



आईटीआई लिमिटेड
नेटवर्क सिस्टम्स युनिट
सामाग्री प्रबंधन विभाग
एफ - 100, पश्चिम विंग
दूरवाणीनगर, बेंगलूरु - 560 016, भारत
फोन : +91 (80) 2566 0508
ई.मेल : materials_nsu@itilttd.co.in
ISO 9001 : 2015 प्रमाणित युनिट

ITI LIMITED

**Network Systems Unit
Materials Management Dept.**

F-100, West Wing,
Doorvaninagar, Bengaluru - 560 016, India
Tel : +91 (80) 2566 0508
E-mail : materials_nsu@itilttd.co.in
ISO 9001: 2015 Certified Unit



ITI Web-Site/ Govt. Portal

ENQUIRY

NSU 6J 88H

DATE 01 10 2026

Dear Sir / Madam, please quote your best price and delivery for supply/service of the following item/s,

Sl.No.	Item Description as per Technical Specifications
1	SUPPLY OF SDH Analyser (1/4/16) with Jitter & Wander -TEST INSTRUMENT
	<u>Please refer following enclosures before submitting tender:</u> Annexure A: General Terms & Conditions for submission of Tender Annexure B: Tender Document Annexure C: Price Bid

Please refer tender document vide Ref. No. ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026

Tender Due Date	22/10/2026, 14:00 Hrs	Tender Opening Date	22/10/2026, 15:00 Hrs
Tender Opening Venue	Materials Management Dept., N.S. Unit, I.T.I. Ltd., Dooravaninagar, Bengaluru- 560 016		
Scope of Work	As per tender document: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026		
Delivery	As per tender document: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026		
Terms of Payment (TOP)	As per tender document: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026		
Performance Bank Guarantee	As per tender document: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026		
Compliance	Point-wise compliance to each item/ Clause mentioned in Tender Document.		
Validity of the offer	180 days from the last date of submission of Bid	Tender Fee: Rs. 5,900.00/- (incl. GST)	
Earnest Money Deposit	Rs. 1.19 Lakhs/- . As per tender document: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026/ Valid MSE certificate along with Bid Securing declaration. The EMD is normally to remain valid for a period of 45 days beyond the final bid validity period.		

All other terms and conditions as per Tender Document vide refer No: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026

Note: Offers should be submitted online as per tender documents.

For submission of online Bid & Procedure to be followed visit (<https://itilimited.ewizard.in>)

All Vendors have to register in website & pay the tender processing fee if required:(<https://itilimited.ewizard.in>) for submitting online BID.

For ITI Ltd., N S Unit,

(Signature)
01/10/2026

Addl. General Manager (MM)-NS

पंजीकृत एवं निगमित कार्यालय : आईटीआई भवन, दूरवाणीनगर, बेंगलूरु - 560016, भारत फोन : +91 (080) 2561 4466, फैक्स : +91 (080) 2561 7525

Registered & Corporate Office : ITI Bhavan, Doorvaninagar, Bengaluru - 560016, India Phone: +91(080) 2561 4466, Fax: +91(080) 2561 7525

TIN : 29980058837 GSTIN : 29AAAC14625C2ZU CIN : L32202KA1950GOI000640 Visit our Website : www.itilttd.in



1. PRICES:

- (a) ITI Ltd., is planning to have long term tie up with limited vendors, who can supply the item with good quality, prompt delivery and at lowest price. Hence, you may quote in such a way that a long-term relationship is possible.
- (b) Prices must be per unit as called for in the enquiry and should be on FOR ITI/FOR destination basis as the case may be and inclusive of insurance charges.
- (c) ITI Ltd., under normal circumstances, may not negotiate for the price. Hence you are requested to quote your best price in the original quotation itself.
- (d) Any counter terms and conditions are not binding on us unless ITI Ltd., agree to the same in writing.
- (e) In case of an order issued on you, the ordered rate should be firm till the completion of the order. In case where the market prices are going down beyond 5% of the ordered rate or decrease in the statutory levies, the same should be passed on to ITI Ltd.
- (f) Vendors should deliver the materials to ITI Ltd., Stores/the destination as mentioned in the P.O. ITI Ltd., will not take the responsibility of clearing the goods from the carriers godown/office/Railway Station/Airport, etc.
- (g) If the supplier supplies the same item at a lower rate to any of their customers during the pendency of execution of ITI Ltd., Purchase Order/ Order Amendment, the supplier should voluntarily come forward and reduce the price.
- (h) The validity of your offer should be for a minimum period of (As main sheet No. NSU 6J 88H) from the date of opening the tender.
- (i) Any Plant/division of ITI reserves the right for placement of Repeat Order if required within one year of original PO date.

2. TERMS OF PAYMENT:

- (a) Payment will be made for the accepted quantity/services as per Main sheet NSU 6J 88H from the date of receipt of the material / services at our Stores / Destination.
- (b) No payment will be made for the rejected quantity.

3. INSPECTION: :(As per Enquiry NSU 6J 88H)

- (a) ITI reserves the right to split the purchase order among the vendors who are capable of meeting the Quality, Delivery and Cost requirements. Preference will be given to the vendors with well-maintained and proven Quality Assurance.
- (b) We are planning to reduce inspection time with self-certification scheme for the vendors who keep up good quality leading to "ship to stock system".
- (c) Inspection of the material at our works/site will be final. ITI reserves the right to inspect the material at any other standard testing centre authorised by us.
- (d) We or our representative including our customer may if required preliminarily inspect the product at vendor's premises. Such verification shall not absolve the vendor of the responsibility to provide the acceptable product nor shall preclude subsequent rejection during the final inspection at our works/site. It is the responsibility of every vendor to ensure that only the inspected materials conforming to our specifications / drawings / requirements are supplied.
- (e) The supplies shall be from the latest batch of production. Batch Number should be indicated on the item/ packet / test certificate and accompanying delivery challan / test certificate.
- (f) Test Certificate/check list should accompany each supply. Consignments without test certificate, if asked for, are liable for rejection. Rejected material should be collected immediately (within 30 days) after our intimation by giving two days' prior notice for completing the necessary excise formalities. You should make arrangements to collect the material either personally OR through your authorized representatives. ITI does not take any responsibility to send the material back to you. After 90 days from the date of rejection intimation to you the material will be scrapped at your risk if not collected.

