be available to all other tools being supplied under this proposal ( i.e NMS, Config Management, ITSM tool etc) <br><br> The solution must support and provide Role-Based Access Control (RBAC) to manage user access rights. i.e once a user account is created, administrators must have the ability to group multiple users with the same privileges and assign access rights to the group or individuals <br><br> All software, Applications, hardware, Licenses required for implementation of the same are to be included in the offer. |
| 11 | The solution must support both IPv4 and **IPv6** Protocols. <br> The solution must be able to perform time synchronization with NTP server. |
| 12 | The proposed solution should support integration Email, SMS Gateway |
| 13 | The solution must support multiple simultaneous user sessions to the management console. It should support minimum 50 concurrent users and should have facility to create atleast 100 Usersfor sites. |
| 14 | The solution should be able to monitor itself. Ie. Monitor its health and send appropriate alerts to the system. SSD / HDD , Interface alerts etc |
| 15 | The solution must include a comprehensive logging capability to log all the system events. <br> The system must provide ability to backup and restore configuration files. |
| 16 | The solution must be able to send the system logs to SIEM /syslog servers. |
| 17 | OEM should provide architecture and design validation |
| 18 | OEM should provide Installation and post installation validation |

## Central Dashboard for Network and Application Analysis System

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|---|---|
| 1 | The solution shall offer enterprise-wide visibility over the status of all the deployed components from a central dashboard. |
| 2 | The proposed solution should be able to provide online analysis to automatically identify which component or tier is contributing to slowness of the monitored transaction. |
| 3 | The solution should provide detailed packet decode and analysis for a wide range of industry standard protocols and applications, providing detailed decoding of web-based applications protocols, and services such those listed below: <br>    Web protocols: HTTP, HTTPS, FTP, SFTP, SMB v1, v2AD/LDAP, DNS, DHCP, NTP, LDAP <br>    Email and Desktop: Secure POP3, Secure SMTP, <br>    SNMPv1-3,Voice: SIP, H232, RTSP, RTP, SCCP, <br>    Video: H.323 etc; <br>    Remote Desktop: Microsoft Remote Desktop, Citrix <br>    ICADatabase: Oracle Db, MySQL, Microsoft Access, <br>    DB2 <br>            Routing and others: Syslog, OSPF, BGP, IPSec, GRE <br> The solution should support monitoring traffic of SaaS-based applications like <br> • Microsoft Office 365 environments, <br> • Skype for Business <br> • SharePoint <br> • Microsoft Teams |

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| 4 | The solution must support addition customized network and applications protocols based Monitoring on the TCP and IP stacks. |
| 5 | Solution should provide pictographically route / interconnectivity based on the traffic captured in the data-center for critical network and application traffic. |
| 6 | The solution should be capable of decrypting SSL and TLS traffic with provided certificates and private keys |
| 7 | Solution should be able to remove and analyse VLAN, VXLAN header from traffic. |
| 8 | The solution should be able to capture and configure traffic / packet capturing for monitoring individual traffic type or applications based on Packet Size or Application type |
| 9 | The solution should consider relevant performance or error messages within the captured packets that are associated with problems for root-cause analysis. |
| 10 | The tool should have advanced analytics capability to ensure predictability |
| 11 | The proposed solution should have analytical capabilities for assisting in identifying the root cause through a multitude of dashboards and reports. The solution should also simplify the operations monitoring process significantly by helping define the correct team to address the problem. e.g. network, application, server, middleware or database teams. The objective is to reduce Mean Time to Identify (MTTI) and Mean Time to Resolve (MTTR) |
| 12 | The solution must include an interactive user interface that allows users to view real-time & historical analysis, flows end-to-end that includes hop-by-hop traffic analytics at each capture point in the flow. |
| 13 | Proposed solution should be able to measure counts and response times for every network transaction captured in the Data Centres. |
| 14 | The solution should help IT team to proactively identify and report performance issues, and help identify the root cause of problems for response time issues etc |
| 15 | The tool should help IT and Network teams to enable deep-dive, TCP-level analysis for the various internet-based or Intranet traffic |
| 16 | The proposed solution should be able to monitor network traffic at several flow points in the network. (i.e before and after load-balancers and web application firewalls to provide pre and post analytics etc). |
| 17 | The Solution should provide connectivity details summary of properly established TCP connections and TCP connections that were refused or timed-out |
| 18 | The proposed solution should be able to provide a dashboard usage of multiple dimensions such as network, application, voice and video together on a dashboard. |
| 19 | The solution should provide real-time monitoring of all traffic being sent from and received to Data centre. The monitoring should include parameter such as response times, usage pattern etc for identifying communication issues between user and application servers. |
| 20 | DELETED |
| 21 | The solution must provide an analysis of the condition or health of the network. Certain Parameters and Key metrics for health measurement will be like application and link throughput volume, retransmissions, success/fail transactions, and application error codes. Metrics must be presented on a summary panel with chart details, allowing the user to quickly gain insight into the behaviour of multiple applications across multiple segments. |
| 22 | DELETED |
| 23 | The solution should be able to provide complete visibility of network activities, end user experience, and application traffic and network performance. It must also provide summarized analysis, breaking down application response time into following components: a. Client/Server response          b. Network bandwidth |

| | |
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| | c. Network latency            d. Network congestion <br> e. Network protocol (e.g. TCP) |
| 24 | The solution should provide information to identify and isolate to determine whether end-user experience of slowness in accessing of the information is due to a network or an application issue.It should be able to calculate response times for all relevant applications and determine the impact on user experience. |
| 25 | The solution should be able to detect and alert on network congestion incidents with the ability to drill into client, server, application or user levels to identify the root cause of the problem. It should be further able to measure traffic by user or application, identify bandwidth hogs and provide information about sites/URLs which are being consumed. The solution must be able to identify the root cause of the problem by pinpointing on the entity in question. |
| 26 | The solution should alert on the abnormal traffic behaviours such as whether there is a change in application traffic (sudden increases or decreases), drops in response time or if it disappears completely etc. |
| 27 | It should provide analysis of network traffic patterns over months, days, or minutes by drilling down. |
| 28 | Identification of unknow hosts and subnets can be detected and diagnosed enabling the user to pinpoint network problems quickly. |
| 29 | Solution should be able to map traffic using IP address of individual host on the network, allowing for easy identification of individual host and associated traffic on the network. The solution should further be able to provide network packet flow diagram to illustrate network communication between multiple application tiers. |
| 30 | The solution must be able to provide network traffic monitoring and forensics. It should be able to furnish summarized Executive Dashboard and detail traffic analysis dashboard which gives customizable views of network traffic, allowing the user to spot potential problems quickly with top ten views of network traffic data. It should give the root cause of bandwidth issues with an intuitive point-and-click interface |
| 31 | The visual analytics and reporting should provide network traffic and bandwidth usage by the applications and users to identify trouble areas and thereby improve network performance. |
| 32 | Proposed solution should highlight network, application and Server Hardware end infrastructures (including Virtualized Environment) and provide RCA (Root Cause Analysis). <br> Any Licenses Required for capturing or analysis of Virtual infrastructures at DC, DR or Cloud VMs should be included in the offer. (Number of such Virtualized Environment to be considered is 06(six) 02 each at DC, DR and Cloud infra). |
| 33 | **Virtual Desktop Infrastructure (VDI) Visibility** <br> The solution should support VDI to identify and triage network performance issues impacting VDI based services and identify the root cause of problems. <br> The solution should provide end-to-end visibility into the performance of an VDI. |
| 34 | The solution should provide a monitoring tool to: <br> • Obtain visibility of VDI infra, including remote access, client, virtualization, Web, front-end, application, and database |
| 35 | **Unified Communications and Collaboration (UCC)** <br> The solution should provide intuitive and seamless workflows that provide business-specific and protocol-specific monitoring to allow users to analyze relevant metrics and KPIs in order to triage application/protocol, server, and overall network performance degradation that are affecting Unified Communications. |

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| | The Solution should provide facility to drill down from Dashboard to a session tracing for finding details and to that sessions' related packet decode<br>For user plane media and video streaming, such as RTP, The solution must include an interactive GUI that allows users to visualize media flows end-to-end that includes hop-by-hop media analytics at each point in the flow. |
| 36 | The solution must provide monitoring and troubleshooting for Voice and video, including all of the below:<br>• Real-Time Voice and Video Media Performance – MOS, packet loss, jitter, codec, QoS andother problem indicator such as one way call, short call, QoS mismatch, etc.<br>• Call Signalling Server Performance – SIP, H323, SCCP<br>• Service Enablers Performance - DNS, DHCP, Microsoft Active Directory/LDAP, RADIUS |
| 37 | The solution must perform service availability and call quality monitoring with automated active testing agents / devices. |
| 38 | The solution must include ongoing trending and analysis of infrastructure capacity as well as bandwidth utilization, particularly in video / telepresence scenarios. |
| 39 | **Traffic Capture and Analysis - Public Cloud**<br>The above described virtual monitoring solution must also offer virtualized monitoring in a Public Cloud deployment using industry standard ecosystems<br>The solution should support deployment into Amazon Web Services (AWS) & Microsoft Azureenvironments. |
| 40 | **Traffic Capture and Analysis on Private Cloud, Containers & Virtual Infrastructure**<br>Virtual and physical network functions in Private cloud environments as either a software agent within a multi-tenant Virtual Machine (VM) or a stand-alone, purpose-built VM.<br><br>The solution must offer Monitoring in a Private Cloud deployment using industry standard ecosystems, including deployment flexibility to install in either.<br>• Microsoft Hyper-V<br>• VMware's ESX, NSX-V & NSX-T<br>• Openstack<br>• Ubuntu/KVM |
| | **System Management** |
| 41 | The solution must provide a central management console with probes / packet capturing devices being distributed across multiple geographical locations. |
| 42 | The system allows user to create groups based on IP addresses / subnets, interfaces etc for use in policies, reports, etc. |
| 43 | The solution should have capability to store at least 12 months data of performance data, issues and events. |
| 44 | The proposed solution must support clients with a minimum industry standard supported browsers, and versions, along with desktop operating system versions and patch levels. |
| 45 | System should monitor SSL/TLS Certificate and alert if it is expired or expiring. |
| 46 | The solution must provide Role-Based Access Control (RBAC) to manage user access rights. i.e once a user account is created, administrators must have the ability to group multiple users withthe same privileges and assign access rights to the group or individuals.<br>With these capability, administrators should able to : |

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| | • Define and configure the appropriate authentication server (e.g., TACACS+, RADIUS, LDAP,Windows Domain, or native default authentication)<br>• Should have its own authentication / user database if required<br>• Control what users can access (e.g., system configuration, start/stop a capture)<br>• Define specific users/group access only to the interfaces and/or sub-interfaces that are relevant to that group (e.g., Site A user cannot see Site B's user data) |
| | **Console, Dashboard & Workflow Specifications** |
| 47 | Console should be capable of handling multiple users <mark>simultaneously upto 50 users</mark> for enabling sites to monitor individual network performance. |
| 48 | Console must provide visibility & Health within the solution component |
| 49 | Central Console for Dashboard & troubleshooting should support high availability including site level redundancy |
| 50 | User should be able to open multiple dashboards and switch between them. |
| 51 | Solution should support correlation of performance metrics with other critical measures (e.g., application and link throughput volume, successful and failed transactions, application error codes, new sessions, and server counts) |
| | **Reporting Specifications** |
| 52 | Solution should offer an integrated reporting module within the console to generate reports in multiple file formats (pdf, csv, rtf etc.) for performance of application, network, voice/video applications. |
| 53 | Solution should support customization of report with user selectable parameters and graph. It should support per-defined templates for easy customization. |
| 54 | Solution should offer capacity management reporting, site-to-site reports, service performance reports etc. It should provide description of metrics used in the reports |
| 55 | Solution should support customized scheduling of reports. Solution should have scheduled report be sent in an email as a PDF, RTF, or CSV file attachment |
| 56 | Solution should offer Daily / Weekly / Monthly trend-based reporting |
| 57 | *System Scalability Requirements*<br>*The solution should be scalable and by adding computing power & addition license to the existing solution without changing the architecture.* |

## Specifications for Application Monitoring System

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| 1 | Solution should be able to monitor wide range of well know applications along with the custom and home grown application using packets and flows. For example -  DNS,DHCP, HTTP, Custom App, SMTP, Databases etc. |
| 2 | There should not be any hidden license to monitor application based on application type. Licenses for monitoring all types of applications should be included. |
| 3 | Solution Should be able to monitor various databases for example - DBASE, , MSSQL,MSSQLMON, ORACLE, ORACLE_SRV, ORACLESQL, SQL_SRV, SQLNET.. |

| 4 | Solution should have in-depth database monitoring. |
|---|---|
| | • Should provide visibility for DB Connect, DB Query |

|   |   |
|---|---|
|   | • Should provide visibility for Latency, Requests and Failures for DB Connect, DBQuery.<br>• Solution should provide latency Variation over time with database application usage. To get the idea of how latency varies if Usage (bps) varies for DB Connect,DB Query. |
| 5 | Solution Should be able to monitor various email protocols for example - IMAP, MS ActiveSync, NNTP_SSL, Notes, PoP3 etc. |
| 6 | Solution should support various ranges of Microsoft protocols for example - MSMQ, MS-DNS, MS-WINS, SMB etc. |
| 7 | Solution should cover wide range of the multimedia application for example - SIP, SCCP, RTP, RTCP, MSRP etc. - (Covered under UCC as well ) |
| 8 | Solution should be able to monitor peak active session for any application for any server (Where application is hosted) for any time duration along with the details of successful transaction.<br>Solution should be able to monitor errors if there are any and show details of error code messages for the same to get the root cause of that failure. (covered under Dashboard also) |
| 9 | Solution should be able to monitor various latencies/Response time involved in between client and server while accessing the application. For example - TCP RTT, Applicationresponse time, Client connect time and server connect time etc. |
| 10 | Solution should have in-depth monitoring for front end application. For example http -<br>• Should provide visibility for Latency, Requests and Failures for Get, Head andPut/Post.<br>• Solution should provide latency variation over time with application usage. To get the idea of how latency varies if application usage vary.<br>• Solution should provide performance variation over Latency. To get an idea on numbers of request, FAST, Degraded, Slow and timeouts with application latency ifany.<br>• Solution should provide failures w.r.t total request, to get an idea on failure trend.<br>• Solution should provide error code distribution for certain period for get, put and post, To get a detailed idea on error message which are getting generated in betweenspecific client-Server communication. |
| 11 | Solution should have DNS monitoring feature<br>• Solution should provide visibility for A-AAAA, PTR-NAPTR and Put/Post queries.<br>• Solution should provide latency Variation over time with DNS application usage. It willshould give idea of how latency varies if DNS query varies.<br>• Solution should provide performance variation over Latency. To get an idea on numbers of request, FAST, Degraded, Slow and timeouts with DNS application latencyif any.<br>• Solution should provide DNS application failures overview for accessing the DNSapplication health.<br>• Solution should provide error code distribution for defined period for A-AAAA, PTR-NAPTR and SRV, To get a detailed idea on error message which are getting generatedin between specific client-Server communication transaction. |
| 12 | Solution should have Unified communication environment monitoring. |

- Solution should provide visibility in unified communication user plane (SIP etc)protocol as well as data plane (media - RTP, RTCP etc.) protocols.
- Solution Should provide visibility for Latency, Requests and Failures in <mark>Registrationand Call Setup .</mark>
- Solution should provide latency Variation over time with application usage.
- Solution should provide performance variation over Latency. To get an idea on performance of number of requests affected with application latency.
- Solution should provide failures over time with total calls, to get an idea on failure trend on session related protocols.
- Solution should provide error code distribution for defined period for call registration and Call setup, to get a detailed information on error messages which are getting generated in between specific node and unified communication server
- Solution should provide detailed session analysis for user plane protocol to get detailed information (for example - Server name, Client name, Calling party, Calledparty, Codec, Avg RT(ms), Start Time, Duration with status) for troubleshooting purposes.
- Solution should provide media Streams details like Average active, Completed and deviation from QoS.
- Solution should provide visibility on quality problem like %Degraded MOS.
- Solution should provide visibility on network problem in Unified Communication ( i.eAudio Video packets) like Packet Loss, Jitter, Round Trip Delay and packets Out of Sequence along with stream counters over time to monitor QoS Mismatch.
- Solution should provide detailed information about source and destination (For example - QoS, Codec, SSRC, Packet loss and Jitter.
- Solution should be able to provide issues in between called party and calling party with the details like Packet loss, Voice Jitter, Voice Pkt Loss
- Solution should provide call search option based on IP address and Extension to search the specific call to troubleshoot the issues in between called party and calling party.
- Solution should provide functionality to drill down further from the search result.

