

RAILTEL CORPORATION OF INDIA LIMITED
(A Govt. of India Undertaking)

OPEN TENDER DOCUMENT

FOR

“Supply of STM-4 Analyser for MD-AII-COR Railway Projects”

TENDER No. RailTel/OT/NR/17-18/STM-4 Analyser/MD-AII-COR/23 Dated: 29.12.2017

RAILTEL

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RailTel Corporation of India Ltd.

(A Government of India Undertaking)

Northern Region

No. RailTel/OT/NR/17-18/STM-4 Analyzer/MD-AII-COR/23

Dated: 29.12.2017

OPEN TENDER NOTICE

Regional General Manager, RailTel Corporation of India Limited, Northern Region, New Delhi, invites the sealed Open Tenders in “single packet” system from established contractors with proven experience for **“Supply of STM-4 Analyser for MD-AII-COR Railway Projects”** as per following details:

a)	Sale of Tender	13.01.2018 to 12.02.2018 (From 11:00 Hrs to 17:00 Hrs)
b)	Last date & time of submission of tender:	Up to 15:00 hrs on 13.02.2018
c)	Date & time of opening of tender:	At 15:00 hrs on 13.02.2018 (If the date of opening happens to be a holiday the tender will be opened on next working day at same time.)
d)	Approximate cost of Tender	Rs. 4,36,600.00/-
e)	Earnest money:	Rs. 8,800/-
f)	Validity of offer	90 days
g)	Delivery period	60 days
h)	Cost of Tender Document:	Rs. 5,900/- (Five Thousand Nine Hundred only) and Rs. 6,490/- (Six Thousand Four Hundred and Ninety only), if required by post including GST, Surcharge and postage charges of Rs. 500/-
i)	Note:	Tender Document may be obtained between 11:00 hrs to 17:00 hrs from 13.01.2018 to 12.02.2018 from the office of Executive Director, Northern Region, New Delhi by paying the cost of tender document through Bank Draft in favor of “RailTel Corporation of India Limited” payable at New Delhi. RCIL shall not be responsible for late receipt of tender documents for any postal delay, if required by post.

A Government of India
Under
GM/Project/ Northern Region
For Executive Director/Northern Region

Chapter I

OFFER LETTER

To,
RailTel Corporation of India Ltd.,
Northern Region,
6th floor, Block-III,
Delhi IT Park, Shastri Park,
Delhi-110053.

I/We _____ have read the various conditions to tender attached here to and hereby agree to ABIDE BY THE SAID CONDITIONS. I/We also agree to keep this tender open for acceptance for a period of **90 days** from the date fixed for opening the same and in default thereof, I/We will be liable for forfeiture of my/our Earnest Money. I/We offer to do the supply of material as per Schedule of Requirement for **RailTel/OT/NR/17-18/STM-4 Analyser/MD-AII-COR/23 Dated: 29.12.2017** for RailTel Corporation of India Limited at the rates quoted in the attached schedules and hereby bind myself/ourselves to supply the Equipment within 60 days from the date of issue of Purchase Order. I/We also hereby agree to abide by the Various Conditions of Contract and to carry out the supply according to the Specifications for materials laid down by the RailTel for the present contract.

2. A sum of **Rs 8,800/-** (Rs. Eight Thousand Eight Hundred only) as on Account Payee Demand Draft No. ----- dt.-----issued by ----- is herewith forwarded as “Earnest Money”. The full value of Earnest Money shall stand forfeited without prejudice to any other rights or remedies I/We withdraw or modify the offer within validity period or do not deposit the security deposit (Performance Bank Guarantee) within 7 days after receipt of orders to that effect.

SIGNATURE OF CONTRACTOR (S)

Date

SIGNATURE OF WITNESS

- 1.
- 2.