4. SAMPLES:

Those tenderers, who have not supplied the material against any of earlier orders, should submit FREE SAMPLES clearly indicating enquiry reference. Free samples along with your offer is preferable. In case of a Purchase Order on you, bulk supply should commence only after approval of samples and other approval formalities including infrastructure clearance.

5. WARRANTY:

ITI Ltd., is an ISO accredited company. All our equipment systems have a warranty as per Enquiry No NSU 6J 88H from the date of despatch to our customer. Hence, the warranty of your products should be as per Enquiry No NSU 6J 88H from the date of supply if not specified explicitly. Within this warranty period, if any of your components/subsystem is found defective during our manufacturing process/system testing/installation & commissioning/operation of our equipment in the field, the same is to be replaced free of cost immediately by you. Warranty specified in the P.O. to be reckoned as final.

6. GENERAL:

- (a) We reserve the right to accept or reject any or all offers and to order full or part quantities or cancellation thereof without assigning any reason whatsoever.
- (b) Successful tenderer only will be intimated by post through letter of intent / firm orders.
- (c) Canvassing by tenderers in any form including un-solicited letters against tenders submitted or post-tender corrections shall render their tenders liable for summary rejection.
- (d) Any Plant/division of ITI reserves the right for placement of Repeat Order if required within one year of original date.

7. DELIVERY SCHEDULE: (As per Enquiry NSU 6J 88H)

- (a) Please indicate minimum lead-time required, manufacturing capacity and the quantity that can be reserved for us.
- (b) **Liquidated Damages Clause:** Time is the essence of contract and the materials, against an order arising out of this enquiry must be delivered by the supplier according to the delivery schedule indicated in the P.O. In case of any change, the supplier should inform us in advance and obtain our approval to the revised delivery schedule. Should the supplier fail to deliver the material or part thereof as per the delivery schedule or any extension thereof, we shall be entitled at our option either to recover from the supplier as penalty a sum equivalent to 0.5% per week (fractions of a week will be considered as one week) for such delay or part thereof of the item delayed (subject to a maximum of 15% of purchase order value) and purchase the material elsewhere at the risk and cost of the defaulted suppliers.

8. LOCAL REPRESENTATION:

Please indicate your local representative's address, telephone, Fax No., of the person to be contacted, in the offer.

9. TECHNICAL CATALOGUE:

The Technical Catalogue in English should be submitted. In the event of any change in the technical catalogue, updated version may be sent to us immediately. It is essential that you simultaneously take up the same with approval authority and their approval copy sent to us.

10. GOVERNING LAW:

All suits shall be instituted in a court of competent jurisdiction at Bangalore and in case of arbitration, the Indian Arbitration Conciliation Act, 1996 is applicable.


01/10/2026
Additional General Manager-MM(NS)

Annexure-B



Network System Unit

(A Govt. of India Undertaking)

Dooravaninagar. P.O. Bengaluru – 560 016

Tel : 080 - 28503639, Fax: 080 – 28503653

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TENDER FOR SUPPLY OF SDH Analyser (1/4/16) with Jitter & Wander -TEST INSTRUMENT

[TWO BID SYSTEM]

(Technical Bid & Finance Bid)

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

1. INTRODUCTION

ITI Limited, a Public Sector Undertaking under the Department of Telecommunications, Ministry of Communications, is a leading Telecom equipment manufacturer and device provider in India. The major customers are BSNL, BBNL, MTNL, Defense, Paramilitary forces, Railways, Banks, Central & State Govt. departments, Institutions and research organizations. ITI has a pan India business footprint supported by the network of its Manufacturing units & MSP (Marketing, Services and Project) units at various locations.

ITI Limited has been undertaking various projects in all fields of telecommunications and information technology and also continuously deploying new technologies in the field of Telecom, ICT, Networking, e-Governance etc. ITI has diversified its operation and has been executing Turnkey projects in the field of Smart Infrastructure, Bharatnet, and Defense Network Rollout etc.

2. GENERAL TERMS & CONDITIONS INFORMATION

NAME OF WORK: This Tender is being floated for Supply of “SDH Analyser (1/4/16) with Jitter & Wander”

SL NO	DESCRIPTION	INFORMATION
1	REFERENCE NO. OF TENDER DOCUMENT	Ref: ITI/NSU/ASCON/Test Instrument/SDH Analyser dated 01.10.2026
2	DATE OF UPLOADING OF TENDER DOCUMENT	01.10.2026
3	MODE OF SUBMISSION OF TENDER	https://itilimited.ewizard.in
4	LAST DATE & TIME FOR SUBMISSION OF BIDS	22.10.2026 AT 14.00 Hrs
5	DATE & TIME OF OPENING OF TECHNICAL BIDS	22.10.2026 AT 15.00 Hrs
6	OPENING OF FINANCIAL BIDS	WILL BE INTIMATED LATER
7	TENDER FEE	Rs. 5,900.00/-
8	EARNEST MONEY DEPOSIT (EMD)	1.19 Lakh (Interest free EMD has to remain valid for a period of 90 days beyond the final bid validity period) or Bidders registered with MSME need not to submit the EMD. Such firms should produce proof of registration in own name with MSME and NSIC and should provide Bid Security Declaration form.
9	FINANCIAL TURNOVER	17.86 Lakhs
10	ADDRESS FOR BID SUBMISSION	https://itilimited.ewizard.in
11	VALIDITY	180 days from the last date of submission of bid.
12	PERFORMANCE BANK GUARANTEE	5% of Tender cost, valid throughout warranty period + 60 days

Signature of the Bidders with Stamp & Date

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

13	LEAD TIME FOR SUPPLY	Within 4 weeks from the date of request in a staggered manner or else LD will be applicable.
14	ESCALATION	NIL
15	CONTACT PERSON	AGM MM -For queries. krkannan_nsu@itilttd.co.in , materials_nsu@itilttd.co.in , For Technical Queries. sunil_nsu@itilttd.co.in
16	ESTIMATED COST	Rs 59.52 Lakhs. (Including GST)
17	Warranty	Warranty of the supplied equipment shall be for 03 (three) years from the date of acceptance of the Material after successful completion of JRI with end user or 03 months after receiving the materials whichever is earlier.

A. Material Delivery Address:

Materials should be delivered at any location in North-India without any extra cost. Final delivery schedule will be shared after release of final PO to successful Bidder.