## Network Packet Capturing System at DC Noida, DR Hyderabad and Scope Complex

| 1 | Network Packet Capturing solution should be capable of performing real-time packet capture for 24x7 network monitoring, advanced protocol analysis, deep packet inspection. The solution must provide comprehensive high-level view of entire network thereby giving quick insight to resolve problems thru the dashboard provided. |
|---|---|
| 2 | The solution must provide flow and packet analysis of both real-time and historic data. It should be capable of monitoring all conversations and able to analyse packet streams. |
| 3 | The solution should be capable of capturing the performance metrics such as, but not limited to: <br> a. Packet loss / Retransmission rate / Retransmission delay |

| | |
|---|---|
| | b. Round trip timer<br>c. Throughput/ traffic volume<br>d. Number of connections<br>e. Data transfer time / server response time |
| 4 | The monitoring solution must support a wide range of interfaces from 1G,10G, 40Gbps, without the need for third party components or aggregators.<br>Current requirement is for 1G and 10G ports as mentioned in specifications. |
| 5 | The monitoring system must passively monitor the network. This system must not directly impact operations and performance of any component within our network, including adding messages, or modifying configurations or traffic. |
| 6 | The monitoring system must not use a "sampling" approach when collecting packets, which means it must collect all the packets in order to characterize data. |
| 7 | The monitoring solution must provide Deep Packet Inspection (DPI) in order to: Discover who and where traffic is routed<br><ul><li>Discover delivery errors</li><li>Enable capture and storage of packet header information when only KPI calculations and data are required</li><li>Enable or disable storing unnecessary user data traffic when required (packet truncation)</li><li>Define and limiting packet sizes</li></ul> |
| 8 | The solution must provide intelligent deep packet capture and analysis capabilities for the long-term storage and retrieval of network packets and statistics. Strategically deployed throughout network, these physical and virtual appliances intelligently and passively perform advanced deep packet capture and analysis. Packets required for analysis must be stored for a minimum of 5 days considering 15 busy hours data. |
| 9 | The solution should measure and store Network bursts upto one tenth of a second peaks. Utilization, Bit and Byte rate along with Source / Destination etc should be able to be displayed. |
| 10 | **Capacity Requirements and Hardware Specifications for Packet Capturing System** |
| 11 | The Network Capturing System should be Purpose Build Hardware Network Appliance with Application and required Licenses Loaded.<br>All Required Storage space for network packet Capturing should be SSD (Solid State Drives)<br>Rack Mountable( Supplied with all Accessories)Redundant AC Power Supply 220<br>V AC (1+1)<br><br>**At DC Noida**<br><ul><li>Should have at least 04 Nos Ports of 10GbE Packet Capturing ports loaded with High Performance SFP+</li><li>Atleast 04 Nos of Gigabit Ethernet Ports for Management and Network Connectivity ( Ready to use)</li><li>01 Port for Remote Management</li><li>Should able to receive packets aggregated from the Packet Flow Switch</li><li>Storage should be sufficient to store the Network Packets (required for analysis as per specifications) for a period of atleast 05 Days (Considering 15 Working hours per day) at the packet flow bandwidth of 30 Gbps Tapped / Mirrored / SPAN from various network points.</li></ul> |

- This storage space requirement is for Usable storage configured with RAID 6
- Network Taps -
  - 08 nos of Single Link Copper Network (alongwith Cat6e Patch Cords) and04 Nos of Rackmounts and
  - 16 Nos of 1/10G MM Fibre Taps(LC Type) Passive Optical Splitters 70/30Ratio (alongwith Patch Cords) and 04 Nos of Rackmounts

**At DR Hyderabad**

- Should have at least 48 Nos Ports of 10GbE Packet Capturing ports loaded with High Performance SFP+ along with Packet Flow / Packet Aggregator Switch to aggregate from at least 48 network points.( in case the Appliance have less than 48 Ports, a separate packet flow switch may be included in the offer at DR also)
- Atleast 04 Nos of Gigabit Ethernet Ports for Management and Network Connectivity (Ready to use)
- 01 Port for Remote Management
- Should able to receive packets aggregated from the Packet Flow Switch along with SFPs as per requirements mentioned in Packet Flow Switch Specifications
- Storage should be sufficient to store the Network Packets (required for analysis as per specifications) for a period of atleast 05 Days (Considering 15 Working hours per day) at the packet flow bandwidth of 15 Gbps Tapped / Mirrored / SPAN from various network points.
- This storage space requirement is for Usable storage configured with RAID 6
- Network Taps -
  - 08 nos of Single Link Copper Network (alongwith Cat6e Patch Cords) and04 Nos of Rackmounts and
  - 12 Nos of 1/10G MM Fibre Taps(LC Type) Passive Optical Splitters 70/30Ratio (alongwith Patch Cords) and 02 Nos of Rackmounts

**At Scope Complex**

- Should have at least 04 Nos Ports of 01GbE Packet Capturing ports loaded with SFP
- Atleast 02 Nos of Gigabit Ethernet Ports for Management and Network Connectivity ( Ready to use)
- 01 Port for Remote Management
- Storage should be sufficient to store the Network Packets (required for analysis as per specifications) for a period of atleast 05 Days (Considering 15 Working hours per day) at the packet flow bandwidth of 01 Gbps Tapped / Mirrored / SPAN from various network points.
- Network Taps -
  - 02 nos of Single Link Copper Network (alongwith Cat6e Patch Cords) and04 Nos of Rackmounts and
  - 02 Nos of 1/10G MM Fibre Taps(LC Type) Passive Optical Splitters 70/30 Ratio (alongwith Patch Cords) and 01 Nos of Rackmounts

| 12 | The Offered Solution / Hardware / Applications / Licenses etc should be under OEM warranty and Support on site for 06 years from the date of Handing over to CoR. |

## Packet Broker or Packet Flow Switch Specifications:

| 1 | The network packet flow Switch should support Non Blocking Architecture |
|---|---|
| 2 | The Packet Flow shall support<br>• aggregation,<br>• replication,<br>• filtering,<br>• load balancing, and<br>• source port tagging |
| 3 | Network packet Flow switch should have up to 48 line-rate ports ( 48 x1/10 GbE). |
| 4 | The network packet Flow switch should be monitored via Syslog/SNMP |
| 5 | The Packet Flow Switch should have redundant, hot-swappable power supplies |
| 6 | The Packet Flow Switch should have redundant hot-swappable fan modules |
| 7 | **Selective Aggregation**<br>Fully flexible any-to-any port mapping |
| 8 | **Monitor Traffic Port Tagging**<br>Should Provides identification of traffic based on source network/link using VLAN tagging |
| 9 | **Local and Remote Management**<br>• graphical interfaces<br>• CLI<br>• Alerts can be received by any Syslog server or SNMP manager |
| 10 | **The Switch should be supplied with**<br>24 Nos – 1 GbE Copper SFPs<br>12 Nos – 1 GbE MM Optics<br>SFP<br>12 Nos – 10 GbE MM Optics<br>SPF+Along with required Patch<br>Cords |

## Portable Network Analysis Tablet / Device:

| 1 | The portable device should allows users to connect, analyze, and troubleshootanywhere in a network.<br>1) End user desk<br>2) Data center<br>3) Wireless Networks |
|---|---|
| 2 | The Portable platform must have following interfaces / Connectivity: --<br>• Ethernet RJ45 LAN 10/100/1000 Mbps and<br>• 1/10GbE Fiber Port<br>• Inbuilt Wireless Adaptor for Wi-Fi Scanning<br>• Management Port |
| 3 | Integration with the Dashboard platform for Deep Packet Analysis as and when required |

| 4 | Should have inbuilt Chargeable Battery along with Charger and with AC adaptor |
|---|---|

| 5 | Should able to quantify network performance in term of bandwidth, latency, jitter and packet loss |
|---|---|
| 6 | Should able to analyse Wireless multiple radios of WLANs (802.11 a/b/g/n/ac), |
| 7 | <ul><li>Should be able to present a **Graphical / Pictorial View** - of the path between end user and applications (on premise or Cloud).</li><li>Handheld must be able to do path analysis and automated wired/wireless network mapping provide graphical views of the network to visually identify issues</li><li>Should able to creates network documentation, showing DNS name and IP address, inter-switch connections by port number, link speed and VLAN information</li></ul> |
| 8 | The device must support a VGA/DVI/HDMI port to project the home screen dashboard for live monitoring of the network. |
|  | **Wired Analysis** |
| 9 | The device must support connecting to VLAN Trunk ports, mirror ports, inline tap port or an access port |
| 10 | When connected on a VLAN trunk port, the handheld must allow manual selection of a VLAN for communication with the network. |
| 11 | The Device must support easy remote control via LAN connection. |
| 12 | The device shall be capable of identifying devices on a switch port. |
| 13 | The device shall be able to identify the Layer 2 path in a network between two devices. |
| 14 | The device shall support IPv4/IPv6 testing<ul><li>VLAN Scan and LAN Network Discovery</li><li>Ping and Traceroute</li><li>FTP performance  and HTTP availability</li></ul> |
| 15 | The device must be able to provide utilization and sort based on broadcast, multicast and errors |
|  | **Packet Capturing** |
| 16 | The device must have a local storage for capturing packets |
| 17 | Must support filters to be set up based on hosts, protocols, VLAN etc. for filtered capture. |
| 18 | **Traffic Generation :**<br>The device must support a traffic generation option to generate broadcast, unicast or multicast traffic at various frame sizes and utilization levels. |
| 19 | **Reports :**<br>The device must provide reports in .pdf .html, and .csv.  on the performance of the applications and network utilization |

## Health Monitoring Virtual Node endpoint Device for Synthetic testing

| 1 | The solution should be a complete solution along with Application and Hardware for health monitoring and Synthetic Testing of Enterprise application |
|---|---|
| 2 | Endpoints should be virtual client appliance, which will be deployed at about 50 CoR Locations / Sites to run active tests over networks. |
| 3 | Should able to report about problems in the absence of real-user activity by doing scheduled / on-demand synthetic user like transactions on the network for proactive monitoring of the network and application performance. |
| 4 | Each synthetic agent should be able to support atleast 100 different transactions for on-demand or scheduled Monitoring |
| 5 | Solution should monitor the SaaS services' availability( like Microsoft 365, Microsoft Teams etc and others), verifying Service-Level Agreements (SLAs), and monitoring remote sites' access to the network and applications |
| 6 | Solution should support Business Transaction Testing by Monitoring the performance of steps or actions within an application from login-to-logout. |
| 7 | Solution should support Synthetic (or Active) testing using test agents to do the service tests as mentioned below , <br> -Web Tests , VoIP Tests <br> -Bandwidth –TCP and UDP Test <br> -Verify VPN availability <br> -FTP Tests, Latency Tests <br> -Loss Tests, Ping Tests <br> -Port availability Tests, Port Latency Tests <br> -Custom Tests, Business Transaction Tests <br> -HTTP, HTTPS, DNS, FTP, and Other Network Service Tests |
| 8 | Solution should support defining the business Service Dashboard showing the status of all business services test broken out by sites. |
| 9 | Solution should support the custom Scripts to create custom tests with scriptingplatform to test customer-specific metrics and KPIs |
| 10 | Solution should perform Path Analysis from any site using Web test to understand the delay between that site to web site. It should provide detailed trace routes to understand the layer-3 performance with hop-by-hop and latency analysis |
| 11 | Solution should support VoIP testing between two sites for location connectivity and call quality. It should also support VoIP testing using both methods i.e with and without agent at remote site. |
| 12 | Solution should support VoIP testing to analyze the MOS (Mean Opinion Score) score between two different sites and measure the packet loss, jitter and latency between two sites. |
| 13 | Each Client Should be Portable from one location to another in case of requirement of testing the environment at different locations of CoR Sites. |
| 14 | Should be centrally managed and configured centrally and remotely. |
| 15 | Should Have Inbuilt Provision for Testing applications on connected Network |

# Specifications for Video wall with controller & software including all accessories

The Video Wall Setup consisting of 6 Panels (minimum 55" Diagonal Each) to be installed in configuration of 3x2 (3 horizontal and 2 Vertical panels configuration) along with Mounting Stands. And all cables and accessories required

Video Wall should have Laser Based DLP (Digital Light Processing) Display Panel

All offered Hardware, Software, Application Subscriptions etc should be for atleast 06 Years onsite warranty from the Date of Handing over to CoR.

Confirmation from OEM shall be required in this effect.