CONTRACTOR (S) ADDRESS

Chapter II

SCHEDULE OF REQUIREMENTS (PRICE SCHEDULE)

Tender No. RailTel/OT/NR/17-18/STM-4 Analyser/MD-AII-COR/23 ,Dated: 29.12.2017

Schedule of Supply-I

SN	Description	Unit	Qty	Unit Rate (Rs.) All incl.	Total Amount (Rs.) All incl.
1	Supply of SDH/PDH/ATM Analyzer for STM-4, STM-1, STM-0, E-4, DS-3, E-1 & T-1 interface with channel level testing. It also includes supply of all related items/accessories required for measurement purpose as per specifications given in Annexure-VI of Chapter-V	Nos.	1		

Total in Figures:

Total in Words:

Note:

1. The material should be supplied as per Technical Specifications given in Chapter V.
2. Tenderer shall give break-up of quoted rates indicating separately the basic cost, CGST/SGST/IGST/GST, insurance charges, packing, forwarding & transportation charges (freight upto destination) including unloading at consignee premises and other levies, if any as per Annexure-A & Annexure-B.
3. Total value quoted in words is treated as final.

Signature of the Tenderer

Annexure-A

[illegible]

Annexure-B

[illegible]

CHAPTER III

Commercial Terms & Conditions

1. Eligibility Criteria and Technical Requirements:

1.1 The tenderer shall necessarily satisfy the eligibility conditions as listed below:

- i) Only OEM or Authorized dealers of OEM should participate. Authorized dealer has to submit the proof of same issued by OEM.
- ii) Bidder should enclose their credentials including supply of similar material to other government/PSUs/ Telecom Service Providers.
- iii) The GST registration is required to avail GST Credit; tenderer should be registered with GST department. The documentary evidence for the same should be enclosed along with the offer. However, in absence of documentary evidence or certificate, the offer is summarily rejected.
- iv) The offer should remain valid for a period of 90 days from the date of opening.

2. Warranty

2.1 The materials are to be warranted for **30 months** from date of delivery or **24 months** from Date of Installation whichever is earlier. The bidder shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defects that may develop under the conditions provided in tender and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet requirements, inadequate protection, deficiencies in circuit design and / or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.

2.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the material under this clause, the provisions of the clause shall apply to the portion/portions of the material so replaced or renewed or until the end of the above mentioned period of twenty four months, whichever may be later, if any defect is not remedied within a reasonable time, the Purchaser may proceed accordingly at the contractor's risk and expenses, but without prejudice to any rights which the Purchaser may have against the contractor in respect of such defects.

2.3 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.

3 Delivery of material:

The Materials should be supplied within **60 days** of issue of “Purchase Order” and should be delivered to the consignees as per Purchase Order.

4 Payment Terms

4.1 **90 %** of the value of the order on receipt of materials at site duly inspected and accompanied with the following documents:

- Tax Invoice
- Delivery Challan duly accepted by Consignee.
- Inspection certificate
- Warranty certificate of OEM/Supplier
- Insurance Certificate
- Certificate for Fall Back clause
- Contractor’s Certificate of dispatch
- Performance bank guarantee.

4.1.1 Balance 10% value of the PO on full supply at site and on receipt by the consignee.

5 Performance Bank Guarantee (PBG)

The supplier is required to submit a Performance Bank Guarantee (PBG) within 7 days of issue of Purchase Order for **10 % of the value of the order and valid for a period of 4 months beyond warranty period towards satisfactory performance of tender clauses**. The PBG shall be returned after successful completion of contractual obligation. The Performa for PBG is given in Chapter IV. The PBG will be forfeited if the order is terminated by the Purchaser on account of Contractor.

6 Taxes & Duties

Please see clause 18.

7 Liquidated Damages

The timely delivery is the essence of this project, Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion subject to a maximum of **10 % of the cost of supply**. RailTel will have the right to cancel the order, place order on alternative source at risk & cost of the supplier besides levying the L.D.

8 Transportation

The rates quoted should be F.O.R. destination.