Material should be delivered at any location in North-India [approximately Eight (08) locations]. Detail address of consignee will be shared later.

3. The tenders are invited in **TWO BIDS**, consisting of **Technical Bid** as per **ANNEXURE-1 {Part-A (BoQ) and Part-B (Technical specification)}** and **Price/Commercial Bid** as per **Annexure-C**.

Tender Bid [Technical Bid]

Documents to be uploaded by the Bidder (Please upload supporting documents wherever required & applicable)

Sl. No.	Description	Compliance Documents to uploaded	Attachments	
			Yes	No
1.	Tender fee documents for submission/bidding of tender (If required as per tender fee)			
2.	Technical Bid [Part-A (BoQ) & Part-B (Technical specification)]	As per ANNEXURE-1		
3.	Technical Compliance Sheet	As per ANNEXURE-12		
4.	Documents in support of submission of EMD or MSME registered with Undertaking for "Bid Security Declaration Form"	As per ANNEXURE-2		
5.	Company Profile			
6.	GST & PAN registration certificate			
7.	Copy of Power of Attorney of authorized signatory of the bid on stamp paper duly notarized			

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

8.	Financial turnover for the last three years certified by the Chartered Accountant with registration number	As per ANNEXURE-3		
9.	Work completion certificate/Experience during the last Five years	As per ANNEXURE-4		
10.	Self-declaration for not having any litigation history			
11.	All the pages of tender documents stamp signed/ digitally signed			
12.	Product Data Sheet / Brochure SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument			
13.	Signed Pre-contract Integrity	As per ANNEXURE-5		
14.	Mutual Non-disclosure agreement	As per ANNEXURE-6		
15.	Compliance to No Variance/Deviation In Bid	As per ANNEXURE-7		
16.	Undertaking that the Bidder has not been Blacklisted/ Debarred	As per ANNEXURE-8		
17.	Affidavit for proprietary/partnership deed/article of association			
18.	Single point of contact (SPOC) details for official communication (Name, Mobile no., Email id, Address).			
19.	Income Tax Return for the last three financial years			
20.	Tentative Delivery Schedule	As per ANNEXURE-9		
21.	OEM Authorization Certificate			
22.	Annual Maintenance Contract for SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument	As per ANNEXURE-10		
23.	Undertaking for "Declaration of Bidders"	As per ANNEXURE-11		
24.	Un-Priced Finance-Bid (Fill & upload separately)	As per ANNEXURE-13		
25.	Undertaking from OEM- Non- "Country of Concern", Non-malicious code certificate from OEM & IT Act 2000 (No 21 of 2000)	As per ANNEXURE-16		

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

FINANCIAL BID [PRICE/COMMERCIAL BID]

The **Price/Commercial Bid**, consists of a document with the rate quoted in figures and words only in separate sealed Envelope/online uploaded quoted sheet as per **Annexure-C**. Incomplete price bid is liable for rejection.

- i. Bidder /Firms who fulfill the requirements as mentioned in this tender document shall be eligible to apply.
- ii. Bidder can upload documents in the form of PDF format only.
- iii. Bidder must ensure to quote rate items separately as per format given in **Financial Bid** as per **Annexure-C**.
- iv. If any cell is left blank and no rate is quoted by the bidder, Rate of such items shall be treated as rupees “0” (ZERO) or rejected for Bidding.
- v. The eligibility documents shall be opened first for technical bid on due date and time as mentioned above. Financial evaluation of Bidders/Firms who qualified in technical evaluation will be opened on the later date.
- vi. ITI Limited reserves the right to reject any or all the tenders without assigning any reason thereof.
- vii. The rates will be submitted as per the financial bid (**Annexure-C**). Financial bid in another format shall be liable to be rejected. In case, if the bidders do not submit any tender relevant document as mentioned in Technical Bid, his bid will be outright rejected and bid will not be considered for further evaluation.
- viii. As the items will use in Defence Project therefore only Non-Chinese items will be accepted. Bidder shall also submit the undertaking for supply of Non-Chinese items (Undertaking format is given in relative Annexure in tender document).
- ix. **GOVERNMENT LAW:** - All suits shall be instituted in a court of competent jurisdiction at Delhi and in case of arbitration; the Indian Arbitration Conciliation Act 1996 is applicable. Tender documents shall be filled, signed and submitted/Uploaded in original. The submitted Tender shall consist of the following:

Note:

- Tenders not submitted on time will not be considered and will be summarily rejected. Tender documents shall be filled and submitted in original all pages of tender documents to be sealed and signed/digitally signed [Submitted along with the technical bid].
- The conditional tender will not be considered and will be summarily rejected.
- There shall not be any financial quote in the Technical Bid, if it is added then said bid will be summarily rejected.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

4. ELIGIBILITY CRITERIA FOR THE BIDDERS

I. **Company Profile:**

- Profile of the Bidder indicating the name of the Company/Organization, address, communication details (mobile numbers, landline numbers, fax numbers, e-mail ids for correspondence), name of the contact person, designation of the Bid submission authority.
- The Bidder shall be a Company incorporated /registered in India under Companies Act 1956/2013/ proprietorship/ partnership firm/ Limited Liability Partnership (LLP).
- Bidder shall have experience of working with CPWD, Railways, Defense, Department of Post, State PWDs, State/Central PSUs and Semi-Government Organizations in the same field.

II. **WORK EXPERIENCE:**

Bidder should have relevant experience in the field of Supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument and Maintenance and should have experience of having completed similar works during the last 5 (Five) years ending 31st March 2026 as indicated below.

- a. Three similar works each costing not less than 40% of the estimated cost put to tender
or
- b. Two similar works each costing not less than 50% of the estimated cost put to tender
or
- c. One similar work costing not less than 80% of the estimated cost put to tender.

Similar works mean Supply of SDH Analyser (1/4/16) with Jitter & Wander, Maintenance and Training. The experience in similar nature of work should be supported by certificates issued by the client's organization. The bidder has to submit Letter of work order for Completion certificate.

Work Experience certificate: Bidder shall submit the work experience certificate as per format given in **ANNEXURE-4**.

In case bidder submits work experience certificate issued by private companies/entities, the bidder shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, in support of work experience certificate. PO details, completion certificate.