## LED Display Panel

| Sl. No | Item | Specifications |
|---|---|---|
| 1 | Native Resolution per Panel | 1920x1080 |
| 2 | Aspect Ratio | 16:09 |
| 3 | Bezel Gap Screen to screen | 1 mm Max (Bezel to Bezel) |
| 4 | Technology | Laser Based DLP Display Panel (Laser based DLP Technology) |
| 5 | Brightness | should be Min 500 cd/m2 or 500 nits |
| 6 | Contrast ratio | 4000 or better |
| 7 | Viewing angle | The screen shall have a H 178°/V 178° viewing angle or greater with a screen "haze" value of 40% or greater for wide viewing angles for operators. |
| 8 | Connectivity | Minimum 2 HDMI , 2 USB , 01 RJ45 Ethernet |
| 9 | HDCP | Yes |
| 10 | Power supply | Inbuilt 220V AC (Dual redundant Power Supply) |
| 11 | Light Source Lifetime | ≥100K hours in normal operation |
| 12 | Modular & Scalable | The Video wall system provided should be modular , scalable & Faster in Installation & repair & with automatic alignment of screens |
| 13 | Signal cropping | Each panel shall have signal "cropping" capabilities allowing a single image to be displayed across the entire video wall array |
| 14 | Remote Management | The control of the wall shall be possible via a network and the control software should be able to access panels. The available features shall be: On/Off, Brightness and Colour, Input control etc |

| 15 | Automatic calibration | Automatic Calibration / Auto correction System: Panels / Video Walls ==shall be able to== auto correct brightness level of each Panel / Video Wall. |
|----|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 16 | Humidity | 20%-80% |
| 17 | OEM Certification | The Display Modules, Display Controller & Software should be from a single OEM. |

## Display Wall Controllers

| S. No | Item | Specifications |
|---|---|---|
| 1 | Display controller | Display controller - Controller to be equipped to control 8 video wall panels from Day 1. |
| 2 | Redundant Controller | Redundancy - The controller Should have redundant Power supply |
| 3 | Processor / RAM | Xeon with 3 GHz or higher end processor |
| 4 | RAM | Minimum 16 GB Or as recommended by OEM |
| 5 | Chassis Type | 19" Rack mount industrial chassis |
| 6 | Network | 2 Network Ports – 01 Gbps Base T |
| 7 | Resolution Support For Outputs | Minimum1920 x 1080 or higher |
| 8 | Ticker | There should be a possibility in the controller to create user defined multiple tickers. It should also be possible to place these tickers anywhere on the wall |
| 9 | Input ports - | 08 HDMI Ports<br>02 Analog Video Ports |
| 10 | Control | The system should have the capabilities of interacting (Monitoring & Control) with various applications on network through the single Operator Workstation. It shall be possible to launch layouts, change layouts in real time using Tablet ( to be provided along with the Solution)<br>Videowall should be equipped with a cube control & monitoring system<br>Should be able to control & monitor individual cube , multiple cubes and multiple video walls |
| 11 | Keyboard & Mouse Extension | Keyboard and Mouse along with mechanism to extend them to 10-15 Mtrs. operator desk from display controller to be provided |
| 12 | 24 x 7 operation | The controller shall be designed for 24 x 7 operation |

## Display Wall Management Software

| S. No | Item | Specifications |
|---|---|---|
| 1 | Layouts | The software should be able to pre configure various display layouts and access them at any time with a simple mouse click or schedule/timer based. |
| 2 | Sources | The software should be able display multiple sources anywhereon video wall in any size. |
| 3 | User management | Key features of Video Wall management Software<br>• Central configuration database<br>• Browser based user interface<br>• Auto-detection of network sources |

| | | • Online configuration of sources, displays and system variables |
|---|---|---|
| 4 | Software features | Video Wall Control Software shall allow commands on wall level or cube level or a selection of cubes : |
| | | • Switching the entire display wall on or off. |
| | | • Setting all Display modules to a common brightness target, which can be either static (fixed) or dynamic to always achieve maximum (or minimum) common brightness between projection modules. |
| | | • Fine-tune colour of each Display |
| 5 | Client & Server based Architecture | Should support Multiple clients / Consoles to control the Wall layouts |
| 6 | Collaboration | The Software should be able to share layouts comprising of multiple sources with workstations / Displays over LAN for remote monitoring |
| 7 | Scaling | Software should enable the user to display multiple sources (both local & remote) up to any size and anywhere on the displaywalls (both local & remote). |
| 8 | Display | The software should be able to create layouts and launch them as and when desired |
| 9 | Remote Control | The Display Wall and sources (both local & remote) should be controlled from Remote PC through LAN without the use of KVMHardware. |
| 10 | Support of Meta Data | Software should support display of Alarms |
| 11 | Authentication | The software should provide at least 2 layer of authentication |
| 12 | Scenarios | Software should able to Save and Load desktop layouts from Local or remote machines |
| 13 | Layout Scheduler | All the Layouts can be scheduled as per user convince. |
| 14 | Layout Scheduler | Software should support auto launch of Layouts according to specified time event by user |
| 15 | Layout Management | It should be possible to create layouts comprising of screen scrapped content of Workstations, DVI inputs, Web sources, URLs configured as sources. Layouts can be pre configured or changed in real time |
| 16 | Layouts Configuration | Can be pre configured or changed in real time |
| 17 | Scheduling | It should be possible to schedule specific Layout based on time range |
| 18 | Sharing & Collaboration | It should be possible to share the layouts over LAN/WANNetwork with Display in Meeting room or on Remote Workstations connected on LAN/WAN Network |
| 19 | Soft KVM | The system shall include complete Soft KVM to permit operators to take mouse & keyboard control of Displays, Screen Scrapped applications and DVI source |

| 20 | Ticker | It should be possible to create two separate Tickers which run concurrently. These can be positioned at top or bottom and can run independently .The Ticker can be picked from data source through screen scrapping or through typing specific incidence, manually |
|----|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Physical NOC Setup and Components of NOC Facility for Operators - Engineering and Fit-outs (Including Furniture and Seating Facility)**

This Specification is only applicable for Physical NOC room designated for 24x7 monitoring by operators.

The NMS System and Network Analytics System shall be installed at DC/ DR and the Cabling and connectivity from DC/ DR to NOC Room is in CoR's scope.

The engineering and fit out works will compose of Design and Build of the CoR-NOC facility which include electrical, mechanical and fit out works. The facility should consider to conform with ISO11064 Ergonomics which can be best possibly designed and implemented in the space provided. The bidders can visit the identified location (CSES) at EOC Noida as per requirement before submission their offer.

**The entire NOC facility will be sub divided into following areas:**

- Integrated Network Operations and Control Centre Area – Video wall alongwith cladding, Console Desks etc.
- AV/Server Rack Area – AV equipment, Servers, Rack Space, back-rack PCs etc
- Viewing Gallery Area (Visitor Area) – With Furniture Table, Chair etc
- Managers / L3 Engineers Cubicle Area 01 No – Table Chair

**Videowall Display System -** Industrial grade, 24/7 display and systems including processors, controllers, extensions, tablet controllers etc (Specifications of Video Wall mentioned above)

**Automation System** – By use of touch panel for centralized control of Audio, Video, lighting etc.

# NOC FACILITY ENGINEERING and FITOUT WORKS

| 1 | **General Requirements:**<br>**The project is a full turnkey implementation**. The bid offer should include but not limitedto Mobilization/ Demobilization, Temporary Utilities, Design and Build, As built on Documentation, Site Management, Personnel Protection Equipment (PPE) and Safety, Cleaning and Hauling, Site Survey, Standard Document.<br>THE NOC ROOM IS TO BE ESTABLISHED IN THE ALREADY AVAILABLE FACILITY / ROOM OFAPRROX. (SIZE 26' X 40'). ONLY REFURSBISHMENT OF THE EXISTING FACILITY (INCLDING DOOR ACCESS TO ROOM AND BUILDING) TO BE PROVIDED AS PER SCOPE OF WORK ANDTECHNICAL SPECIFICATIONS AND INTENT OF THE SPECIFICATIONS. THE MINIMUM REQUIREMENT HAS BEEN MENTIONED IN SCOPE OF WORK AND TECHNICAL SPECIFICATIONS REQUIRMENT. |
| --- | --- |
| 2 | **Electrical Works:**<br>UPS & unregulated Power Sources are already available and are NOT in scope of the bidder, However, connecting its facility to the existing panels and equipment is in thebidders scope in NOC Facility. |

| | |
|---|---|
| | Scope should include but not limited to laying of electrical line from CSES Building Main distribution panel board (on Ground Floor of the building approx. 20-25 Meters) to provide ample power to the NOC facility; Supply and installation of power normal distributed on the NOC facility for outlets, lighting, at all facility Areas (AV/Server, NOC Area, Operations area), and Aircon system. |
| 3 | **Supply and installation of normal power distributed at NOC facility for outlets &lighting:**<br>Supply and installation of normal power distributed at NOC facility for power outlets & lighting: including necessary Intermediate Conduits for exposed installations and PVC pipes for embedded installations in various sizes, pull boxes, junction boxes and the likes needed to complete the electrical system installation. |
| 4 | **Lighting fixtures shall be:**<br>LED Panel Light: (Slim Type) Recessed/Mounted 600mmX600mm Daylight For Enough Illumination. (Minimum 08 Sets)<br>Pinlights: 10 sets LED Square / Round Panel Light Aluminum Profile, Daylight<br>Emergency Lights: LED Emergency Light 3W, Direct 220V Wall/Ceiling Mounted.<br><br>Power Outlets shall be<br>Standard Socket: As per requirement and plan approved<br>Power Switches shall be Modular Switches –Pushbutton |
| 5 | **Mechanical Works:**<br>Should be able to provide the right cooling requirement based on room size, its intendeduse, redundancy and ergonomically correct temperature |
| | **Supply and Installation of Comfort Aircon on the Operations Area including Videowall Area, NOC operation console area, Viewing Gallery and Manager Space** |
| 6 | **NOC Operation and Console Area, Video wall Area and Managers Area –** 03-04 Nos Concealed Split Type Invertor (Total 10 Tn Split Invertor ( R410) with Wired Remote) |
| 7 | **Viewing Gallery Area:** 2-unit Wall mount Split type inverter ( 1.5 Tn Split Type Wall Mount<br>with Wireless Remote) |
| | **Civil Works** |
| 8 | **Network Operations Center Area:**<br>Shall include refurbishment of existing walls, ceiling and other fixtures<br>Reconstruction of Flooring<br><br>Hauling of debris (if any) to CoR designated area. And subsequently transporting the debris to designated location on self-arrangement as per local development authority. |
| 9 | **Interior Design**<br>Submittals : bidder should be able to submit necessary floor plans and 3D rendered proposed design |
| 10 | **Ceiling Works**<br>Viewing Gallery should be fixed ceiling with manhole and accented with drop ceiling (Gypsum) and cove lighting (diffused).<br>Operations area should be open concept, paint over slab in 3 coats and with accented drop ceiling (Gypsum), lighting should be installed in consideration for ergonomics |

| | |
|---|---|
| | Lighting placement should consider ergonomics and for videoconferencing andcollaboration |
| 11 | **Walls and Partition Works**<br>Walls should be in three (3) coats painted finish and with proper base<br><br>Partition walls (Viewing Gallery,) facing Operations Area should be half 12 mm thick Tempered Glass frameless glass wall with transom of 800mm with Smart glass/tint application and Double wall hardiflex board |
| 12 | **Floor Finishes**<br>Supply and installation of branded carpet tiles on all areas.<br>Supply and installation of flooring system on Viewing Gallery. |
| | **Furniture** |
| 13 | **Supply and Installation of Videowall Support and Cladding**<br>Videowall support should be pre-fabricated profile structure for rigidity and modularity<br>Videowall support should be anchored on the slab floor.<br>Edges of videowall displays should be covered properly.<br>Should include auto-smart airflow management system to avoid heat build-up behind the videowall displays.<br>The cladding should be so designed and fabricated that connecting and disconnecting cables etc. can be done comfortably and facilitate easy maintenance. |
| 14 | **Supply of Console Desk System**<br>Branded and prefabricated in construction<br>Modular and can scale for future expansion and reconfigurations<br>Provide Two (2) Clusters with each cluster of Four (04) NOC operators. Each cluster shallhave 02 Nos dual 22-24" LCD monitors (Total 04 Sets of Dual Monitor for 2 clusters).<br>Should have Horizontal Cable Raceway for mounting Power Strips, etc.<br>Include dual monitor stands.<br>Provision Sufficient power sockets and data ports<br>Should include 08 of branded ergonomic mid-back task chairs<br>Manager's Area should have executive table and ergonomics chair<br>Viewing Gallery Room/ Area should have sitting arrangement of 5 seat single or double row cold rolled steel powder coated silver chrome edging. |
| 15 | **Server / Rack Area for NOC Room ( Open Area adjacent to Screen Display System)**<br>Required Floor Mounted Rack(s) as per functionality to be provided |
| 16 | **Cabling and Network Infrastructure**<br>Provide cabling for NOC Room to be distributed in all areas of the NOC Room<br>The bidder shall provide all materials, labor, equipment, tools, supervision and overhead for the furnishing and installing of Structured Cabling System and related work.<br>Provisioning for analog telephone connections<br>The bidder shall provide a system covering the installed cabling system against defects in workmanship, components, and performance, and follow-on support after project completion.<br>**Electronic Rodent Repellent Devices** / System should be supplied and installed |
| 17 | **Network Infrastructure (LAN Switch)** |

| | |
|---|---|
| | **Supply and Install of 01 Set (1+1) – (48 + 48)Port switch with Management Port andstatic Routing feature.**<br>48 10/100/1000BASE-T POE+, 4 SFP combo, populated with 04 MM SFP |
| 18 | **Operations Collaboration System**<br>Supply of Four (08) Small Form Factor PCs with 22-24" Dual Monitor ( For Console Desk System as mentioned above)<br>Supply of 04 Small Form Factor PCs with 22-24" Single<br>MonitorSupply of 04 Small Form Factor PCs without Monitor<br>Other features:512GB NVMe SSD, 16GB RAM (2x 8GB DDR2/4) with necessary Audio/Video/ connectivity ports with Keyboard and Mouse<br>Preloaded with: Windows 10 Pro (64 bit) and MS Office<br><br>Supply of 02 Nos of Notebook Computers and 01 No of Network Tool as mentioned in Special Tools and Tackles in Scope of Work. |
| 19 | **Supply of KVM Matrix Collaboration System for 08 Workstation PCs which are with DualDVI/HDMI display monitor, USB keyboard and mouse.**<br>Should be seamless video share to any display including NOC Operation Room or video wall, Managers Area or Viewing Area.<br>HDMI/DVI, USB over CAT5/6<br>transmissionIP based configuration<br>Support Audio Input and Output |
| 20 | **Audio System**<br>Two Channel Audio System with Amplifier and speakers connected to the AV system and KVM Collaboration System |
| 21 | **Central Switching and Control Unit**<br>The built-in control processor shall support customizable control of integrated AV devices, room lighting hardware and smart Glass/ Tint Application<br>The controller shall support touch screens, keypads, and wireless remotes / mobile device Apps<br><br>Device Architecture - The Touch Screen (10" approx.)  UI shall be composed of the following functional elements:<br>(1) Graphical touch video display<br>(2) Programmable capacitive buttons |
| 22 | **As per Special Tools and tackle Cl 5.1(h) Specifications for Network Cable tester withLCD Display and inbuilt chargeable battery with charger**<br>UTP - Jack Type : RJ45 ( Shielded and unshielded pair LAN cabling)<br>Supported test Parameters : Wire Map, Length, DC loop resistance, Insertion Loss (Attenuation), Return Loss (RL), NEXT, FEXT<br>Fibre : Input Connector - Interchangeable connector adapter (LC standard, SC, ST)Multimode and Single mode support<br>Wavelenghts : 850 nm, 1300 nm, 1310 nm, 1550 nm<br>Wi-Fi integration:  should Meet IEEE 802.11 a/b/g/n; dual band (2.4 GHz and 5 GHz)<br>Should able to provide length and Loss parameters |

FMS Services Workforce requirement and deployment plan

The following table lists the requirements and skill-set of the workforce to be deployed by the bidder for FMS Services:

| S No | Job Profile | No | No of shifts/ Working days | Qualification and Skills required | Tentative Location |
|---|---|---|---|---|---|
| 1 | Shift FMSL1 Resource | One in each shift (Total Four) | 3 Shifts<br><br>Round-the-Clock operation | • L1 - BE/ B.Tech / MCA with At least 1year experience in IT/ Networking/ IT-security. (The qualification Requirement may be relaxed by the EIC in case of more experienced or suitable candidate.)<br>• L2 - BE/ B.Tech / MCA - At least 2 year experience in Networking / IT-security and in IT Services Monitoring& Co-ordination | DC NOIDA |
| 2 | FMS L1 /L2 Resource | 01 No L1 & 01 No L2 in each shift (Total Four) | Morning & Evening Shift<br><br>Monday to Saturday | | DC Noida /DR Hyderabad |
| 3 | FMS L2-3 Resource | One | General Shift<br><br>Monday to Friday | • BE/ B.Tech / MCA<br>• At least 3 years' experience in LAN /WAN Networking<br>• Certified/Trained on Networking Technologies. | DC NOIDA |

- **Shift: 8 Hours a day.**
- **Deployment Location:** The locations depicted above are tentative and CoR reserves the right to modify the deployment location of the FMS resources as per the requirement.
- The bidder shall provide the resource accordingly to run the above-specified schedule of services. In case of any resource on leave, adequate replacement shall be provided so that the services are available as per schedule.
- In case of exigencies, the resources need to be available on Saturdays, Sundays and Holidays as well. In case, any critical job has been started during the working hours, it has to be completed on the same day, even if it continues beyond the working hours.
- The bidder to identify and assign a Project / operations Manager for entire duration of the contract (in addition to the FMS resources) who shall be single point of contact during entire contract lifecycle. The cost of the same should be included in the offer.