9. Statutory Deduction

These will be made at source as per the rules prevalent in the area of work.

10. Issue of Purchase Order/ Award of Contract

The purchaser shall consider placement of orders for commercial supplies on those bidder whose offers have been found technically and commercially acceptable. The rates quoted by the bidders shall be compared/evaluated itemwise and the Purchase order for each item of the SOR shall be placed on the lowest bidder for each item. The issue of purchase order shall constitute the award of contract on the bidder. The bidder shall within 7 days of issue of Purchase Order, give his acceptance along with Performance Bank Guarantee as per Clause 5.

11. Purchaser's Right to Vary Quantities

The Purchaser reserves the right at the time of award of order/contract to **increase or decrease by upto 25 %** of the quantity of goods and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions.

12. Splitting of Quantity

Deleted

13. Purchaser's Right to accept any Bid and to reject any or all Bids

The purchaser reserves the right to accept or reject any Bid and to annul the bidding process and reject all bids, at any time prior to award of contract without any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the Purchaser's action.

14. Issue of Advance Purchase Order - Deleted

15. Issue of Purchase Order and Award of contract – Please see Clause 10.

16. Annulment of Award

Failure of the successful bidder to comply with the requirement of Clause 5 shall constitute sufficient ground for the annulment of the award and forfeiture of EMD in which event the Purchaser may make the award to any other bidder at the discretion of the Purchaser or call for new bids.

17. Earnest Money Deposit (EMD)

Earnest Money as per Tender Notice shall be submitted in the form of Demand Draft from any Nationalized / Scheduled bank in India in favour of "RailTel Corporation of India Ltd. payable at New Delhi." EMD may be forfeited if a bidder withdraws his offer or modifies the terms and conditions of the offer before validity period and in the case of a successful bidder, if the bidder fails to accept the Purchase Order and furnish performance security in accordance with clause 5 and 10.

17.1 Tenders under noted categories of tenderers need not deposit Earnest money :-

a) For NSIC registered firm and micro & small enterprises (MSEs) who are having valid

Udyog Aadhar memorandum and for Small Scale Units registered with NSIC under single point registration scheme and participating in this tender, following exemptions shall be available

- b) They shall be exempted from cost of tender documents. However, postage charges of Rs. 500/- would have to be paid by them, in case they need tender document by post.
- c) They shall also be exempted from depositing Earnest money. These exemptions shall be applicable provided units are registered with NSIC for tendered item and registration is current and valid. Firms claiming these exemptions are required to submit along with their offer, a copy of their current and valid NSIC registration certificate for the tendered item/items, otherwise their offer would not be considered.

- 17.2 Earnest Money of the unsuccessful bidder will be discharged/returned as promptly as possible. No interest shall be payable on the EMD.
- 17.3 The successful bidder's bid security will be discharged upon the bidder's acceptance of the purchase order satisfactorily and furnishing the performance bank guarantee in accordance with **clause 5**.
- 17.4 Tenders not accompanied by Earnest money shall be summarily rejected.

18. BID PRICES, Taxes & Duties

- 18.1 The bidder shall give the total composite price inclusive of all levies and taxes, packing, forwarding, freight and insurance etc. **The basic unit price and all other components of price need to be individually indicated against the goods it proposes to supply under the tender as per schedule given in Chapter II.** The price shall be firm in Indian Rupees and FOR Destination. No Foreign exchange will be made available by the purchaser.

The breakup of price of each item of SOR in terms of basic Unit price, GST, Freight, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the supplier shall also be quoted separately.

- 18.2 The price quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account.

19. Clause wise Compliance

Clause wise compliance statement of the Technical Specifications and Commercial Terms & Conditions shall be enclosed with the offer along with technical literature of the material and other documents in support of relevant clauses.

20. Provenness of the material/equipment supplied:

In order to enable the Purchaser to assess the provenness of the materials offered, the bidder shall provide documentary evidence regarding the materials being offered by him.