III. **FINANCIAL STRENGTH:**

The average annual financial turnover on Supply for the last 3 years shall not be less than 30% of the estimated cost. The requisite Turnover shall be duly certified by a Chartered Accountant with his seal/Signatures and registration number as per format given in **ANNEXURE-3**.

- The Bidder shall have a **positive Net Worth** at the end of the financial year.
- The Bidder shall submit Audited financial statements **for last three years by CA**.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

5. EARNEST MONEY DEPOSIT (EMD)

As specified in the tender document EMD of Rs. 1.19 Lakh/- shall be payable with the bid. EMD will remain valid for a period of 45 days beyond the final bid validity period. Micro small Enterprise (MSE) Organizations and Start-ups are exempted from EMD. But bid securing declaration form need to be submitted as **ANNEXURE-2**.

This shall be paid well in advance of tender submission time through Bank Guarantee / Online Payment through eWizard payment gateway in favour of ITI Ltd, N.S. Unit, Bangalore-560016. The Bank details is attached as **ANNEXURE-17**. Proof/receipt of payment of cost of EMD to be uploaded.

Note: The Bank Guarantee / Online Payment through eWizard payment gateway shall be indicated on the letter head along with a scanned copy of the above payment must be uploaded during tender submission.

5.1 The EMD may be forfeited:

- If a bidder withdraws the bid after bid opening during the period of validity.
- The information provided by the bidder is found to be false/forged document have been provided. This will entail black listing of the tender also.

IN CASE L1 BACKS OUT: in case The bidder withdraws during the technical evaluation and before financial bid opening, still the technical bid of such bidder will be evaluated and in case such bid is technically suitable and happens to be L-1, then also the tender has to be discharged and EMD of the bidder will be forfeited.

5.2 Return of Earnest Money deposit: No interest shall be allowed on the Earnest Money deposit by the Bidder. The earnest money of the unsuccessful bidder will be refunded on their request after the finalization of the contract.

5.3 The Earnest Money deposited by the successful bidder will be adjusted towards the Security deposit for the fulfilment of the contract.

5.4 EMD shall be forfeited if the Bidder fails to submit the balance amount of Performance Bank Guarantee within 30 Days (i.e. 5% of the tendered value - the requisite security deposit).

6. PERFORMANCE CUM WARRANTY BOND:

PBG for supply and testing etc. will be submitted by Bidder in the form of Performance Bank Guarantee (PBG) equal to 5% of the Purchase order value through the scheduled bank of India in favour of ITI.

6.1 PBG to be submitted by successful bidder awarded the PO as per above to ensure due performance.

6.2 PBG has to be furnished within 15 days from the date of issue of LOI and should remain valid for a period of 60 days after the completion of 3 years' warranty obligation of the Bidder.

6.3 If the PBG validity is going to expire before completion of project (i.e. before obtaining NOC/Commissioning Certificate), it will be obligatory on bidder part to extend the PBG validity period accordingly.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

6.4 No interest shall be allowed on the PBG by the Bidder.

6.5 Bidder shall submit separate PBG for AMC at the time of award of AMC contract PO.

7. LIQUIDITY DAMAGES (LD) CLAUSE:

LD shall be as per ITI Clauses (@ 0.5% of order value per week or part there of subject to a maximum of 10% of the undelivered portion/ the order value (if the item(s) cannot be used unless full supply is made) or to cancel the order and purchase the materials from alternative source at the risk and cost of the supplier) OR as per the end customer PO/tender clause whichever is higher.

The timelines for completing the work shall be as defined in the P.O. released to the successful bidder and any delay shall trigger LD clause as mentioned above.

Delay attributed to **Force Majeure** or enhancement in the scope of work by the way of modification or delay on the part of ITI in the clearing the site, furnishing of clarification, Supply of ITI materials etc. shall not attract LD.

8. PAYMENT TERMS AND CONDITIONS:

- a) Delivery of the material shall be in Single Lot within 12 Months from the date of successful completion PDI as per technical specification of materials.
- b) ITI will issue a Release Order confirming the quantity to be supplied consignee-wise at respective sites as delivery plan shared by ITI.
- c) LCs will be opened against Purchase Invoice (PI) raised by bidder.
- d) Payment terms will be as given below.
 - 80% through LC with usance period of 90 days from the date of delivery. Certificate of receipt of material indicating date of delivery, will be issued by ITI after receipt of ordered materials at site and physical verification between M/s ITI Ltd & Bidder at site.
 - 20% against successful completion of JRI or within 6 months from the date of supply whichever is earlier of supplied equipment at location with usance LC period of 180 days.
 - All bank charges w.r.t, LC opening, extension, amendment and retirement, would be borne by the bidder.

9. SPECIAL TERMS AND CONDITIONS:

10.1 Bidder shall submit the following documents with the bid:

- (i) Bidder shall Supply the Material not manufactured in 'Country of Concern' and submit the Undertaking from OEM stating that:

Final delivery/supply of equipment/cards as part of Project "Customer project name" including spares / maintenance equipment to be provided during the warranty and AMC period will be Non-'Country of Concern' for "Customer project name."

Please Note- 'Country of Concern' implies country sharing land border with India (Refer ANNEXURE-16)

- (ii) The Bidder shall submit the non-malicious code certificate for the offered Hardware and software.
- (iii) Point wise compliance to all the Annexures.

Signature of the Bidders with Stamp & Date

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

- (iv) List of spares
 - (v) Product Data sheet/Brochure of each quoted item.
 - (vi) OEM authorization Certificate mentioning tender reference
 - (vii) Letter from OEM stating that the offered product will be supported by **OEM for next 13 years as the project life time is about 13 Years (2 years Implementation +3 years Warranty +8 years AMC)**, so minimum 13 years' life span of the equipment is required. In case OEM fails to support for 13 years, then it will be bidder's responsibility to provide support during the left out period.
 - (viii) In case, Bidder fails to provide the support for any item due to EOL/EOS/any circumstance beyond control at any stage of the project, then Bidder shall provide the compatible replacement item meeting all the operation and functional requirement without any extra cost to ITI after approval from end customer.
- 10.2 End of Life (EOL) or End of Sale (EOS) of any offered product should be notified to ITI one year in advance. Bidder has to support during the Change management process for EOL/EOS products/items.
- 10.3 Any BG submitted by bidder has to be from an Indian nationalised bank only.
- 10.4 Authorised channel partners are eligible for participating on behalf of OEMs, but they have to qualify for all eligibility criterion of this tender and have to submit Authorisation certificate from respective OEM.
- 10.5 Cost of calibration will be quoted separately in finance bid.
- 10.6 Lowest Bid will be decided on the basis of total cost of Supply of items, AMC Charges and calibration charges.