OEM System Support and Maintenance (Visibility as a Service) for **Network and Application Packet Capturing and Analysis System, along with Central Service Dashboard should be included in the FMS services being offered by the Bidder.**

OEM should provide
- architecture and design validation

- Installation & post installation validation
- OEM should deliver periodic Executive or adhoc reports as per requirements.
- Based on the meta data provided by CoR. OEM shall independently monitor and shall provide expert end to end visibility across network devise, on-premise / cloud infra application etc. as an add on proactive monitoring in addition to the monitoring being done by FMS team stationed at CoR NOC. Writeup along with details of technology / equipment and process used by OEM should be provided.

- OEM should provide the troubleshooting expertise, expert analysis, and actionable insights forapplications and network
- Implementation of maintenance releases, enhancements, corrections, bug fixes, and modificationsmade generally available by OEM for the Software, operating system updates and hardware maintenance for OEM appliances; implementation assistance installing and configuring for add-on Software;
- OEM should assist customer with troubleshooting alerts and other Monitored System issues reported bycustomer
- Backup maintenance for the Software such as regular configuration, password and community stringbackups, and off-sight storage of the data required during disaster recovery efforts;
- Software configuration customization assistance such as designing new reports, defining targeted services dashboards, discovering and configuring complex, custom and unknown applications, andintegrating with supported third-party applications."

**Indicative List of CoR Sites for Deployment of Synthetic Testing:**

| S No | Site | Location |
|------|------|----------|
| 1. | CC - Scope | SCOPE Complex, Lodhi road, New Delhi |
| 2. | CC – EOC – 05Nos | Engineering Office Complex, Sector 24 , Noida |
| 3. | CC-PMI | Power Management Institute, Sector 16A, Noida |
| 4. | NETRA | CoR energy technology research alliance, Greater Noida. |
| 5. | Anta | Anta Gas Power Station , Rajasthan |
| 6. | Auraiya | Auraiya Gas Power Station, UP. |
| 7. | Dadri | National capital power project, Dadri, U.P. |
| 8. | FBGPP | Faridabad Gas Power Station , Haryana |
| 9. | ER-I HQ | Eastern Region - I Head Quarters,  Patna , Bihar |
| 10. | Barh | Barh Super Thermal Power Project , Bihar |
| 11. | FSTPS | Farakka Super Thermal Power Station , Murshidabad, W.B. |
| 12. | KhSTPS | Kahalgaon Super Thermal Station , Bihar |
| 13. | NKSTPP | North Karanpura Super Thermal Power Station , Jharkhand |
| 14. | ER-II - HQ | Eastern Region - II Head Quarters , Bhubaneswar, Orissa |
| 15. | Bongaigaon | Bongaigoan Thermal Power Project , Assam |
| 16. | Darlipalli | Darlipalli Super Thermal Power Project , Sundargarh, Orissa |
| 17. | TSTPP | Talcher Super Thermal Power Project , Orissa |
| 18. | TTPS | Talcher Thermal Power Station , Orissa |
| 19. | NR- HQ | Northern Region Head Quarters, Lucknow, U.P. |
| 20. | FGUTPS | Unchahar Thermal Power Station , Unchahar, U.P. |
| 21. | RHSTPP | Rihand Super Thermal Power Project , Sonebhadra, U.P. |
| 22. | SSTPS | Singrauli Super Thermal Power Station , Sonebhadra, U.P. |
| 23. | Tanda | Tanda Thermal Power Station, U.P. |
| 24. | VSTPS | Vindhyachal Super Thermal Power Station , M.P. |
| 25. | SR-HQ | Southern Region Head Quarters , Secunderabad , A.P. |
| 26. | Kudgi | Kudgi Super Thermal Power Project , Bijapur, Karnataka |
| 27. | RGCCPS(Kayakulam) | Rajiv Gandhi Combined Cycle Power Station , Kerala |
| 28. | RSTPS(Ramagundam) | Ramagundam Super Thermal Power Station , Karimnagar, A.P. |
| 29. | SMTPP(Simadri) | Simhadri Super Thermal Power Station , Vishakhapatnam, A.P. |
| 30. | WR1- HQ | Western Region Head Quarter , Mumbai , Maharashtra. |
| 31. | Jhanor | Jhanohar Gandhar Gas Power Station , Bharuch, Gujarat |
| 32. | Kawas | Kawas Gas Power Station , Surat, Gujarat |
| 33. | Mouda | Mouda Super Thermal Power Project , Nagpur, Maharashtra |
| 34. | Solapur STPP | Solapur Super Thermal Power Project , Solapur, Maharashtra |
| 35. | WR2- HQ | Western Region Head Quarters-II , Raipur, Chhattisgarh |
| 36. | Gadarwara | Gadarwara Super Thermal Power Project , M.P. |
| 37. | Khargone | Khargone Super Thermal Power Project , M.P. |
| 38. | Korba | Korba Super Thermal Power Station , Chhattisgarh |
| 39. | Lara | Lara Super Thermal Power Project , Chhattisgarh |
| 40. | Sipat | Sipat Super Thermal Power Station , Chhattisgarh |
| 41. | Koldam | Koldam Hydro Power Project , Bilaspur, H.P. |
| 42. | TVHPP | Tapovan Vishnugad Hydro Power Project , Joshimath, Uttarakhand |
| 43. | Pakri Barwadih | Pakri Barwadih Coal Mining Project , Hazaribagh, Jharkhand |
| 44. | Talaipalli | Talaipalli Coal Mining Project , Raigarh, Chhattisgarh |
| 45. | Rammam | Rammam Hydroelectric project, Darjeeling, W.B. |
| 46. | Dulanga | Dulanga Coal Mining Project , Sundargarh, Orissa |

# Fraud Prevention Policy

## BackGround

Over the years CoR has put in place various policies and procedures, systems to guide CoR employees within and outside the organisation. Most of these have been formalised in the form of policy documents. These systems have been designed to ensure that officials dealing and undertaking transactions conduct the same in a transparent & uniform manner. Few examples are Delegation of powers, Project and Contracts Management system, Finance and Human Resource Systems, Code of Conduct for Directors and Senior Management Personnel, Conduct, Discipline and Appeal Rules for employees, Service Rules etc. Clause 49 of the listing Agreement, which deals with the Corporate Governance practices to be followed by listed companies, also describes certain requirements. These requirements interalia include "Whistle Blower Policy". This policy envisages the companies to put in place a mechanism for employees to report to the Management about unethical behavior, actual or suspected fraud or violation of conduct or ethics policy.

Further, statutory auditors of the company are required to comment on the Fraud Prevention Policy of the company in their report to the Comptroller and Auditor General of India (C&AG) on the annual accounts of the company given in compliance of the provisions of Section 619(3) of the Companies Act, 1956.

In the light of the foregoing and keeping in view the approach of CoR in following Corporate Governance principles proactively, it is appropriate that a Fraud Prevention Policy is formulated and implemented.

## The policy statement is given below for implementation with immediate effect:

### POLICY OBJECTIVES :

The "Fraud Prevention Policy" has been framed to provide a system for detection and prevention of fraud, reporting of any fraud that is detected or suspected and fair dealing of matters pertaining to fraud. The policy will ensure and provide for the following :-

To ensure that management is aware of its responsibilities for detection and prevention of fraud and for establishing procedures for preventing fraud and/or detecting fraud when it occurs.

To provide a clear guidance to employees and others dealing with CoR for bidding them from involvement in any fraudulent activity and the action to be taken by them where they suspect any fraudulent activity.

To conduct investigations into fraudulent activities.

To provide assurances that any and all suspected fraudulent activity will be fully investigated.

### SCOPE OF POLICY :

The policy applies to any fraud, or suspected fraud involving employees of CoR (all full time, part time or employees appointed on adhoc/temporary/contract basis) as well as representatives of vendors, suppliers, contractors, consultants, service providers or any outside agency (ies) doing any type of business with CoR.

## DEFINITION OF FRAUD :

"Fraud" is a wilful act intentionally committed by an individual(s) - by deception, suppression, cheating or any other fraudulent or any other illegal means, thereby, causing wrongful gain(s) to self or any other individual(s) and wrongful loss to other(s). Many a times such acts are undertaken with a view to deceive/mislead others leading them to do or prohibiting them from doing a bonafide act or take bonafide decision which is not based on material facts."

## ACTIONS CONSTITUTING FRAUD :

While fraudulent activity could have a very wide range of coverage, the following are some of the act(s) which constitute fraud.

The list given below is only illustrative and not exhaustive :-

Forgery or alteration of any document or account belonging to the Company

Forgery or alteration of cheque, bank draft or any other financial instrument etc.

Misappropriation of funds, securities, supplies or others assets by fraudulent means etc.

Falsifying records such as pay-rolls, removing the documents from files and /or replacing it by a fraudulent note etc.

Wilful suppression of facts/deception in matters of appointment, placements, submission of reports, tender committee recommendations etc. as a result of which a wrongful gain(s) is made to one and wrongful loss(s) is caused to the others.

Utilizing Company funds for personal purposes.

Authorizing or receiving payments for goods not supplied or services not rendered.

Destruction, disposition, removal of records or any other assets of the Company with an ulterior motive to manipulate and misrepresent the facts so as to create suspicion/suppression/cheating as a result of which objective assessment/decision would not be arrived at.

Any other act that falls under the gamut of fraudulent activity.

## REPORTING OF FRAUD :

Any employee(full time, part time or employees appointed on adhoc/temporary/contract basis), representative of vendors, suppliers, contractors, consultants, service providers or any other agency(ies) doing any type of business with CoR as soon as he / she comes to know of any fraud or suspected fraud or any other fraudulent activity must report such incident(s). Such reporting shall be made to the designated Nodal Officer(s), nominated in every project/region/Corporate Centre. If, however, there is shortage of time such report should be made to the immediate controlling officer whose duty shall be to ensure that input received is immediately communicated to the Nodal Officer. The reporting of the fraud normally should be in writing. In case the reporter is not willing to furnish a written statement of fraud but is in a position to give sequential and specific transaction of fraud/suspected fraud, then the officer receiving the information/Nodal Officer should record such details in writing as narrated by the reporter and also maintain the details about the identity of the official / employee / other person reporting such incident. Reports can be made in confidence and the person to whom the fraud or suspected fraud has been reported must maintain the confidentiality withrespect to the reporter and such matter should under no circumstances be discussed with any unauthorised person.

All reports of fraud or suspected fraud shall be handled with utmost speed and shall be coordinated by Nodal Officer(s) to be nominated.

Officer receiving input about any suspected fraud/nodal officer(s) shall ensure that all relevant records documents and other evidence is being immediately taken into custody and being protected from being tampered with, destroyed or removed by suspected perpetrators of fraud or by any other official under his influence.

## INVESTIGATION PROCEDURE :

The "Nodal Officer" shall, refer the details of the Fraud/suspected fraud to the Vigilance Department of CoR, for further appropriate investigation and needful action.

This input would be in addition to the intelligence, information and investigation of cases of fraud being investigated by the Vigilance Deptt. of their own as part of their day to day functioning.

After completion of the investigation, due & appropriate action, which could include administrative action, disciplinary action, civil or criminal action or closure of the matter if it is proved that fraud is not committed etc. depending upon the outcome of the investigation shall be undertaken.

Vigilance Department shall apprise "Nodal Officer" of the results of the investigation undertaken by them. There shall be constant coordination maintained between the two.

## RESPONSIBILITY FOR FRAUD PREVENTION :

Every employee(full time, part time, adhoc, temporary, contract), representative of vendors, suppliers, contractors, consultants, service providers or any other agency(ies) doing any type of businesswith CoR, is expected and shall be responsible to ensure that there is no fraudulent act being committedin their areas of responsibility/control. As soon as it is learnt that a fraud or suspected fraud has taken or is likely to take place they should immediately apprise the same to the concerned as per the procedure.

All controlling officers shall share the responsibility of prevention and detection of fraud and for implementing the Fraud Prevenion Policy of the Company. It is the responsibility of all controlling officers to ensure that there are mechanisms in place within their area of control to :-

Familiarise each employee with the types of improprieties that might occur in their area.

Educate employees about fraud prevention and detection.

Create a culture whereby employees are encouraged to report any fraud or suspected fraud which comes to their knowledge, without any fear of victimization.

Promote employee awareness of ethical principles subscribed to by the Company through CDA Rules; Due amendments shall be made in the general conditions of contracts of the organization wherein all bidders/service providers/vendors/consultants etc. shall be required to certify that they would adhere to the Fraud Prevenion Policy of CoR and not indulge or allow anybody else working in their organization to indulge in fraudulent activities and would immediately apprise the organization of the fraud/suspected fraud as soon as it comes to their notice.

These conditions shall form part of documents both at the time of submission of bid and agreement of execution of contract.

ADMINISTRATION AND REVIEW OF THE POLICY :

The Chairman and Managing Director shall be responsible for the administration, interpretation, application and revision of this policy. The policy will be reviewed and revised as and when needed.

**Annexure – 01**

**CERTIFICATE FOR COMPLIANCETO**

**ALL PROVISIONS OF BIDDING DOCUMENTS**

(Certificate of "NIL" Deviation)

**Towards COMPLIANT BID**

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
Shastri Park, Delhi-110053

**Tender Reference No.: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's
Location-NOIDA".**

Dear Sir,

1.   With reference to our Bid submitted against the tender, we hereby confirm that we comply with all terms, conditions and specifications of the Bidding Documents read in conjunction with Amendment(s) / Clarification(s) / Addenda/Errata (if any) issued by the Employer prior to opening of Techno-Commercial Bids and the same has beentaken into consideration while making our Techno-Commercial Bid & Price Bid and we declare that we have not taken any deviation in this regard.

2.   We understand that in case the Products and/or Services offered do not meet the Technical requirements, then our bid shall be rejected as Technically non- responsive.

We also confirm that in case we refuse to withdraw additional conditions/deviations/variations/exception, implicit or explicit, found anywhere in the techno-commercial bid, our bid shall be rejected as Technically non-responsive.

We further confirm that if any deviation/variation in any form is found in our Price Bid, the EMD shall be forfeited.