21. Training - Deleted.

22. Inspection

- 22.1** Pre-shipment/pre-dispatch inspection shall be carried out at manufacturer's / supplier's works by authorized representative of RailTel's. The materials should be offered for inspection within 2 to 3 weeks of issue of Purchase Order. Traveling, lodging & boarding expenses of RailTel's representative and charges for 3rd party inspection, if any, shall be borne by RailTel but necessary facilities to carry out tests / witness inspection shall be provided by the manufacturer, free of cost.
- 22.2** Along with inspection call, the supplier / manufacturer shall submit details of test procedures, test programme, test parameters together with permitted values, etc. and their Quality Assurance Plan.
- 22.3** In case material fails during inspection, the same shall be replaced, free of cost, by manufacturer/supplier. In such a case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's/supplier's account. Nominated RailTel Engineer will issue inspection certificate of successfully completion of the test/inspection.

23. Force Majeure

Force majeure shall mean –

- War, hostilities (whether war be declared or not), invasion, act of foreign enemies.
- Rebellion, revolution, insurrection or military or usurped power, or civil war.
- Ionizing radiation, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof.
- Presume waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds.
- Riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the works.
- Loss or damage due to the use or occupation by the Employer of any section or part of the permanent works, except as may be provided for in the contract.
- Loss or damage due to the extent that it is due to the design of the works, other than any part of the design provided by the contractor or for which the contractor is responsible, and
- Any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

24. Settlement of Disputes

24.1 For all commercial contracts with Private entities:

In case of any dispute concerning this order both the supplier and RailTel shall try to settle the same amicably through mutual discussion/negotiations. Any unsettled dispute shall be settled in terms of Indian Act of Arbitration and conciliation 1996 or any amendment

thereof. Place of arbitration shall be New Delhi. Arbitrator shall be appointed by Managing Director, RailTel Corporation of India Limited.

24.2 For all commercial contracts with Public Enterprises/ Govt. Departments:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprise. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator

25. Governing Laws

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

26. Termination for Default

The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default, sent to the supplier, terminate this order/contract in whole or in part.

- a) If the supplier fails to deliver any or all of the goods within the time period(s) specified in the order/contract.
- b) If the supplier fails to perform any other obligation(s) under the contract; and
- c) If the supplier, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the purchaser.

In the event the purchaser terminates the order/contract in whole or in part, the Purchaser may proceed, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered and the supplier shall be liable to the Purchaser for any excess cost for such similar goods. However, the supplier shall continue performance of the order/contract to the extent not terminated.

27. Termination for Insolvency

The purchaser may at any time terminate the order/contract by giving written notice to the supplier, without compensation to the supplier, if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect to the Purchaser.

28. Deleted

29. Submission of Tender Bid (Single Packet System):

29.1 The envelope shall be addressed to the Purchaser at the following address:

**Executive Director/Northern Region,
RailTel Corporation of India Ltd.,
6th floor, Block-III,
Delhi IT Park, Shastri Park,
Delhi-110053.**

29.2 Earnest Money Deposit (EMD) equal to **Rs 8,800/-** (Rs. Eight Thousand Eight Hundred only) in the form of Account Payee Bank Draft in favour of RailTel Corporation of India Limited, payable at New Delhi, should be enclosed with the tender bid. The envelope containing the bid should be sealed by the personal seal of the bidder. **Each and every page of the bid should be numbered and signed by authorized representative of the firm.** Power of attorney in favour of the signatory duly authorizing the signatory shall be enclosed with the bid.

29.3 **The Tender document issued by RailTel should be signed on each page along with stamp of the company/Firm and should be submitted along with bid.**

29.4 The envelope shall bear **name of the supply, the tender no. and the words “DO NOT OPEN BEFORE” (due date).**

29.5 Bid should be delivered to the above address so as to reach up to **15:00 hours** of 13.02.2018 The bids shall be opened at **15:00** hours on the same day in the above office in the presence of those representatives of the bidders who choose to be present. Bids received after due date and time shall be summarily rejected and shall not be opened. If the above said date happens to be a holiday the same shall be done on the next working day.