Note: This RFP may be cancelled/withdrawn at any stage of the tendering process without any reason and prior intimation to bidders.

If required, selected Bidder may have to go through Technical Evaluation for the offer equipment by the Technical Evaluation Committee (TEC) constituted by End customer.

10. WARRANTY

- (i) Warranty of the supplied equipment shall be for 03 (three) years from the date of acceptance of the Material after successful completion of JRI with end customer or 03 months after receiving the materials whichever is earlier.
- (ii) Warranty of equipment shall cover calibration of Equipment, software upgradation, repair/replacement of faulty hardware, technical support through telephone, Email or onsite visit without any extra cost.
- (iii) Acceptance of the material shall mean receipt of material and functionally working.
- (iv) Calibration of the equipment during the warranty period will be the responsibility of the bidder.
- (v) TAT (Turn-around time) for faulty card / equipment will be 22 days from the date of reporting of fault in the equipment by ITI to the supplier and date of receipt back of the rectified equipment at centralized location in North-India. The collection point for the faulty equipment will be at centralized location in North-India. Exact location detail will be shared later.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

- (vi) The LD/penalty 0.5 to max 10% will be recovered as per Tender from the Performance Bank Guarantee (PBG). If the amount exceeds that of PBG the balance amount will be adjusted against the payments made to the Bidder till the penalty amount is recovered fully.
- (vii) AMC clauses are equally applicable during the warranty period of the Project.

11. ANNUAL MAINTENANCE CONTRACT (AMC)

- a) Bidder shall provide (08) 'eight years' maintenance support post (03) 'three years' warranty for the quoted items. (Refer **ANNEXURE-10** for details).
- b) ITI will release separate order for AMC as per the requirement based on this quoted price after signing of AMC agreement with customer.
- c) Bidder shall quote AMC charges for the offered items for eight years (Post Three years' warranty) in the given format in finance/un-price bid as per **Annexure-C**.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Description	Price in Rupees
1	1 st year of AMC	Fill quote in Finance Bid separately
2	2 nd year of AMC	Fill quote in Finance Bid separately
3	3 rd year of AMC	Fill quote in Finance Bid separately
4	4 th year of AMC	Fill quote in Finance Bid separately
5	5 th year of AMC	Fill quote in Finance Bid separately
6	6 th year of AMC	Fill quote in Finance Bid separately
7	7 th year of AMC	Fill quote in Finance Bid separately
8	8 th year of AMC	Fill quote in Finance Bid separately

12. PRE-DISPATCH INSPECTION (PDI):

Bidder shall deliver the Items as per consignee details only after the successful completion of PDI (as per technical specification) and approved dispatch plan by ITI. Bidder shall provide the PDI Acceptance Test Procedure documents to ITI as per technical specification in tender.

PDI of the ordered items as per lot wise shall be conducted by OEM/Bidder in the presence of ITI and End Customer at OEM premises in India.

13. DELIVERY OF MATERIAL:

Bidder shall deliver the material as per **ANNEXURE-9**.

14. JOINT RECEIPT INSPECTION (JRI):

Bidder shall support (if required) during JRI which will be conducted after the delivery of items at the site. The Bidder shall provide JRI acceptance procedure documents to ITI for further approval by end customer and the final approved document would be used for conduct of JRI.

NOTE:

- (i) The scheduled quantity may vary.
- (ii) ITI reserves the right for placement of repeat order if required within one year of original order date.
- (iii) The bidder will not be entitled for any compensation for any increase / decrease in the quantities of materials supplied.
- (iv) The bidder shall offer the complete instrument for SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument. Any other Hardware or Software required to complete the instrument, other than items mentioned in the **Technical Bid [Part-A (BoQ) & Part-B (Technical specification)]**, shall be the responsibility of bidder.

15. TRAINING:

Technical Literature.

- i. Page size of all soft copies of documents will be A5. Documents will be optimized for viewing in latest version of Acrobat Reader with 1" header, footer and margins on left and right side.
- ii. One set per test equipment will be provided as detailed technical literature including User Handbooks and Technical Manuals. The technical literature provided will not be photocopies. These will be provided under the following heads: -
 - (a) Training documents and packages.
 - (b) USER level documents.
 - (c) Technical documents for repair and maintenance and giving comprehensive technical details of the systems.

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

ANNEXURE-I

TECHNICAL BID [Part-A (BoQ) & Part-B (TECHNICAL SPECIFICATION)]

Bidder is required to provide complete Instrument for SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument. Bidder has to submit its bid covering following:

Supply of all items as per proposed instrument and complying to technical specifications as given in this tender document.

BILL OF QUANTITY & TECHNICAL SPECIFICATIONS

A. BILL OF QUANTITY

Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model
1	VePAL TX300s Portable SDH/SONET Tester with SFP interface up to STM1/4/16 and PDH 2M/8M/34M/45M/139M.Incl. TX300s Chassis/Rechargeable Battery Pack, AC Adaptor/Power Cord, Shoulder Strap, Rugged Reusable transit case with lock and key, USB Stick with Manual/ReVeal TX300s Software for PC. with accessories as follows :	Nos.	1	10	Make : VeEX & Model : VePAL TX3000S (STM 1/4/16)
2	Accessories/ Additional Items				
(a)	2M Bantam Interface	Nos	2	20	
(b)	Jitter Generation and measurement analysis	Nos	2	20	
(c)	Wander Analysis	Nos	1	10	
(d)	Voice Frequency testing	Nos	1	10	
(e)	Pulse Mask Analysis	Nos	1	10	
(f)	TX300S 2 year extended warranty (Total 3 year warranty)	Nos	1	10	
(g)	Over-the Head Headset (2.5mm Type)	Nos	1	10	
(h)	FC/PC to FC/PC (Male/Female) SM 1310/1550 nm Attenuator 10dB	Nos	2	20	