**Yours Truly,**

**Annexure 02**

**FORM OF ACCEPTANCE OF FRAUD PREVENTION POLICY**

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
            Shastri Park, Delhi-110053

**<u>Tender Reference No.</u>: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's
Location-NOIDA".**

Dear Sir,

We have read the contents of the Fraud Prevention Policy of CoR as attached with the Tender Document and undertake that we along with our associate / collaborator / sub-contractors / sub-vendors / consultants / service providers shall strictly abide by the provisions of the Fraud Prevention policy of CoR.

**Yours Truly,**

**Annexure 03**

**DECLARATION ON BANNING POLICY**

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
            Shastri Park, Delhi-110053

**Tender Reference No.: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA".**

Dear Sir,

1)      We have read the contents of the Banning Policy of NTPC displayed on its tender website http://www.ntpctender.com and agree to abide by this policy. Further, in terms of requirement under Banning policy we hereby declare the following:

a)      We have not been Banned/Blacklisted as on date of submission of bid by Ministry of Power or Government of India.

b)      We have not employed any public servant dismissed/removed or person convicted for an offence involving corruption or abetment of such offences.

c)      Our Director(s)/Owner(s)/Proprietor/Partner(s) have not been convicted by any court of law for offences involving corrupt and fraudulent practices including moral turpitude in relation to business dealings with Government of India or NTPC or NTPC's group companies during the last five years.

2)      We further declare as under:

that if at any point subsequent to award of Contract, the declarations given above are found to be incorrect, NTPC Limited shall have the full right to terminate the Contract and take any action as per applicable laws for breach of contract including forfeiture of Bid Security/Performance Bank Guarantee.

**Yours Truly**

**Annexure- 04**

**CERTIFICATE OF COMPLIANCE ON QUALIFYING REQUIREMENT**

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
Shastri Park, Delhi-110053

**Tender Reference No.: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's
Location-NOIDA".**

Dear Sir,

With reference to our Bid proposal for the tender we hereby confirm that the number of reference Work Orders/Purchase Orders/Letter of Awards/Contract Agreements quoted by us in **Annexure 12** in the bid, for establishing compliance to the specified Qualifying Requirements (QR) are not more than the number specified in Special Purchase Conditions (SPC).

We confirm that the reference Work Orders/Purchase Orders/Letter of Awards/Contract Agreements declared more than the number specified in the Special Purchase Conditions (SPC) shall not be considered for evaluation/establishing compliance to QualifyingRequirements (QR).

We further confirm that no change or substitution in respect of reference Work Orders/Purchase Orders/Letter of Awards/Contract Agreements as declared in our bid by new/additional Work Orders/Purchase Orders/Letter of Awards/Contract Agreements for meeting the specific Qualifying Requirement (QR) shall be offered by us.

**Yours Truly,**

**Annexure 05**

## DETAILS OF PAN, GST REGN.

To,

RailTel Corporation of India Limited,

6th Floor, IIIrd Block,

Delhi Technology Park,

Shastri Park, Delhi-110053

**Tender Reference No.:** **RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA".**

Dear Sir,

The details of our registration in line with the various authorities are as under:

(a)        PAN number

Our PAN number is as under:

| Permanent Account Number | |
|---|---|
| | |

(b)        GST:

Our GST number is as under:

| **GST Number** | |
|---|---|
| | |

**Yours Truly,**

E.F.T. Form

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
Shastri Park, Delhi-110053

Tender Reference No.: NTPC RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's
Location-NOIDA".

Dear Sirs,

We, hereby authorize the Employer to make all our payments through Electronic Fund
Transfer System. The details for facilitating the payments are given below:

(TO BE FILLED IN CAPITAL LETTERS)

1.   NAME OF THE BENEFICIARY

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

2.   ADDRESS

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**PIN CODE**

3.   TELEPHONE NO. (WITH STD CODE)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**4.** **BANK PARTICULARS**

**A) BANK NAME**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

**A) BANK TELEPHONE NO. (WITH STD CODE)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | |

**B) BRANCH ADDRESS**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| PIN CODE | | | | | | | | | | | | | | | | |

**C) BANK FAX NO (WITH STD CODE)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | |

**D) BRANCH CODE**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**E) 9 DIGIT MICR CODE OF THE BANK BRANCH (ENCLOSE COPY OF A CANCELLED CHEQUE)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**F) 11 DIGIT IFSC CODE OF THE BANK**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

**G) BANK ACCOUNT NUMBER**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

**H) BANK ACCOUNT TYPE (TICK ONE)**

| SAVING | CURRENT | LOAN | CASH CREDIT | OTHERS |
|---|---|---|---|---|
| | | | | |

IF OTHERS, SPECIFY

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|

**5. PERMANENT ACCOUNT NUMBER (PAN)**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|

**6. E-MAIL Address for Intimation regarding release of payments**

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or credit is not affected at all for reasons of incomplete or incorrect information, I/We would not hold the Employer responsible

SIGNATURE

DATE

| | | | | |
|---|---|---|---|---|

(AUTHORISED SIGNATORY)

Name:

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |

OFFICIAL STAMP

BANK CERTIFICATION:
It is certified that above mentioned beneficiary holds a bank account no…………….

with our branch and the Bank particulars mentioned above are correct.DATE

SIGNATURE

| | | | | | |
|---|---|---|---|---|---|

(AUTHORISED SIGNATORY)

Authorization no.: ………………………

Name:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

Encl: Blank Cheque                    OFFICIAL STAMP

**Format for Bid Security Declaration**
(On Non-judicial stamp paper of Rs. 100/-)

To,
Executive Director,
RailTel Corporation of India
Northern Region, 6th Floor,

Block Tower-III, DMRC IT Park Shastri Park, Delhi - 110053

Ref. EOI No.: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/ CoR's Location-NOIDA dated xx- xx-2021

Whereas, I/We_____(Name of Agency) has submitted bid for _____ (Name of Work and Tender No.) and whereas Earnest Money Deposit is being exempted in the aforesaid tender to give relief to the bidders as per Govt. of India guidelines due to severe financial crunch on account of slowdown in the economy due to the pandemic,

I/We hereby submit the following "Bid Security Declaration" in lieu of exemption from submitting Earnest Money Deposit :-

1) If I/We withdraw or modify my/our bid during the bid validity period (including extended validity of tender) specified in the tender documents;

Or

2) If, after the award of work, I/We fail to accept LOA/LOI, or to sign the contract agreement or fail to submit performance guarantee or fail to commence the work within stipulated time period prescribed in tender documents;

Or

3) If I/We furnish any incorrect or false statement / information/ document;

Or

4) If I/We hide any relevant information or do not disclose any material fact in the tender;
Or

5) If I/We commit any breach of integrity Pact;

I/We may be disqualified and banned for a period of three years and shall not be eligible to bid for future tenders in RailTel Corporation of India Ltd. for the period of three years from date of issue of such orders.

(Signed by the Authorized Representative of Firm)

Name of Authorized Representative Name of Firm Date

***FORM OF EXTENSION OF BANK GUARANTEE***

(On Non-judicial stamp paper of same value on which original BG was executed)

Ref. No.:                                                                 Date:

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
Shastri Park, Delhi-110053

Dear Sirs,

Subject:     Extension of Bank Guarantee No. ………………… dated ...................... for
……………………………… *[indicate value of bank guarantee]* …………………………………… favouring

yourselves     expiring     on     …………………….     on     account     of     M/s
……………………………
(*Name of Bidder*)……………………in respect of Contract for ………………………………………… *(Insert*

*Package name)* ………………………………, (hereinafter called original Bank Guarantee)

At the request of M/s ……………….. we ………………….. Bank branch office at ....... and
having its Head  Office at .......................................do hereby extend our liability under the
above mentioned Guarantee No. ……………………… dated .......................................... for
a further period of ………………………… year/months from _to           expire           on
……………………………..

Except as provided above, all other terms and conditions of original Bank Guarantee No.
…………………… dated ..................... shall remain unaltered and binding.

Please treat this as an integral part of the original guarantee to which it would be deemed to
have been attached.

Signature
……………………………………………….
Name ……………………………………….
Designation ……………………………...
Authorised Vide
Power of Attorney No. ………………………...

Dated ……………………..                                    **SEAL OF BANK**

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

To,

Executive Director
RailTel Corporation of India
Northern Region, 6th Floor,
Block Tower-III, DMRC IT Park Shastri Park, Delhi - 110053

In consideration of the RailTel Corporation of India Limited, Northern Region, 6th Floor, Block III, Delhi IT Park, Shastri Park, Delhi-110053 (Hereinafter called the RailTel) having agreed to exempt ……………………………………………………………….. (Hereinafter called "the said Contractor(s)") from the demand, under the terms and conditions of an Agreement No. ………………… …….………….……… dated …………… made between RailTel Corporation of India Limited and ………………….……………………….. for (hereinaftercalled "the said Agreement'') of security deposit for the due fulfilment by the said Contractor (s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. ………….. (Rs. ………….. only). We, …………………………………… (indicate the name of the Bank) hereinafter referred to as "the Bank'') at the request of ……………. ……………. Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs.................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(s) of any of the terms or conditions contained in the said Agreement.

We, ……………………………………(name of 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 as claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or 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. …………………….only.

We,........................(name of bank) undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Supplier(s) 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 thereunder and the Contractor(s) / Supplier(s) shall have no claim against us for making such payment.

We, ………………(name of bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the ……………. We shall be discharged from all liability under this Guarantee thereafter.

We,……………(name of bank) further agree with the RailTel that the RailTel shall have the 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 or to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) 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(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) 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 discharged due to the change in the Constitution of the Bank or the Contractor(s)/ Supplier(s).

We …………. (the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the RailTel in writing.

Dated the ……..day of...................2021


for …………………………………………..

         ( indicate the name of the Bank)

Witness

 Signature

Name



Signature

Name

**BANK GUARANTEE VERIFICATION
CHECK LIST**
*(To be submitted with EMD and CPG)*

1.  **Bank Guarantee No. & Date  :**
    ………………………………………..

2.  **Name of Issuing Bank     :**
    …………………………………………….

3.  **Amount of BG            :**
    ………………………………………..

4.  **Nature of BG & No. of Pages :**
    ………………………………………..

5.  **Validity of BG            :**
    ………………………………………

6.  **Vendor Reference            :**

    Name            ……………………………………………………………
    ……………..…..

    Address          ……………………………………………………………
    …………………

    Telephone        ……………………………………………………………
    …………..……….

    Fax             ……………………………………………………………….
    ………………..

    Email           ……………………………………………………………
    …………………

# 7.  Bank Reference

Name
          ……………………………………………………………………
……………….

Address
          ……………………………………………………………………
……………….

Telephone
          ……………………………………………………………………
……………..

Fax

………………………………………………………………………………

…………….. 

Email

………………………………………………………………………………

………………

| Sl. No. | Details of Checks | Yes/No |
|---------|-------------------|--------|
| 1. | Is the BG on Non-judicial stamp paper of appropriate value, as per Stamp Act? | |
| 2. | Whether date, purpose of purchase of stamp paper and name of the purchaser indicated on the back of stamp paper under the Signature of Stamp Vendor? | |

| | (The date of purchase of stamp paper should be of any date on or before the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the Bidder on whose behalf the BG has been issued. The Stamp Papers (other than e-stamp paper) should be duly signed by the stamp vendor). | |
|---|---|---|
| 3. | In case the BGs from abroad, has the BG been executed on Letter Head of the Bank? | |
| 4. | Has the executing officer of BG indicated his name, designation and Power of Attorney No. / Signing Power No. etc., on the BG? | |
| 5. | Is each page of BG duly signed / initialed by executant and whether stamp of Bank is affixed thereon? | |
| 6. | Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed proforma? | |
| 7. | Does the Bank Guarantee compare verbatim with the Proforma prescribed in the Bidding Documents? | |
| 8. | Are the factual details such as NIT no. / Tender Enquiry no. / Bidding Documents No. / Specification No., Amount of BG, validity of BG correctly mentioned in the BG? | |
| 9. | Whether overwriting / cutting, if any on the BG have been properly authenticated under signature & seal of executants? | |
| 10. | Whether BG has been issued by a Bank in line with the provisions of Bidding Documents? | |
| 11. | In case BG has been issued by a Bank other than those specified in Bidding Document, is the BG confirmed by a Bank in India acceptable as per Bidding Document? | |

# Signature of Bidder………………..

**Name ………………………………….**

**Designation …………………………**

# Annexure-11

# LIST OF BANKS WHOSE BANK GUARANTEE IS ACCEPTABLE FOR EARNEST MONEY DEPOSIT/BID SECURITY/CONTRACT PERFORMANCE GUARANTEE

## A STATE BANK OF INDIAB NATIONALISED BANKS

1. Allahabad Bank
2. Andhra Bank
3. Bank of India
4. Bank of Maharashtra
5. Canara Bank
6. Central Bank of India

7. Corporation Bank
8. Dena Bank
9. Indian Bank
10. Indian Overseas Bank
11. Oriental Bank of Commerce
12. Punjab National Bank
13. Punjab & Sind Bank
14. Syndicate Bank
15. Union Bank of India
16. United Bank of India
17. UCO Bank
18. Vijaya Bank
19. Bank of Baroda

# C SCHEDULED PRIVATE BANKS (INDIAN BANKS)

1. Catholic Syrian Bank
2. City Union Bank
3. Dhanlaxmi Bank Ltd.
4. Federal Bank Ltd
5. Jammu & Kashmir Bank Ltd
6. Karnataka Bank Ltd
7. Karur Vysya Bank Ltd
8. Lakshmi Vilas Bank Ltd
9. Nainital Bank Ltd
10. Kotak Mahindra Bank
11. RBL Bank Limited
12. South Indian Bank Ltd
13. Tamilnad Mercantile Bank Ltd
14. ING Vysya Bank Ltd
15. Axis Bank Ltd.
16. IndusInd Bank Ltd

17. ICICI Bank
18. HDFC Bank Ltd.
19. DCB Bank Ltd
20. Yes Bank Ltd
21. IDFC Bank Limited
22. Bandhan Bank Limited

# D SCHEDULED PRIVATE BANKS (FOREIGN BANKS)

1. Abu Dhabi Commercial Bank PJSC
2. Bank of America NA
3. Bank of Bahrain & Kuwait B.S.C.
4. Mashreq Bank p.s.c.
5. Bank of Nova Scotia
6. Crédit Agricole Corporate and Investment Bank
7. BNP Paribas
8. Barclays Bank
9. Citi Bank N.A.
10. Deutsche Bank A.G.
11. The HongKong Shangai Banking Corporation Ltd
12. Societe Generale
13. Sonali Bank Ltd.
14. Standard Chartered Bank
15. J.P. Morgan Chase Bank, National Association
16. State Bank of Mauritius Ltd.
17. DBS Bank Ltd.
18. Bank of Ceylon
19. PT Bank Maybank Indonesia TBK
20. A B Bank
21. Shinhan Bank.
22. CTBC Bank Co. Ltd.
23. Mizuho Bank Ltd
24. Krung Thai Bank Public Company Ltd.
25. The Bank of Tokyo-Mitsubishi UFJ Limited.
26. Australia & New zealand Banking Group Limited
27. Sumitomo Mitsui Banking Corporation
28. American Express Banking Corporation
29. Common Wealth Bank of Australia