30.0 **UNIT PRICES**

30.1 The prices quoted by the Tenderer shall include the prices of materials including all incidental charges for transport, loading/unloading and handling of materials, charging for arranging dispatch by rail/road direct from manufacturer's factory. The prices would also include charges towards completing all necessary formalities such as submission of forwarding notes, arranging placement of Wagon, Siding/shunt charges, banker's charges for Bank guarantee, Indemnity Bonds inclusive of cost of Stamp etc. as applicable and also the charges, if any, levied by the RailTel.

30.2 The prices shall include all taxes, duties, Royalty and levies applicable on this contract. Therefore, the bidder should quote their prices taking into account the rate of GST/IGST/CGST/SGST or any other tax leviable on contract. The breakup of price of each item of SOR in terms of basic Unit price, GST/IGST/CGST/SGST, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the tenderer shall be quoted in the SOR. Any changes in statutory duties/taxes after opening of technical bid will be to RailTel's account within the contracted delivery period.

- 30.3 The prices quoted by the tenderer shall include cost of commissioning and testing and all costs of Administration of Contract, Insurance Premium, Banker's charges for guarantees, custom handling, cost of storage in custom and other locations during execution of work, loading-unloading and handling of materials and road transport which the contractor may use for carriage of materials to his depot/ site of work and any other charges incurred towards delivery of the material at site. The prices shall include the cost of works and adjustments necessary to be done by the contractor during or after tests carried out by the purchaser.
- 30.4 The price to be quoted by the tenderers should take into account the credit availed on inputs credit under the GST law. The tenderers should give a declaration that any set off in respect of duties on inputs as admissible under law is being totally and unconditionally passed on to the purchaser in the price quoted by him. The bidder in this regard shall submit the details of breakup of GST and other Tax and Surcharge & Cess on these, so that RailTel can avail the input GST credit benefit. The firm will furnish documentary evidence of such duties/taxes paid, to enable the purchaser to avail GST credit.
- 30.5 The prices quoted in the contract shall be inclusive of all taxes i.e. custom duty, GST levied by any statutory authority, or any other tax. The tenderer will indicate the details of taxes included in the unit price. Offer received without specific details/ breakup of various taxes included in the unit prices are liable to be summarily rejected.
- 30.6 All taxes, duties and levies arising out of the transaction between the contractor and his sub contractor/supplier for this work will be included in the rates quoted by the contractor in the relevant Schedule. Arrangement for all permits/licenses required for delivery of materials at site including Road Permits etc. will be the responsibility of contractor and the contractor will have to make his own arrangements. RailTel shall facilitate by way of authorization /request letters whenever needed. Import license of RailTel can be used for materials procured under high sea sale.

31.0 Fall Back Clause:

The order/contract, if and when placed, will be subject to following **Fall Back Clause:-**

- 31.1** The price quoted by the supplier should not be higher than the maximum price, if any, for the materials and the same shall not be higher than the price usually charged by the supplier for materials of the same nature, class or description to any other purchaser.
- 31.2** The price charged for the materials supplied under the order/contract by the supplier shall in no event exceed the lowest price at which the supplier sells the materials of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such materials or sells such materials to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchase and the price payable under the contract for these materials supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

31.3 If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to terminate the order/contract and purchase the materials at the risk and cost of the supplier and in that event the provision of General Conditions of tender shall, as far as possible, be applicable or recover the loss.

31.4 The Contractor shall furnish the following certificate to the concerned Account Officer along with each bill for payment of supplies made against the order/contract:

“I/We certify that there has been no reduction in sale price of the stores of description identical to the stores supplied to the Government under the contract herein and such stores have not been offered/sold by me/us to any person /organization including the purchaser or any Department of Central Government or any Railway Office or any Railway Undertaking as the case may be up to the date of bill/the date of completion of supplies against all supply orders placed during the currency of the order/contract at a price lower than the price charged to the RailTel, Northern Region, under the contract.”