Signature of the Bidders with Stamp & Date

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model
(i)	BNC to BNC Test Cable, 2m (6 ft) (SS211).	Nos	2	20	
(j)	Bantam to Bantam Test Cable, 2m (6 ft), (SS106)	Nos	2	20	
(k)	SS212 Bantam (m) 120 Ohm to BNC (m) 75 Ohm, 2m (6 ft)	Nos	2	20	
(l)	1310nm SR SFP for 155M/622M/2.5G STM 1/4/16- OC3/12/48	Nos	2	20	
(m)	1310nm IR for 155M/622M/2.5G STM 1/4/16- OC3/12/48	Nos	2	20	
(n)	1310nm LR for 155M/622M/2.5G STM 1/4/16 - OC3/12/48	Nos	2	20	
(o)	1550nm IR SFP for 155M/622M/2.5G STM 1/4/16- OC3/12/48	Nos	2	20	
(p)	1550nm LR for 155M/622M/2.5G STM 1/4/16- OC3/12/48 (Part No. 301-01-009G)	Nos	2	20	
(q)	Optical Patch cord- FC-PC to LC-PC SM Duplex Patch cord	Nos	2	20	
(r)	FC/PC to FC/PC (M/F) SM 1310/1550 nm Attenuator 10dB.	Nos	2	20	
(s)	LAN Cable with RJ-45 Connector	Nos	1	10	
(t)	Rugged Carrying case with lock & key	Nos	1	10	
(u)	Warranty 3 years	Nos	1	10	

Signature of the Bidders with Stamp & Date

B. TECHNICAL SPECIFICATIONS

SDH ANALYSER (1/4/16) WITH JITTER & WANDER -TEST INSTRUMENT

1. Introduction. The test equipment and accessories shall comply with the prevailing international standards. The instrument shall support PDH Interfaces, i.e. E1 (2M), E2 (8M), E3 (34M), E4 (140M) and SDH interfaces, i.e. STM-0, STM-1, STM-4 and STM-16). It shall be capable to perform jitter and wander measurements at all PDH and SDH interfaces. The PDH electrical interfaces must comply with ITU-T G.703 and SDH optical interfaces must comply with ITU-T G.757. The offered tester shall be compact, handy and standalone (Not modular). It shall conform to **GR/SDA 05/02.FEB.09**.

2. Technical Specifications.

- (a) Transmitter Bit Rates: STM-16, STM-4, STM-1 and STM-0
(with tolerance: $\geq \pm 4$ ppm).
- (b) Frequency offset: ± 50 ppm in 1, 10 ppm steps (for 2.488 Gbit/s, 622.080 Mbit/s and 155.520 Mbit/s 51.840 Mbit/s).
- (c) Transmit output power:
 - (i) STM-1 and STM-4 at 1310 nm: - 8 dBm to -16 dBm.
 - (ii) STM-1 and STM-4 at 1550 nm: +2 dBm to -3 dBm (Long Reach).
 - (iii) STM-16:
 - (aa) 1310 nm : -4 to -10 dBm (Short Reach).
 - (ab) 1310 nm : 0 to -5 dBm (Intermediate Reach).
 - (ac) 1310 nm : +3 to -2 dBm (Long Reach).
 - (ad) 1550 nm : 0 to -5 dBm (Intermediate Reach).
 - (ae) 1550 nm : +3 to -2 dBm (Long Reach).
- (d) Clock Source: Internal, Recovered and External within tolerance of $\geq \pm 4$ ppm.
- (e) Payloads: Both for PDH and SDH as per ITU-T standards.
- (f) Receiver Wavelength: 1280 - 1580 nm.
- (g) Input Sensitive:
 - (i) STM-1/4 at 1310 nm : ≥ -30 dBm (Intermediate Reach & Long Reach)
with maximum input power: - 3 dBm.
 - (ii) STM-1/4 at 1550 nm : ≥ -30 dBm Long Reach)
With maximum input power: - 5 dBm.
 - (iii) STM-16 at 1310 nm : ≥ -17 dBm
for 1310 nm Short/ Intermediate Reach, -28 dBm (Long reach).
 - (iv) STM-16 at 1550 nm: ≥ -18 dBm (Intermediate reach) and > -28 dBm (Long reach).

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

- (h) STM-0/STM-1 Electrical
 - (i) Clock Source (STM-1): Internal with the tolerance of $\geq \pm 4$ ppm.
 - (ii) Frequency Offset: 155.520Mbps ± 50 ppm in 1, 10 ppm steps.
 - (iii) Clock Source (STM-0): Internal with the tolerance of $\geq \pm 5$ ppm.
 - (iv) Frequency Offset: 51.840Mbps $\geq \pm 500$ ppm in 1, 10, 100 ppm steps.
- 3. Receiver (STM-1): Clock recovery: 155.520Mbps ± 150 PPM Clock recovery (STM-0): 51.840Mbps $\geq \pm 500$ PPM in 1, 10, 100 ppm steps.
 - (a) Type of connectors: FC/PC Optical Connectors, 1.5/2M Bantam Connectors.
 - (b) Test Pattern : PRBS, All 1's, All 0's, 10 User Patterns defined up to 16 bits, Test Pattern Inversion Unselected Channels: Unequipped, broadcast.
 - (c) Tester shall be able to inject alarms and errors.
 - (d) SDH Measurements (622M, 155M, 52M).
 - (e) Tester should be able to measure all the errors and alarms which come up during testing.
 - (f) The tester shall comply with the performance standards ITU-T G.821, G.826, G.828 and G.829, M.2100/M.2101/M.2110 (Maintenance or BIS).
- 4. **Optical Power Level Measurement.**
 - (a) Output power: -9 dBm to -21 dBm with the accuracy of ± 1 dBm. It pertains to the Test & Measurement specifications of the equipment.
 - (b) Tester shall have the Automatic Tributary Scan function.
- 5. **SDH Features.**
 - (a) The tester shall have the function of ITU-T and ETSI mapping, Overhead Monitoring and Decoding, Text encoding of all applicable bytes (K1, K2, S1, C2, etc.), Full SOH/POH Overhead bytes control in binary or HEX format, and Programming K1, K2 APS signalling bytes as per ITU-T G.783.
 - (b) The tester shall have the Through Modes functions i.e. Line through, Payload through, All SOH bytes can be modified except for B1, B2, H1, H2 bytes, Alarms/Error Insertion, Trace Generation.
 - (c) **SDH-PDH Mux/Demux Testing.** Tester shall have two sets of physical ports with the following combinations:-
 - (i) 2.5G 0/34M.
 - (ii) 622M 0/34M.