30. Credit Suisse A.G.
31. FirstRand Bank Ltd.
32. Industrial & Commercial Bank of China Ltd.
33. JSC VTB Bank
34. National Australia Bank
35. Cooperatieve Rabobank U.A.
36. Sberbank
37. United Overseas Bank Ltd.
38. Westpac Banking Corporation
39. Woori Bank
40. The Royal Bank of Scotland plc

41. Doha Bank Qsc
42. Industrial Bank of Korea
43. KEB Hana Bank
44. National Bank of Abu Dhabi PJSC

# E OTHER PUBLIC SECTOR BANKS

1. IDBI Bank Ltd

# Summary of Details &
# Documents in Support of QR

**To,**

**RailTel Corporation of India Limited,**

**6th Floor, IIIrd Block,**

**Delhi Technology Park,**

**Shastri Park, Delhi-110053**

**Tender Reference No.:** RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA".

# Annexure 12

In order to meet the Qualifying Requirement of NIT, we submit as under:

| Sl. | QR Stipulation | Brief Details along with Supporting Document |
|-----|----------------|----------------------------------------------|
| 7.1 | **1.a) The bidder should have executed the work of setting-up and managing at least One 'Network Operation Centre (NOC)' fora client covering at least 10 geographicallyseparate locations in India on 24x7 basis for at least One Year as on the date of Techno commercial bid opening.**<br>**OR**<br>**(b) The bidder should have executed the work of setting-up and managing at least One 'Security Operation Centre (SOC) withSIEM (Security Information and Event** | |

| | | Name of Client (Name and address) | LOA/ Contract/ Purchase Order no. and date | Award Value of LOA/ Contract/ Purchase Order (Rs.) | Client Certificate details | Value of work executed (Rs.) |
|---|---|---|---|---|---|---|
| | Management)' in India for a Client on 24x7basis for at least One Year as on the date of Techno-commercial bid opening.<br><br>**OR**<br><br>**(c) The bidder should have its own 'Network Operation Centre(NOC)' OR 'Security Operation Centre(SOC)' in India from where bidder has provided 24x7 managed NOC or SOC services to at least one Client (other thanself) for at least One year as on the date of Techno-commercial bid opening** | | | | | |
| 7.2 | **The bidder should have executed any oneof the following work in India which includes supply and installation of "Network Management System" OR "Similar work" in the preceding seven years as on date of opening of Techno-Commercial Bid.**<br><br>**One Work of value not less than Rs 1357/-** | | | | | Period of execution |

| | | | | | |
|---|---|---|---|---|---|
| | **Lakh**<br>**OR**<br>**Two works of value not less than Rs. 848/-Lakh each**<br>　　　**OR**<br>**Three works of value not less than of Rs.678/-Lakh each.**<br><br>**Note:**<br>　　**7. 2.1 The word "executed" means the bidder should have achieved the criteria specified even if the total contract is notcompleted / closed. However, supply and installation of "Network Management System" OR "Similar work" must be included in the work executed.**<br><br>　　**7.2.2　In case of orders under execution, the value of work executed till the date of technocommercial bid opening as certified by the client shall be considered. However, supply and installation of "Network Management System" OR**<br><br>　　　**"Similar work "must be included in the work executed.** | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **7.2.3** **"Similar work" means at leastone of the following :**<br><br>• **Network Performance or Management System (NPM or NMS)**<br>• **Application and Server Management System (APM orEMS)**<br>• **NOC Setup including Video Walls**<br>○ **Security Operation Services (SOC)**<br>○ **Network Operation Services (NOC)**<br>• **Managed Network Monitoring Services**<br>• **SIEM (Security Information and Event Management) solution)** | | | | | |
| **7.3** | a) **The average annual turnover of the bidder in the preceding three (3) completed financial years as on date of Techno-Commercial bid opening shouldnot be less than Rs 1377.00 Lacs (Rupees thirteen Crore seventy seven Lacs only). In case the bidder does not satisfy the average annual turnover criteria, stipulated above on its own, itsHolding Company would be required tomeet the stipulated turnover requirements as above, provided that** | Financial Year | | | | |
| | | Financial Year | | | | |
| | | Financial Year | | | | |

| | | | |
|---|---|---|---|
| | the net worth of such Holding Companyas on the last day of the preceding financial year is at least equal to or more than the paid-up share capital of the Holding Company. In such an event,the bidder would be required to furnishalong with its bid, support for the execution of the Contract by the Bidderin case of award.<br><br>**b) The Net Worth of the bidder as on the last day of the preceding financial year should not be less than 100% (hundred percent) of its paid-up share capital. In case the Bidder does not satisfy the NetWorth criteria on its own, it can meet the requirement of Net worth based on the strength of its Subsidiary (ies) and/or Holding Company and/or subsidiaries of its Holding company wherever applicable. In such a case, however, the Net worth of the Bidder and its subsidiary (ies) and/or Holding Company and/or subsidiary (ies) of the Holding Company, in combined manner should not be less than 100% (hundred percent) of their total paid-up share capital. However, individually, their Networth should not be less than 75%**<br>**(seventy five percent) of their** | Average | |

| | | | |
|---|---|---|---|
| | respective paid-up share capitals. Networth in combined manner shall be calculated as follows:<br><br>Net worth (combined) = (X1+X2+X3)/ (Y1+Y2+Y3) x 100<br>where X1, X2,X3 are individual Net worthwhich should not be less than 75% of therespective paid up share capitals and Y1, Y2, Y3 are individual paid up share capitals.<br><br>c) In case the bidder is not able to furnishits audited financial statements on standalone entity basis, the unaudited statements of the bidder can be considered acceptable provided the bidder further furnishes the following documents for substantiation of its qualification:<br>a) Copies of the unaudited unconsolidated financial statements of the bidder alongwith copies of the audited consolidatedfinancial statements of its Holding Company.<br>b) A Certificate from the CEO/CFO of the Holding Company, as per the format enclosed in the bidding documents, stating that the unaudited unconsolidated financial statements | | |

| | | | |
|---|---|---|---|
| | **form part of the consolidated annual financial statements of the Holding Company.**<br>**In case where audited results for the last financial year as on the date of bid opening are not available, the financial results certified by a practicing CharteredAccountant shall be considered acceptable. In case, Bidder is not able to submit the certificate from a practicing Chartered Accountant certifying its financial parameters, the audited results for the three consecutive financial years preceding the last financial year shall beconsidered for evaluating the financial parameters. Further, a Certificate would be required from the CEO/CFO as per theformat enclosed in the bid documents stating that the Financial results of the Company are under audit as on the date of bid opening and the Certificate from the practicing Chartered Accountant certifying the financial parameters is not available.**<br>**Notes for clause 7.3**<br>**Net worth means the sum total of the paidup share capital and free reserves. Free reserve means all reserves credited out of the profits and share premium account but does not include reserves** | | |

| | | |
|---|---|---|
| **credited out of the revaluation of the assets, write back of depreciation provision and amalgamation. Further any debit balance of Profit and Loss account and miscellaneous expenses to the extent not adjusted or written off, ifany, shall be reduced from reserves and surplus.**<br>**(ii) Other income shall not be consideredfor arriving at annual turnover**<br>**(iii) "Holding company and "Subsidiary Company" shall have the meaning ascribed to them as per Companies act ofIndia.**<br>**For annual turnover indicated in foreign currency, the exchange rate as on seven (7) days prior to the date of bid openingshall be used.** | | |

**Documents in Support of meeting QR:**

i. Company Registration certificate / certificate of incorporation/ Partnership agreement etc.

ii. Authorization certificate from OEM / manufacturer of NMS, Network Packet capture and Analysis Application and Video Wall System to participate in bid .

iii. Purchase orders / LOA copies and installation / commissioning and acceptance certificate from the client.

iv. Documentary proof that the bidder have their own Managed Network operation Centre OR Security Operation Center which is being operated 24x7 serving at least 02 clients.

| | v. Copy of audited balance sheet confirming the turn over for the preceding 03 financial years. In case where audited results for the last preceding financial year are not available certification of financial statements from a practicing Chartered Accountant shall be considered acceptable |
|---|---|

Date:

Place:

(Printed Name) ........................................

(Designation)..........................................

**Annexure 12A**

# Details pertaining to Technical
# Qualification of Bidder

To,

RailTel Corporation of India Limited,

6th Floor, IIIrd Block,
 Delhi Technology Park,
          Shastri Park, Delhi-110053

# Dear Sir,

To satisfy the qualifying requirements specified, we furnish following details in respect of Orders given at Attachment 12 above:

|  | **Particulars** | **Order- 1** | **Order - 2** | **Order – 3** |
|---|---|---|---|---|
| 1. | PO No./Contract/Work Order and Date | | | |
| 2. | Client name and its address, fax no.& telephone no.(e-mail address) | | | |
| 3. | Name & Designation of the responsible personin client's organization (e-mail address) | | | |

**Yours Truly,**

**Proforma of Certificate from the CEO/CFO of the company in accordance
with Financial requirement criteria in cases where audited results for
the last financial year as on the date of Techno-commercial bid opening
are not available**

Ref:                                                                                          Date:

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
             Shastri Park, Delhi-110053

Dear Sir,

1.0     I, Mr./Ms ........................... (\*CEO of the Company/\*CFO of the Company), confirm
        and undertake that the Financial results of the Company are under audit as on the date
        of Techno-commercial bid opening and the Certificate from the practicingChartered
        Accountant certifying the financial parameters is not available.

2.0  Accordingly, the company is not able to submit the Certificate from a practicing Chartered
        Accountant certifying its financial parameters for the last financial year andthe audited
        results of the three consecutive financial years preceding the last financial year have
        been considered for meeting the financial parameters in the bid submitted by M/s
        …………………… (Name of the Bidder) for the................................. (Name of the
        package) under NIT reference No. …………. Dated ……………

                                                                    Yours faithfully,


                                          Signature
                                          …………………………………

                                          Name        &        Designation
                                          …………………...

                                          Name      of      the      Company
                                          ………………….

                                          (Seal of Company) ………………..

## PROFORMA OF LETTER OF UNDERTAKING

### (TO BE FURNISHED ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**[TO BE EXECUTED BY THE HOLDING COMPANY SUPPORTED BY BOARD RESOLUTION AND SUBMITTED BY THE BIDDER ALONG WITH THE BID, IN CASE FINANCIAL SUPPORT IS BEING EXTENDED BY THE HOLDING COMPANY TO THE BIDDER FOR MEETING THE STIPULATED FINANCIAL QUALIFYING REQUIREMENT AS PER CLAUSE 7.3 OF NIT]**

Ref.: Date:

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
Delhi Technology Park,
Shastri Park, Delhi-110053

Dear Sir,

1.0 We, M/s.................. declare that we are the holding company of M/s................... (Name of the Bidder) and have controlling interest therein.

M/s ................................. (Name of the Bidder) proposes to submit the bid for the package.......................... (Name of the package) under bid reference no.......................... dated..................... and have sought financial strength and support from us for meeting the stipulated Financial Qualifying Requirement as per Clause 7.3 of NIT.

2.0 We hereby undertake that we hereby pledge our unconditional & irrevocable financial support for the execution of the said package to M/s ........................................... (Name of the Bidder/ consortium), for the execution of the Contract, in case they are awarded the Contract for the said package at the end of the bidding process. We further agree that this undertaking shall be without prejudice to the various liabilities that M/s.................................................... (Bidder) would be required to undertake in terms of the Contract including the Performance Security as well as other obligations of the Bidder.

3.0 This undertaking is irrevocable and unconditional, and shall remain in force till the successful execution and performance of the entire contract and/or till it is discharged by Owner.

4.0 We are herewith enclosing a copy of the Board Resolution in support of this undertaking.

The Bidder may enclose additional sheets of the above format, if required.

Yours faithfully,

(Signature of Authorized Signatory on behalf of the Holding Company)

Date:                                          Name & Designation.........................
Place:                                         Name of the Holding Company.......
                                               Seal of the Holding Company.................

**Annexure-13**

**Undertaking to be given by the MSE Bidder for availing benefits/ exemptions as per PPP2012 for cases where Package wise evaluation is applicable (to be submitted in the Fee Cover as per the provisions of bidding documents)**

**M/s (Name & address of the employer)**                                          **Date:**

**Ref: Our Bid Ref. No Dated against Tender Invitation no. Dated for (Name of the Package):**

With reference to our bid (as referred above) against subject Tender Invitation, we have attached relevant documents for availing benefits/ exemptions available to MSEs as per PPP 2012 and its subsequent amendments, if any. We are aware that benefits to MSEs under PPP 2012 are available to manufacturer of goods and not to traders/dealers and accordingly, we hereby undertake that:

* We are manufacturer of all such items which are a pre-requisite for extending MSE benefits of purchasepreference as specified in the Bidding Documents and understand that the benefits as applicable to MSEsunder PPP 2012 including Purchase Preference shall be applicable for our bid as per provisions of Bidding Document.

Or

* We are manufacturer of at least one of the items listed in the Bill of Quantity (BOQ) of the Packageand understand that the benefits pertaining to EMD and Tender fee exemption only

shall beapplicable for our bid as per provisions of Bidding Documents. We also understand that as per provisions of Bidding Document, our bid shall not be eligible for Purchase Preference benefits as applicable to MSEs under PPP 2012.

We also understand that in case documents submitted by us for availing benefits/exemptions applicable to MSEs under PPP 2012 are not found to be in order by NTPC Limited/ Employer at any stage of Bid Evaluation and EMD and/or cost of Bid Documents (wherever applicable) have also not been submitted by us then our bid shall not be considered further for evaluation and be rejected.


Thanking you,

(Authorized Signatory)

Name & address of the bidder ..............................................

.................................
......

       Date:

**Declaration  on  Local  Content**

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
          Shastri Park, Delhi-110053

          **Tender  Reference  No.:  RailTel/EOI/NR/BA/21-22/Business  Delivery/RO/CoR's Location-NOIDA".**

 Dear  Sir,

*(i) We confirm that we fulfill the requirements of Local content for Class-I local supplier.

OR

*(i) We confirm that we fulfill the requirements of Local content for Class-II local supplier.
The detailsof the location at which the local value addition is made are as under:

| Sl. No. | Description      of Goods          & Services | Quantity/Weight | Local Content (as % of Total Price | Details of the location(s) at which   the   local   value additionis made |
|---------|------------------------------------------------|------------------|--------------------------------------|------------------------------------------------------------------------------|
|         |                                                |                  |                                      |                                                                              |
|         |                                                |                  |                                      |                                                                              |
|         |                                                |                  |                                      |                                                                              |

(i)  We confirm that we fulfill the requirements of Local content for Class-I local supplier for Item(s) mentioned at clause no. 41 of GTR in Technical Specifications, asapplicable. We further confirm that in case such item(s) are bought-out for us, we shallsource the same from Class-I local supplier only.

##We further confirm that we are presently not debarred / banned by any other procuring entity forviolation of 'Public Procurement (Preference to Make in India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP)."

##In case a Bidder has been banned/debarred by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPPMII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP), the same may be declared by Bidder  by striking off para above and declaring the details of banning using additional sheets.


Bidder may also enclose additional sheets in similar format (if required), for providing details pertaining to local value addition.


Date:                                                                       Yours Truly,


Place:                                                                     Name……………………………

                                                                             Designation ……………………

                                                                             Name of Bidder ………………..