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Chapter IV

Form- A

PROFORMA FOR PERFORMANCE BANK GUARANTEE

(On Stamp Paper of requisite value)
(To be used by approved Scheduled Banks)

In consideration of the RailTel Corporation of India Limited, registered & regional office at 6th floor, Block-III, Delhi IT Park, Shastri Park, Delhi-110053 (hereinafter called "the RailTel") having agreed to exempt (M/s. Party Name and Address).....
..... (hereinafter called "the said Contractor(s)") from the demand, under the terms and conditions of an Agreement No.(P.O No.)
Dated.....made between and..... for (Name of Work) (hereinafter called "the said Agreement") of Security Deposit for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said Agreement, or production of a Bank Guarantee for Rs. (Rs. Only). We,(Bank Name and Address)) 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 PO/Agreement.

1. We, Bank (Bank Name and Address) do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage 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 PO/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.

2. We, Bank (Bank Name and Address) 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.

4. We, Bank (Bank Name and Address) 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 PO/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.

5. We, (Bank Name and Address) 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 of 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 affect of so relieving us.

6. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) Supplier(s).

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

8. Notwithstanding anything contained herein,

Our liability under the Bank guarantee shall not exceed Rs. (In Rupees)

This Bank Guarantee shall be valid upto and

we are liable to pay the guaranteed and or any part thereof under this Bank Guarantee only and only if you serve upon is a written claims or demand or before(date of expiry of guarantee)

_____ Dated the _____ day of _____ 2018
for
(Indicate the name of the Bank)

Witness

1. Signature

Name

2. Signature

Name

.....

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STATEMENT OF DEVIATIONS

(PROFORMA FOR STATEMENT OF DEVIATIONS)

1. The following are the particulars of deviations from requirements of the conditions of Contract

Commercial Terms & Conditions (Chapter -III)

Clause	Deviation	Remarks (Including Justification)
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2. The following are the particulars of deviations from requirements of the Technical specifications (Chapter -V)

Chapter	Clause	Deviation	Remarks (Including Justification)
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Note: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating “**no deviations**”.

SIGNATURE AND SEAL OF THE
MANUFACTURER / TENDERER

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Chapter V

TECHNICAL SPECIFICATIONS OF MEASURING INSTRUMENTS

SDH/PDH Analyzer		Annexure-I
	Make	JDSU/DLI USA/ANRISHTU/Sunrise Telecom or equivalent.
Clause No	Technical Specification of SDH/PDH Analyzer for STM-4, STM-1, DS3, E1 interface with channel level testing. It also includes supply of all related items/accessories required for measurement purpose.	
1.1	General Requirements	
1.1.1	A single platform that can house Next Generation Multiservice and Multi rate test module (from 2M up to 622M). The Test Instrument proposed shall be highly portable, battery operation and cover testing interfaces and applications for SDH.	
1.1.2	The proposed Test Instrument shall be highly modular to meet today and future network expansion testing applications :- i) Support PDH/SDH interface testing from 2M up to 622M/STM-4 (E1 (120 ohm), STM-1, STM-4).	
1.1.3	The proposed Multiservice test module shall have a combined functions of STM-1/STM-4.	
1.2	Test Equipment Requirements	
1.2.1	The test platform shall have following interfaces: i) Minimum two port of USB 2.0.	
1.2.2	The test platform shall support battery operation for field deployments in addition to AC power supply	
1.2.3	The Test Instrument shall have internal Memory of at least 1 GB.	
2.1.1	Data Rate	E1,STM-1,STM-4 with ± 4.6 ppm SFP/SFP+ for STM-1/STM-4 (1310 and 1550nm)
2.1.2	Clock Reference	Internal: Stratum 3 Clock Generation/Accuracy: 0.1ppm/Offset Range: 100ppm External: 2Mhz/10Mhz Received Signal
2.1.3	Coding	E1: HBD3 STM-1/STM-4: NRZ
2.1.4	Optical Input and Output range for the optical ports (physical/SFP) should be specified by the supplier	
2.1.5	Frequency Offset	The test instrument shall able to display deviation between received frequency and clock frequency in ppm for both electrical and optical interfaces. A minimum of 50 ppm frequency offset should be supported by all the interfaces
2.1.6	Test Pattern	PRBS, Word PRBS:

		No Frame: $2^{15}-1, 2^{23}-1, 2^{31}-1$
		Invert On/Off
		Word: 16/32bit programmable
2.1.7	Modes of Operation	Coupled: The transmitting/receiving rate shall be same. Monitor mode : The ability to monitor the incoming signal. Through mode : The ability to connect the tester is intrusive pass-through mode.
2.1.8	Overhead Byte Analysis/Manipulation	The following overhead byte shall be displayed and can be manipulated J0, J1, J2, S1, D1-D12, K1, K2, G1, E1, F1, N1, N2
2.1.9	Pointer Movement Analysis	The test instrument shall measure and count negative and positive pointer in high-order and low-order with/without NDF
2.1.10	Alarm Analysis/insertion	The test instrument shall detect, display and count following alarm function: LOS, LOF, OOF, MS-AIs, MS-RDI, AU-AIS, AU-LOP, H-TIM, HP-RDI, TU-AIS, TU-LOP, LP-SLM, LP-TIM, LP-RDI, Patter Loss, Pattern Synchronization The test instrument shall able to inject alarm on RS/MS and path layers for any optical signal.(STM-1/STM-4)
2.1.11	Error Analysis/Insertion	The test instrument shall able to detect, display and count following errors: B1, A1/A2, B2, MS-REI, B3, HP-REI, LP-BIP, LP-REI The test set should able to insert error as Single and Multiple.
2.1.12	Round Trip Delay Measurement	The test instrument shall measure minimum, maximum and average RTD
2.1.13	Service Disruption Time Measurement	The shortest/longest disruption, service disruption count. It should support all alarms of SDH.
2.1.14	Performance Analysis	The test instrument shall support ITU-T recommendation and its monitoring parameters G.821, G.826, G.828, G.829, M.2100, M.2101
2.1.15	Tandem Connection Monitoring	The test instrument shall analyse N1 and N2 bytes; monitor and display and alarms and errors like AIS, RDI, REI, B3, TC-UNEQ, TC-BIP.
2.1.16	APS Time Measurement	The test instrument shall able to measure of automatic protection Switching
2.1.17	Remote Control	The test shall be controlled remotely and have automatic capabilities to run the test and the result of the test should be viewed remotely.
2.1.18	Event Log	The test parameters such as start/end/duration of the test, the count of errors/alarms shall be displayed in the screen and also shall be able to transfer as pdf/html/xls/doc file.
2.2	<u>Ethernet Specification</u>	