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- (iii) 155M E (0)/34M.
- (iv) 2.5G 0/2M.
- (v) 622M 0/2M.
- (vi) 155M E (0)/2M.
MuxTest, MuxMode.

(d) Tester shall have the function of SDH-SDH Mux/Demux Testing. The following combinations are applicable:-

- (i) 2.5G 0/622M 0.
- (ii) 622M 0/155M E (0).
- (iii) 155M E(0)/52M E.
- (iv) 2.5G 0/155M E (0).
- (v) 622M 0/52M E.
- (vi) 2.5G 0/52M E.

(e) Tester shall have G.783 Pointer Test Sequences (AU or TU pointer). Sequences: Single, Burst, Phase, Transient Burst, Periodic, 87-3, 26-1, Opposite (Increase + Decrease), and Custom Movement: Increase, Decrease, Increase + Decrease Anomalies: Added, Cancel, and None.

(f) Tester shall have APS Timing Measurement function with following features:-

- (i) Tester should measure the time anomaly present with the 1 ms resolution.
- (ii) Anomaly selection: MS-AIS, B2 errors, AU-AIS, TU-AIS, LOS.
- (iii) Selectable switch time to display PASS or FAIL.
- (iv) Selectable gate time to control the minimum interval for the circuit to be anomaly time.
- (v) APS timing at 2M interfaces: 2M-AIS, 2M-LOS.
- (vi) APS bytes capture with the save and printing facility.

(g) Tester shall have the function of Round trip delay measurement.

6. PDH Specifications.

(a) 34 M Transmitter.

- (i) Clock Source: Internal with the tolerance of ± 5 ppm.
- (ii) Frequency offset generation: 34.368 Mbit/s ± 500 ppm in 1, 10, 100 ppm steps.

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(b) **34 M Receiver.**

- (i) Clock Recovery: 34.368 Mbit/s $\pm$ 500 ppm.
- (ii) Jitter Tolerance shall conform to ITU-T G.823.
- (iii) Input Sensitivity: Terminate: -12 dB cable loss.
- (iv) Impedance: 75 Ω , unbalanced.
- (v) Port/Connector: 75 Ω , unbalanced BNC.

(c) **Dual 2M Transmitter (Lines 1 and 2).**

- (i) Clock Source: Internal with the tolerance of $\pm$ 5 ppm, external, recovered.
- (ii) Frequency offset: $\geq \pm 5000$ ppm in 1, 10, 100, 1000 ppm steps.
- (iii) Line Coding: AMI, HDB3.
- (iv) Port/Connector: 120 Ω .

(d) **Dual 2M Receiver (Lines 1 and 2).**

- (i) Clock Recovery: $\geq \pm 5000$ ppm.
- (ii) Jitter Tolerance shall comply with ITU-T G.823 recommendations.

(e) **Voice Frequency Testing.**

- (i) Monitor speaker with volume control.
- (ii) VF Level and Frequency Measurement Level: +3 to -60 dBm.
- (iii) Resolution: 0.1 dBm.
- (iv) Frequency Range: 50 to 3950 Hz, resolution 1 Hz.
- (v) VF Tone Generation.
- (iv) Noise measurement.

(f) **Pulse Mask Analysis.**

- (i) The tester shall have the pulse mask (2M, 34M, and 45M).
- (ii) Scan period: 500 ns
- (iii) On-screen pulse shape display with G.703 Pulse Mask verification.

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7. **PDH/T-Carrier Jitter Measurement.**

(a) Tester shall comply fully with ITU-T recommendations O.171 and O.172 (payloads inside SDH signals); wide band/High band Jitter Measurement PASS/FAIL threshold as per ITU-T G.823, G.824 recommendations or user defined.

(b) **Jitter Generation Modulation Source Type.** Sinusoidal Jitter Amplitude/Frequency as per ITU-T O.171.

(c) **Jitter Transfer/Tolerance Measurement PASS/FAIL Template.** As per ITU-T G.823, G.824; Test Frequencies: Up to 30 points; Technique: Onset of errors; Storage: upto 100 records.

8. **SDH Jitter.**

(a) Jitter Measurement Tester shall fully comply with ITU-T recommendations O.172. Accuracy: As Per ITU-T O.172 Tester shall Store ≥ 99999 measurement intervals and > 99 records. Measurement Interval: One second Jitter Histogram.

(b) **High Band Jitter Measurement.** PASS/FAIL threshold as per ITU-T G.825 or user defined.

(c) **Accuracy.** As per ITU-T O.172; Test Duration: Timed or Continuous; Storage: ≥ 99999 measurement intervals, ≥ 99 records; Measurement Interval: min1 second.

(d) **Jitter Generation Modulation Source Type.** Sinusoidal Jitter Amplitude/Frequency: Fully compliant to ITU-T recommendations as per ITU-T Recommendation O.172.

(e) Tester shall have the Jitter Tolerance/Transfer Measurement function, PASS/FAIL Template as per ITU-T G.825, Test Frequencies: Up to 30 points, Technique: Onset of errors, Storage: Up to 100 records.

9. **Wander Measurements.** Tester shall have the PDH Wander function and shall fully comply with ITU-T recommendations per ITU-T O.171 and ITU-T O.172 (payloads inside SDH signals).

10. **Additional Features.** Auto Configuration, Test results/events storage and events log capability. Tester should store more than 18 test results or 750 errors or alarms events with user definable labels; lock/unlock records, available to screen view or print; Print at timed interval, Audible alarm: On/off switchable.

11. **Histogram Analysis.**

(a) **Upgrades.** SW options upgradeable via software in-field cartridge replacement. It implies insitu software upgrade capability.

(a) **Display.** Backlit 320 x 240 pixels STN indoor/outdoor Color screen with CFL Backlight.

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- (b) **Printer**. Report printing via serial port, RS-232 DIN-9.
- (d) **Network**. 10Base-T DIN-9.
- (e) **Battery**. Built-in NiMH rechargeable battery pack
- (f) **Power**. AC operation w/100 to 240 V AC, 50/60 Hz universal charger.

12. Environmental.

- (a) Operating temperature: -5°C to +45°C.
- (b) Storage temperature: -20 to 70°C.
- (c) Relative Humidity: > 95% at 40°C.
- (d) Size: Handy and small in size.
- (e) Weight should not be more than 1.5 kg.