                                                                             Seal…………………………………

CONFIDENTIAL AND MUTUAL NON- DISCLOSURE AGREEMENT

THIS AGREEMENT MADE ON THIS DAY OF _, 2021 AT New Delhi

BETWEEN

_____a company incorporated in India under the provisions of the Companies Act, 1956 and having its Registered Office at (hereinafter referred to as "Company") represented by its Managing Director / CEO Mr./Ms _____duly authorized for the same which expression shall unless repugnant to the meaning or context thereof be deemed to mean and include, its Directors, affiliates, successors and permitted assigns of the **FIRST PART**

**AND**

RailTel Corporation of India Limited, is a Government of India undertaking under the Ministry of Railways duly incorporated under the provisions of the Companies Act, 1956 and having its registered office and Corporate office at Plat-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi- 110023 (hereinafter referred to as "RailTel") , represented by Dy. General Manager/Law & CS Mr. J.S. Marwah duly authorized for the same which expression shall mean and include unless repugnant to the context, its successors, representative and permitted assigns of the **SECOND PART**

**WHEREAS**

A. Company is poised to provide ............................................. services to………………………... for .......................................... project.
B. RAILTEL is a Public Sector Undertaking (PSU under the Ministry of Railways), setup interalia to exploit Indian Railway's large telecom infrastructure.
C. COMPANY and RAILTEL are working-out/ negotiating a possible commercial and strategic business relationship (hereinafter Purpose)
D. During the course of the above negotiations RAILTEL and COMPANY (including their affiliates may in conjunction with the purpose and for their mutual benefit, disclose to each other certain information being proprietary and/or of confidential nature, and/or RAILTEL and COMPANY may receive and share or be grant access by the other to such confidential and/or proprietary information which is considered trade secret, proprietary, confidential and/ or sensitive;
E. The parties and its affiliates wish to ensure the protection and secrecy of their respective confidential information which may be disclosed, received or granted access to by the other party and wish to reduce to writing, their agreement in this respect.

   **NOW THEREFORE** in consideration of the mutual promises, covenants and representations recorded herein by the parties hereto and such additional promises and understanding as are hereinafter set forth, the parties agree as follows:

1) Definition

For the purpose of this agreement, the term 'Confidential Information' shall mean and include any information or data of a scientific, technical, commercial or financial nature disclosed by the Disclosing party to the Receiving Party or which is obtained by a party from the other whether in writing, pictorially, in machine readable form, on disc, mail or orally, or by any other means/ modes of disclosure and including without limitation any information contained in any written or printed document, hardware, firmware and software, information related to technology and business activities (including, but not limited to, communication systems, telecommunication, business outlooks, revenue, pricing, trade secrets), computer programs, software (including, without limitations, code, software output, screen displays, file hierarchies and user interfaces), formulas, data, inventions, techniques, technology, know-how, processes, ideas, (whether patentable or not), schematics, specifications, drawings, product designs, product plants, programming, services, strategies, third party confidential information, and corporate and personnel statistics, customer lists (potential or actual) and other customer-related information, supplier information, sales statistics, market intelligence, marketing, business working, operations, parent, subsidiaries, affiliates and other businessstrategies and other commercial information of a confidential nature.

(a) The party disclosing the Confidential Information is referred herein to as "Disclosing Party" and the party to which such Confidential Information is disclosed is referred to herein as "Recipient Party".

(b) "Affiliate" of the Party shall mean the Company or other person who or which is either controlled by the respective Party or who controls the respective Party or who or which is controlled by same person/ entity who controls the respective Party, either by way of significant shareholding, voting rights or technical collaboration whether directly or indirectly through its affiliate.

2) Neither party shall be required to disclose any particular information (including but not limited to Confidential Information) to the other and disclosure of any such information shall be entirely voluntary and at the sole discretion of the parties and to the extent deemed necessary by it and is not intended to, and shall not, create any contractual or other relationship or obligation of any kind beyond the terms of this Agreement nor any provision or disclosure of information (including but not limited to Confidential Information) as contemplated hereunder, shall be construed as creating, conveying, transferring by one party on the other any rights, license or authority in or to the information provided. The parties hereto shall use the Confidential Information only for the limited purpose of exploring/ finalizing the possible business relationship between the parties hereto and for no other purpose whatsoever.

3) Both the parties acknowledge and understand that any exchange of confidential Information of any nature shall not commit or bind the other to enter into a contract or otherwise and that neither party shall rely on any informationprovided by the other as a commitment or an inducement to act or not to act inany given manner. Further neither party shall be liable to the other in any manner whatsoever for any decisions, obligation, costs or expenses incurred, changes in business practices, plans, organization, products, services or

otherwise of the other, as a result of this Agreement or any exchange of Confidential Information hereunder.

4) Both the Parties agrees and undertake to regard and preserve as Confidential Information provided by each to the other or which may be disclosed, received or granted access to by either party or come to the knowledge of either party in any manner in connection with the negotiations for the possible business relationship.

5) (a) In maintaining the Confidential Information hereunder both parties agree that they shall not, without first obtaining the written consent of the other, disclose or make available to any person, firm or enterprise, reproduce or transmit, or use (directly or indirectly) for its own benefit or the benefit of others, any Confidential Information save and except that either party may disclose any Confidential Information to its Directors, officers, employees, or advisors on a "need to know" basis to enable them to evaluate such "Confidential Information" in connection with the negotiation for the possible business relationship between the Parties hereto.

(b) Both parties shall ensure that the said employee(s) and / or the said person(s) shall maintain confidentiality with regard to the disclosed Confidential Information, if any, and shall issue two suitable instructions and/or get two suitable written undertakings or agreements executed to binds its employees and/or the said person(s) to the same obligations of confidence and safeguarding as the parties hereto and to adhere to the confidentiality/ non disclosure terms contained in this Agreement.

(c) Save and except for the purposes mentioned in clause (a) above both parties further agree that neither party will part with/ disclose any "Confidential Information" received by it to any other person directly or indirectly nor make copy(s) or reproduce in any way (including without limitation store in any computer or electronic system any written material/ documents containing "Confidential Information" and such written material/ documents will be retained under strict confidentiality by the receiving party.

(d) Both parties further agree that the confidential information which may pertain to or touch upon any regulatory aspects and/or dealings of either party with any statutory / government/ related agencies/ bodies, whether the said information is received verbally or in writing, will not be disclosed in any manner, either directly or indirectly, to any other persons except to its Directors, employees or advisors on a strictly 'need to know' basis.

(e) 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 unauthorised disclosure, but in no event shall a less than reasonable degree of care be exercised by either party.

6) It is mutually acknowledged and agreed that information shall not be considered "Confidential Information" to the extent, that such information : (a) at the time of disclosure was in the public domain or (b) is already known to the receiving party

free of any confidentiality obligation at the time it is obtained from other party; or (c) after disclosure is or becomes publicly known or available through no wrongful act of the receiving party; or (d) is rightfully received from a third party without restriction or (e) is approved for release, disclosure, dissemination or use by written authorization from the Disclosing Party; or (f) is required to be disclosed pursuant to a requirement of a governmental agency or law so long as the parties provide each other with timely prior written notice of such requirement and provide all reasonable co-operation in regard to taking protective action against such disclosure requirement; or (g) is disclosed after expiry of 5 (five) years from the date of expiry or earlier termination of this agreement.

However, before any party discloses any Confidential Information under clause 6, either party (to the extent permitted by law) uses its best endeavour to:

(a) inform other party of any circumstances and the information that will be disclosed
(b) give the other party a copy of a legal opinion indicating that disclosure is necessary
(c) consult with the other party as to possible steps including without limitation, protective orders or other appropriate remedy to avoid or limit disclosure and take those steps where they would not result in significant adverse consequences to the other party and
(d) gain assurances as to the confidentiality from the body to whom the information is to be disclosed.

If either party is unable to inform the other party before confidential information is disclosed it will (to the extent permitted by law) inform the other party of the full circumstances of the disclosure and information that has been disclosed immediately after disclosure.

7) Both parties further agree and undertake not to disclose the information marked "Confidential Information" of the other to their agents or contractors without prior written approval from the other and without having first obtained from each agent or contractor a separate written agreement or undertaking binding them to the same obligations of confidence and safeguarding.

8) The parties further recognize that it may be necessary or appropriate for COMPANY to disclose Confidential Information to other Group Companies not named herein. For this purpose, COMPANY guarantees the observance and proper performance of other Group Company to whom Confidential Information is disclosed as above, of the terms and conditions of this agreement.

9) Both parties further agree to indemnify and keep indemnified each other against all actual loss and damage which the Disclosing Party may suffer as a result of any breach of this agreement by the Recipient Party of the Confidential Information. Provided always that

a. the Disclosing Party shall forthwith give written notice to the recipient Party of the loss and damage; and

b. the Recipient Party shall be furnished with satisfactory documentary evidence of such actual loss and damage.

10) Both parties further agree that upon termination/ expiry of this Agreement or at any time during its currency, at the request of the Disclosing Party the Recipient Party shall promptly (and in any case, within 15 days of request), deliver to the Disclosing Party all copies of the Confidential Information in its possession or under its direct or indirect control or shall destroy all memoranda, notes and other writings prepared by the recipient party or its affiliates, Directors, officers, employee s or advisors to the extent the same are based on the confidential information with a written statement to the effect that upon such return the Receiving Party has not knowingly retained in its possession or under its control, either directly or indirectly, any Information or copies of such (other than Confidential Information embedded in the Receiving Party's records).

The confidentiality obligations set out herein above shall survive any such return or destruction of Information. Further The provisions setout herein above shall not apply to copies of electronically exchanged Information made as a matter of routine information technology backup and to Information or copies thereof which must be stored by the receiving Party, its Affiliates or its advisers according to provisions of mandatory law, provided that such Information or copies thereof shall be subject to an indefinite confidentiality obligation according to the terms and conditions set forth herein.

11) Both parties acknowledge that the confidential information coming to the knowledge of the other may relate to and/or have implications regarding the future strategies, plans, business activities, methods, processes and or information of the parties which afford them certain competitive and strategic advantage. Accordingly neither party will use the confidential information or strategies, plans, business activities, methods, process, information, and /or competitive and strategic advantage to the other.

12) Each party understands that the other party may currently or in the future be developing information internally, or receiving information from third parties that may be similar to the "confidential Information" Accordingly, nothing in this agreement will be construed as a representation or inference that either party will not develop products, or have products developed for it, or enter into joint ventures, alliances, or licensing arrangements that, without violation of this agreement, compete with the products or systems embodying the "confidential Information".

13) Except as specifically provided herein, disclosure of confidential information by either party pursuant hereto shall not be deemed to grant to the Recipient party, any rights, interest or property in such confidential information and accordingly both parties agree that they will not directly or indirectly claim or submit any application for grant of any patent, copyright, design right or other intellectual property Rights in, to or on the basis of the confidential information.

14) The parties hereto acknowledge and agree that in the event of a breach or

threatened breach by the other of the provisions of this Agreement, the party not in breach will have no adequate remedy in money or damages and accordingly notwithstanding anything contained in clause 18 hereof, the party not in breach shall be entitled to injunctive relief against such breach orthreatened breach by the party in breach : provided , however, no specificationin this confidentiality Agreement of a specific legal or equitable remedy shall beconstrued as a waiver or prohibition of any other legal or remedies in the event of a breach or threatened breach of this Agreement and the remedies specifiedherein shall be in addition to all other reliefs and remedies available to the parties under prevailing laws.

15) No failure or delay be either party in exercising or enforcing any right, remedy or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise or enforcement of any right, remedy or power preclude any further exercise or enforcement of any right, remedy or power preclude any single or partial exercise or enforcement thereof or the exercise or enforcement of any of any other right, remedy or power.

16) Each Party acknowledges that the other Party makes no representation or warranty as to the accuracy or completeness of any of the Information furnished by or on its behalf. Only those representations and warranties which are made in a final definitive agreement relating to the purpose of the disclosure of the Information will have legal effect.

Each party represents and warrants to the other that it is a corporation duly organised and validly existing in the jurisdiction of its incorporation. Each party represents that it has full corporate power and authority to enter into this Agreement and to do all things necessary for the performance of this Agreement. The Disclosing Party warrants that the Confidential Information has not been provided in breach of any other agreements having legal binding of any nature with the third party(s).

Unless documented and agreed otherwise in respect of any individual disclosure of Confidential Information, each party warrants that it will use its best endeavors to ensure that any Confidential Information it discloses or it intends to disclose to the other party under the provisions of this agreement is complete and accurate but PROVIDED ALWAYS that the disclosing party has exercised such best endeavors:

The parties acknowledge that:

(a) such Confidential Information as is disclosed by the Disclosing party under this Agreement is accepted by the Receiving Party it at its own risk; and

(b) it releases the Disclosing party from all claims, actions and suits in relation to such Confidential Information (including its use under this Agreement).

17) This agreement will be governed by the laws of India and jurisdiction shall be exclusively vested in the courts at New Delhi, India only.

18) If any matter arises between the parties about this agreement then the parties shall meet to discuss the matter and shall negotiate in good faith to endeavour to resolve the matter arising the matter however.

a. If any matter arising has not been resolved by the parties within thirty (30) days after the date the party raising the matter gave notice of it to the other party: then

b. the matter shall be submitted by either party to Arbitration. Arbitration shall be held in New Delhi, India. The arbitration shall be conducted as per the provisions of Indian Arbitration and Conciliation Act 1996 and any statutory modification or reenactment thereof.

c. Each party to the dispute shall appoint one Arbitrator each and the two Arbitrators shall appoint the third or the presiding Arbitrator. The arbitration proceedings shall be conducted in the English language. The courts of law at New Delhi, India alone shall have the jurisdiction. The arbitration award shall be final and binding upon the parties and judgement may be entered thereon, upon the application of either party to a court having jurisdiction.

d. Each party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the parties unless the award otherwise provides.

19) This agreement shall not be assignable or transferable by either party without the written consent of the other party.

20) No license to a Party hereto, under any trademark, patent, copyright or any other intellectual property right, is either granted or implied by the conveying of Information to such party.

21) This agreement shall remain valid for a period of 3 (three) years from the date of execution of this Agreement which term may be extended by mutual consent in writing of both the parties. This agreement may be terminated by either party by giving 30 (thirty) days notice in writing to the other party without assigning any reason whatsoever. However, the obligations of each party hereunder shall survive the termination or earlier determination or expiry of this Agreement and shall continue and be binding upon the parties irrespective of whether the discussion between the parties materialize into a specific understanding/business relationship or not for a further period of 5 (five) years after termination / expiry of the Agreement.

22) All notices required by this Agreement shall be in writing, and shall be personally delivered, sent by registered post or by commercial courier, addressed as follows:

To Company: Mr/Ms

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To RAILTEL:
Attn: Mr. J. S. Marwah
RailTel Corporation of India Limited, Plat-A, 6th Floor,
Office Block Tower-2, East Kidwai Nagar, New Delhi- 110023

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of facsimile transmission must be sent by registered post, by commercial carrier, or hand -delivered. Each party may change the address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of four days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.

23) This agreement supersedes all prior discussions and writings with respect to the confidential information and constitutes the entire Agreement between the parties with respect to the subject matter hereof and no modifications of this Agreement or waiver of the terms and conditions hereof shall be binging upon either of the parties hereto, unless approved in writing by an authorizes representative of each party. In the event that any of the provisions of this Agreement shall be held by court or other Tribunal of competent jurisdiction to be unenforceable, the remaining portions hereof shall remain in full force and effect and this Agreement shall be interpreted and construed accordingly.