2.2.1	Interfaces:	10M/100M/100M (RJ45)
2.2.2	Tx/Rx Measurement Accuracy	±4.6ppm for all data rates
2.2.3	Jitter Compliance	IEEE 802.3 for 10M/100M/1000M
2.2.4	Connector	RJ45(Electrical), LC(Optical)
2.2.5	Measurement Capabilities	-ITU- Y.1564/ instrument
		-RFC-2544
		-BER Testing
		-Multiple Traffic Generation and Analysis
		-Dual Test set mode
		-RFC-6349
2.2.6	ITU-T Y.1564/ITU-T Y.156SAM	
2.2.7	The test instrument shall support ITU-T Y.1564 Ethernet Service Activation Methodology.	
2.2.8	The test instrument shall support complete Y.1564 test suite including Service Configuration Test and Services Performance Test. Each test mode can be executed either separately or both at the same test.	
2.2.9	The test instrument shall support throughput measurement in terms of CIR and EIR as defined by the ITU-T Y.1564.	
2.2.10	The test instrument shall support Committed Burst Size (CBS) and Excess Burst Size (EBS) measurements as part of Y.1564.	
2.2.11	The test instrument shall be capable of operating in a dual test set mode, enabling two test sets to run end to end Y.1564 testing over two different exchanges or premises at the same time.	
2.2.12	The test instrument shall display the following SLA parameters:	
	- average throughput (Mbps), frame loss (%), max jitter (ms), max latency (ms)	
	- detailed analysis with counter of max, min, current and average for throughput.	
	- detailed analysis with counter of max, min, current and average for Round Trip Latency.	
	- sequence tracking of out of sequence and frame loss in seconds, count, rate and percentage.	
	- pass/fail analysis.	
2.2.13	RFC 2544	
2.2.14	The test instrument shall support RFC-2544 testing including; Throughput, back-to-back, frame loss and latency measurements.	
2.2.15	The test instrument shall support two test sets to simultaneously generate and receive traffic in both test directions.	
2.2.16	Ber Testing	
2.2.17	The test instrument shall support Ethernet testing with Unframed, framed layer 1, framed layer 2 supported with or without VLAN Q-in-Q.	
2.2.18	The test instrument shall support Ethernet Service Disruption Time measurement with shortest/longest/count of disruption	
2.2.19	Multiple Traffic Generation and Analysis	

2.2.20	The test instrument shall support the ability to transmit up to 10 services with configurable parameters including; packet size, user configurable profile (Voice, Video, Data), MAC address, VLAN ID, VLAN priority, IP source/destination address, ToS field, DSCP field, TTL, UDP/TCP source/destination port and payload.
2.2.21	The test instrument shall support configurable traffic filters with the following parameters; MAC source/destination address, VLAN ID, VLAN priority, IP source/destination address, ToS field, DSCP field, TCP source/destination port and UDP source/destination port.
2.2.22	The test instrument shall support VLAN stacking as per IEEE 802.1ad Q-in-Q.
2.2.23	The test instrument shall support MPLS testing with the ability to generate and analyse streams with up to two layers of MPLS labels and to filter received traffic by MPLS label or COS.
	The test instrument shall support PBB testing capabilities including;
	- Generating and analysing streams with PBB data traffic
2.2.24	Ping Test
2.2.25	The test instrument shall provide the ability to ping destination parameters directly from the stream configuration for troubleshooting purposes.
2.2.26	The test instrument ports shall be able to support the PING functionality. The test set ports shall be able to receive and respond to a PING request over IPv4 and IPv6 with manual and automated configuration.
2.2.27	Event Log/Packet Capture
2.2.28	The test instrument shall be able to generate pdf/html report of test result with time stamp,error/alarm type.
2.2.29	The test set shall support third party packet capture application tools:
	- Wireshark- Packet capture
	And, it should also provide the feature to decode the issue in terms of Layers 1, 2, 3, 4 for easy troubleshooting and rectification of the issue.
2.2.30	Alarm Analysis
2.2.31	The test set shall support the following 10M to 100 MB Ethernet alarm and error measurements;
	- Insertion: LOS, link down, local fault, remote fault, pattern loss . WAN: SEF, LOF, AIS-L, RDI-L,
	- Detection: LOS, link down, local fault, remote fault, and frequency offset, pattern loss (BERT). WAN: SEF, LOF, AIS-L, RDI-L
	- LAN/WAN: jabber/giant, runt, undersize, oversize, FCS
	- WAN: B1, B2, B3, REI-L, REI-P, UDP, TCP and IP header checksum
2.3	Accessories
2.3.1	1.Necessary SFP shall be provided
	2.The carrying case shall be provided
	3. Necessary software/driver shall be provided.

END