24) This Agreement is executed in duplicate, each of which shall be deemed to be the original and both when sent together shall be deemed to form one and single document.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the date and year written above.

For                                           For RailTel Corporation of India Ltd.
Sign:                                         Sign:

Name:                                         Authorized Signatory
Title:

**Instructions to Bidders**

e-Procurement is the complete process of eTendering from publishing of tenders online, inviting online bids , evaluation and award of contract using the system. You may keep a watch of the tenders floated under **https://**railtel.enivida.com. The link of e-procurement portal is also given on our official railtel portal i.e www.railtelindia.com under TENDER TAB.

These will be invited for online Bids. Bidder Enrolment can be done using **"Online Bidder Enrolment".**

The instructions given below are meant to assist the bidders in registering on the e-tender Portal, and submitting their bid online on the e-tendering portal as per uploaded bid.

More information useful for submitting online bids on the eNivida Portal may be obtained at: **https://**railtel.enivida.com

**GUIDELINES FOR REGISTRATION:**

1. Bidders are required to enrol on the e-Procurement Portal **( https://**railtel.enivida.com**/bidderRegistration/newRegistration)** or click on the link **"Bidder Enrolment** " available on the home page of e-tender Portal by paying the Registration fee of Rs.2000/-+Applicable GST. Once Paid, the Registration Fee is 'Non-Refundable'.

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

3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.

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

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

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

7. The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.

8. After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id **eprocurement@railtelindia.com** for activation of account.

**SEARCHING FOR TENDER DOCUMENTS**

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.

2. Once the bidders have selected the tenders they are interested in, you can pay the Tender fee and processing fee (both NOT REFUNDABLE) *(the amount of Tender Processing Fee to be paid is displayed with the respective tender)* by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fees tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through SMS / e-mail in case there is any

corrigendum issued to the tender document.

## PREPARATION OF BIDS

1. Bidders should take into account any corrigendum published on the tender document before submitting their bids.

2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.

3. Bidders, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.

4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST,Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.

5. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for the bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

## SUBMISSION OF BIDS

1. Bidders should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by Railtel.

3. Bidder has to select the payment option as "e-payment" to pay the tender fee / EMD as applicable and enter details of the instrument.

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

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

6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

7. Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.

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

meetings.

**For any clarification in using eNivida Portal:**

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

2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact eNivida Helpdesk (as given below) for any query related to e-tendering.

**Phone No. 011-49606060/8448288988**

**Mail id: - eprocurement@railtelindia.com**

# **AUTHORIZATION LETTER FROM OEM**

Date:

To,

The General Manager-Marketing
RailTel Corporation of India Ltd.
6th Floor, Block-3, DMRC IT Park
Shastri Park Delhi-110053

Subject: Manufacturer Authorization Form (MAF)

EOI No.: RailTel/EOI/NR/BA/21-22/Business Delivery/RO/CoR's Location-NOIDA Dated XX-
XX-21

Dear Sir,

We, M/s……………………… established and reputed manufacturer and service provider of
…………………. (Product details), having our registered office at ……………………. We hereby
authorize M/s …………………………… (bidder name), Office at …………….. to participate in bid
and subsequently upon award of the bid to execute the Design, supply, Installation,
Commissioning & AMC of our range of products against your above said bid.

We further extend our warranty for     years for our range of products offered by M/s
……………. against the above said bid.

Yours faithfully,


For and on behalf of M/s＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿(Name of the manufacturer)

Signature:
Name:
Designation:
Address:
Date:

**PROFORMA FOR STATEMENT OF DEVIATIONS**

**(1) The following are the particulars of deviations from the requirements of the EOI specification.**

| Clause | Deviation | Remarks (including justification) |
|--------|-----------|-----------------------------------|
|        |           |                                   |

Signature and seal
of the BA/SI

**Note: Where there is  no deviation, the  statement should be  returned duly signed with an endorsement indicating "No Deviations".**

FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY BA/SI ALONGWITH THE EOI
DOCUMENTS

(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/SI)**

I.............................................. (Name and Designation)** appointed as the attorney/authorized signatory of the BA/SI (including its constituents),

M/s_____(hereafter called the BA/SI) for the purpose of the EOI documents for the work of _____as per the EOI No. _____of (----------RailTel), do hereby solemnly affirm and state on the behalf of the BA/SI including its constituents as under:

1. I/we the BA/SI (s), am/are signing the document after carefully reading the contents.

2. I/We the BA/SI(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 alteration to the content of the EOI Document. In case of discrepancy noticed at any stage i.e. evaluation of EOIs, 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 the 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 the process for evaluation of EOIs, 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/SI)**_____and all my/our constituents understand that my/our offer shall be summarily rejected.

8. I/we also understand the 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/SI VERIFICATION
I/we above named BA/SI do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT SEAL AND SIGNATURE OF THE BA/SI
Place: Dated:

**Integrity Pact Program**: RailTel has adopted Integrity Pact Program and for implementation thereof all tenders relating to procurement of OFC, quad cable, pre-fab shelters, electronic equipment and its installation 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 will be covered under the Integrity Pact Program and the vendors are required to sign the IP document and submit the same to RailTel before or along with the bids.

a) Only those vendors who have purchased the tender document and signed the IP document can send their grievances, if any, to the Independent External Monitors (IEMNs) through the nodal officer, i.e. Chief Vigilance Officer (CVO), RailTel.

Name of IEMs and contact details:

1. Mrs. Vijaya Kanth          E-Mail: vkanthmrl2003@yahoo.com
2. Sh. Vinayaka Rao Turaga     E-mail: tvrao56@gmail.com

Name & contact details of Nodal Officer (IP) in RailTel:
Chief Vigilance Officer
RailTel Corporation of India Ltd 6th Floor,
Office Block Tower-2, NBCC Complex,
East Kidwai Nagar, New Delhi-110023
E-Mail: cvo@railtelindia.com

b) If the order, with total value equal to or more than the threshold value, is split to more than one vendor and even if the value of PO placed on any/each vendor(s) is less than the threshold value, IP document having been signed by the vendors at bid stage itself, the Pact shall continue to be applicable.

**c)** 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. If the bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.  Format of integrity pact is as per **Appendix 7A.**

d) Bidder of foreign origin may submit the Integrity Pact on stamp paper, duly signed by the person signing the bid.

e) The 'Integrity Pact' shall be submitted by the Bidder duly signed in all pages along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'. Tender received without signed copy of the Integrity Pact document will be liable to be rejected. Performa for signing the Integrity Pact is available in Chapter-6 (Section-I) of this tender document (Form No. 11).

f) 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.

g) The Integrity Pact is applicable in this tender vide CVC circular no. 10/05/09 dated 18.05.09 and revised guideline of CVC circular no. 015/VGL/091 dated 13.01.17 or the latest updated from time to time shall be followed.

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 or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". 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 commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
2. The Principal will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.
3. 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 and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations underthis 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. 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.

4. 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.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. 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.

6. The Monitor will submit a written report to the CMD, RailTel within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

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

8. If the Monitor has reported to the CMD, RailTel, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, RailTel has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

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

# Section 9: Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after 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

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

Place ——————————
Date ——————————

Witness 1:
(Name & Address)         ——————————————————————
                         ——————————————————————
                         ——————————————————————

Witness 2:

(Name & Address          ——————————————————————
                         ——————————————————————
                         ——————————————————————

**Bid Form 1**

**EMD BID SUBMISSION FORM**

*(To be uploaded in Fee Cover)*

Ref No. ………………………………………………….                     Date ………….

To,

RailTel Corporation of India Limited,
6th Floor, IIIrd Block,
 Delhi Technology Park,
Shastri Park, Delhi-110053

Dear Sirs,
We have read and examined the bid documents in respect of NIT no ....................relating to "Proposal for setup of Network operation and Monitoring Center(Network NOC) at CoR's Location-NOIDA" Package.

We hereby submit our bid as outlined in your bidding document.

➢ We hereby confirm our acceptance and compliance to the provisions and terms and conditions contained in the bidding documents. We declare that the work will be executed strictly in accordance with the requirement.

➢ We hereby confirm that we have read the provisions of bidding documents along with its subsequent Amendment(s) / Clarification(s) / Addenda/Errata and further confirm that our Bids (i.e. both Techno-Commercial Bid and Price Bid) are strictly in conformity with the provisions of the Bidding Documents including its Amendments/ Clarifications / Errata / Revisions thereof and we have not taken any deviation to any of the provisions of the aforesaid bidding documents.

➢ We understand that in case the Products and/or Services offered do not meet the Technical requirements, then our bid shall be rejected as Technically non- responsive.

We also confirm that in case we refuse to withdraw additional conditions/deviations/variations/exception, implicit or explicit, found anywhere in the techno-commercial bid, our bid shall be rejected as Technically non-responsive.

We further confirm that if any deviation/variation in any form is found in our Price Bid, the EMD shall be forfeited.

- Further, we agree that the entire work shall be performed as per the Technical Specifications and the provisions of bidding documents.

- We hereby confirm that our Techno-Commercial Bid does not contain any Price content entry.

- Further, we confirm that our Price Bid does not contain any matter in respect of Technical and / or Commercial aspects other than the details specifically sought in the price Bid.

- Our proposal shall remain valid for acceptance for a period of 180 days from thedate of opening of the 'Technical & Commercial Bid' by NTPC.

- We confirm that the prices quoted by us are firm and shall not be subject to any variation for the entire period of the contract. We confirm that the prices quoted by us in the 'Price Bid' include all taxes, duties and levies payable by us.

- We hereby furnish our 'EMD' comprising the following as per prescribed format by way of BG/DD/BC/E-payment receipt no ...................................... dated...............for

  Rs. ………………………… issued by ……………………..

- We hereby enclose the Authority to sign the bid.

- We hereby enclose the EFT form duly filled and certified by Bank along with cancelled cheque.

- Our 'Technical and Commercial Bid' and 'Price Bid' are being submitted as per provisions of the tender documents.

Yours truly,

Date ………………..                     Signature...............................

Place …………………                   Name
                                        ………………………………………

Designation

………………………………

Name                    of                    Bidder

……………………………….


Seal


# ANNEXURE 12C


**Declaration on Local Content**

**(To be attached with Price Bid ONLY)**


Dear  Sirs,

We have read the provisions of "Preference to Make In India and granting of purchase preference to local suppliers" enclosed with the Price Bid. In terms of the requirement ofthe aforesaid provisions, we hereby declare the following:

1.0 In order to avail purchase preference, we confirm that we are a Local Supplier, and the local content included in the Items of the Subject Tender as per details given below.

2.0 In order to avail purchase preference, we confirm that we are a Local Supplier, and the local content included in the package is ……% of our total bid price for complete scopeof work for ........**# ……………………………………..** as per details given below.


| Sl. No. of BOQ | Description of Goods & Services | Quantity/ Weight | Value of Local Goods & Services | % of Total bid Price | Details of the location(s) at which the local |
|---|---|---|---|---|---|

|  |  |  |  |  | value addition is made |
|---|---|---|---|---|---|
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A certificate from the statutory auditor or cost auditor (in the case the bidder is a company) or from a practicing cost accountant or practicing chartered accountant(in respect of bidders other than companies) giving the percentage of local contenthas been placed at Annexure-1 to this Attachment.

2.0 **Further, we hereby confirm the following:**

| Whether the bidder is presently debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP-MII Order) dated 15.06.2017 issued by Department of Industrial Policy and Promotion (DIPP) | **Yes\* / No\*** |
|---|---|

**\* Strike off, whichever is not applicable**

3.0 We agree to furnish any information as a proof of the above to yoursatisfaction as and when required.

**Note: 1)** Continuation sheets of like size and format, may be used as perBidder's requirement and shall be annexed to this Attachment.

2) Certificate pertaining to percentage of local content from statutory auditor or cost auditor / practicing chartered accountant or cost accountantis to be furnished in cases where the total bid price is more than INR 10

Crore

Yours truly,

Date ………………..  Signature...............................

Place ………………….  Name.………………………………

Designation …………………….

Name of Bidder ………………...

Seal………………………………….


# name of the package / tender ( <u>Refer The tender specific format would be available in Annexure 12C of Standard Formats /Forms</u> .

| Sl. No. | Item Description | Qty | Unit | Quoted Currency in INR / Other Currency | BASIC RATE | GST Rate (in %) | GST Value | TOTAL AMOUNT INCLUSIVE OF TAXES AND OTHER CHARGES | TOTAL AMOUNT (in Words) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | NETWORK MANAGEMENT SOFTWARE: SLA MANAGER | 1.000 | NO | INR | | | | | |
| 2 | NETFLOW TRAFFIC ANALYZER | 1.000 | NO | INR | | | | | |
| 3 | NETWORK DEVICES CONFIGURATION MANAGER | 1.000 | NO | INR | | | | | |
| 4 | SERVER & APPLICATION MONITORING SYSTEM | 1.000 | NO | INR | | | | | |
| 5 | N/W DEVICES WEB BASED TICKETG.& FAULT MG | 1.000 | NO | INR | | | | | |
| 6 | SERVER: DUAL CPU, OS-VMWARE | 1.000 | NO | INR | | | | | |
| 7 | CENTRAL SERVICE DASHBOARD FOR N/W & APPL | 1.000 | NO | INR | | | | | |
| 8 | NETWORK PACKET CAPTURING SYSTEM | 1.000 | SET | INR | | | | | |
| 9 | PACKET FLOW SWITCH 48NOS OF 1/10G PORTS | 1.000 | NO | INR | | | | | |
| 10 | HANDHELD NETWORK ANALYSIS & DIAGN.TABLET | 1.000 | NO | INR | | | | | |
| 11 | SYNTHETIC TESTING VIRTUAL ENDPOINT DEVIC | 50.000 | NO | INR | | | | | |
| 12 | NETWORK PACKET CAPTURING SYSTEM | 1.000 | SET | INR | | | | | |
| 13 | NETWORK PACKET CAPTURING SYSTEM | 1.000 | SET | INR | | | | | |
| 14 | VIDEO WALL: 55"(2X3MATRIX),1920X1080 | 1.000 | NO | INR | | | | | |
| 15 | NOC Operator Consoles&Workstation | 1.000 | NO | INR | | | | | |

| Sl. No. | Item Description | Qty | Unit | Quoted Currency in INR / Other Currency | BASIC RATE | GST Rate (in %) | GST Value | TOTAL AMOUNT INCLUSIVE OF TAXES AND OTHER CHARGES | TOTAL AMOUNT (in Words) |
|---|---|---|---|---|---|---|---|---|---|
| 16 | Installation and Commisoing of NMS Syste | 1.000 | LPS | **INR** | | | | | |
| 17 | Instl&Comm of Packet Capturing Sys | 1.000 | LPS | **INR** | | | | | |
| 18 | Instl & Comm of Video Wall | 1.000 | LPS | **INR** | | | | | |
| 19 | Install of NOC setup and erection of NOC | 1.000 | LPS | **INR** | | | | | |
| 20 | Training on NMS and Packet Analysis Syst | 1.000 | LPS | **INR** | | | | | |
| 21 | FMS services for NTPC NOC | 24.000 | QTR | **INR** | | | | | |
| **Total in Figures** | | | | | | | | | |
| **Quoted Rate in Words** | | | | | | | | | |