13. Accessories.

- (a) The test instruments and their accessories shall be provided with rugged re-usable transit case with lock and keys with field usage.
- (b) Carrying Case.
- (c) AC/DC Charger Adapter.
- (d) Instruction Manual.
- (e) Optical Patch cord SM (FCUPC to FCUPC).

14. Warranty. 3 years.

15. Calibration. The calibration after expiry of warranty period and till the end life as required for the test equipment and accessories shall be covered under AMC.

NOTE:

- a) ITI reserves the right for placement of repeat order if required within one year of original order date.
- b) The supplier will not be entitled, to any compensation for any increase / decrease in the quantities of work done and materials supplied.

BID SECURITY DECLARATION FORM

<Letter head of the bidder>

<Date>

To

ITI LIMITED,
Bangalore

I/ We, the undersigned, declare that:

I/We understand that bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity or its extended period, if any; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Bank Guarantee, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/ we are not the successful Bidder,

upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (Insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (Insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a consortium, the Bid Securing Declaration must be in the name of all partners to the consortium that submits the bid)

TURN OVER FOR LAST THREE YEARS

Sl.No.	Financial year	Turnover
1	Last 1 st Year	
2	Last 2 nd Year	
3	Last 3 rd Year	

Note:

In addition to the above, the applicant has to submit the following documents/information,

- a. Copy of the balance sheets
- b. Other relevant details if any.

The requisite Turnover certificate shall be duly certified by a Chartered Accountant with his seal /Signature and Registration No.

Signature of the bidder with Seal

DETAILS OF THE WORK COMPLETED CERTIFICATE/EXPERIENCE DURING THE LAST 5 YEARS

Sl. No.	Name of work	Scope of services	Value of work	Date of start/ completion	Name and address of the client	Remarks

NOTE:

THE FOLLOWING DOCUMENTS ARE TO BE ENCLOSED FOR EACH OF THE ABOVE WORKS.

- a. Completion certificate.
- b. Copy of award letter and PO/WO copy.
- c. Other relevant documentary evidence, if any.

Signature of the bidder with Seal

PRE CONTRACT INTEGRITY PACT

PURCHASE ENQUIRY/ORDER No.

THIS Integrity Pact is made on.....day of20.

BETWEEN:

ITI Limited having its Registered & Corporate Office at ITI Bhavan, Dooravaninagar, Bangalore – 560 016 and established under the Ministry of Communications, Government of India (hereinafter called the Principal), which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman & Managing Director, Directors, Officers or any of them specified by the Chairman & Managing Director in this behalf and shall also include its successors and assigns) ON THE ONE PART

AND:

..... represented by..... Chief Executive Officer (hereinafter called the Contractor(s), which term shall unless excluded by or is repugnant to the context be deemed to include its heirs, representatives, successors and assigns of the bidder/contract ON THE SECOND PART.

Preamble

WHEREAS the Principal intends to award, under laid down organizational procedures, contract for of ITI Limited (name of the Stores/equipment's/items). The Principal, values full compliance with all relevant laws of the land, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal has appointed an Independent External Monitor (IEM), who will **monitor** the tender process and the execution of the contract for compliance with the principles as mentioned herein this agreement.

WHEREAS, to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact the terms and conditions of which shall also be read as integral part and parcel of the Tender Documents and contract between the parties.

NOW THEREFORE, IN CONSIDERATION OF MUTUAL COVENANTS STIPULATED IN THIS PACT THE PARTIES HEREBY AGREE AS FOLLOWS AND THIS PACT WITNESSETH AS UNDER:

SECTION 1 – COMMITMENTS OF THE PRINCIPAL

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

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- a. No employee of the Principal, personally or through family members, will in connection with the tender for or the execution of the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal 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 tender process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employee, which is a criminal offence under 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 action as per its internal laid down Rules/ Regulations.

SECTION 2 – COMMITMENTS OF THE BIDDER/CONTRACTOR

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

- a. The bidder(s)/contractor(s) will not, directly or through any other person 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 of any kind whatsoever during the tender process or during the execution of the contract.
- b. The bidder(s)/contractor(s) will not enter with other bidders/contractors 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 IPC/PC Act, further the bidder(s)/contractor(s) will not use improperly, for purposes of competition of personal gain, or pass onto 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.

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- e. The Bidder(s)/Contractor(s) will, when presenting the bid, disclose any and all payments made, are committed to or intend to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. The Bidder(s)/Contractor(s) will not bring any outside influence and Govt bodies directly or indirectly on the bidding process in furtherance to his bid.
- g. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

SECTION 3 – DISQUALIFICATION FROM TENDER PROCESS & EXCLUSION FROM FUTURE CONTRACTS

3.1 If the Bidder(s)/Contractor(s), during tender process or before the award of the contract or during execution has committed a transgression in 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 Bidder(s)/Contractor(s) from the tender process.

3.2 If the Bidder(s)/Contractor(s), has committed a transgression through a violation of Section 2 of the above, such as to put his reliability or credibility into question, the Principal shall be entitled exclude including blacklisting for future tender/contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case, particularly taking into account the number of transgression, the position of the transgressor within the company hierarchy of the Bidder(s)/Contractor(s) and the amount of the damage. The exclusion will be imposed for a period of minimum one year.

3.3 The Bidder(s)/Contractor(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack of any hearing before the decision to resort to such exclusion is taken. The undertaking is given freely and after obtaining independent legal advice.

3.4 A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that on the basis of facts available there are no material doubts.

3.5 The decision of the Principal to the effect that breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/ Contractor(s) shall be final and binding on the Bidder(s)/ Contractor(s), however the Bidder(s)/ Contractor(s) can approach IEM(s) appointed for the purpose of this Pact.

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3.6 On occurrence of any sanctions/ disqualifications etc arising out from violation of integrity pact Bidder(s)/ Contractor(s) shall not entitled for any compensation on this account.

3.7 subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/ Contractor(s) could be revoked by the Principal if the Bidder(s)/ Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption preventative system in his organization.

SECTION 4 – PREVIOUS TRANSGRESSION

4.1 The Bidder(s)/ Contractor(s) declares that no previous transgression occurred in the last 3 years immediately before signing of this Integrity Pact with any other company in any country conforming to the anti-corruption/ transparency International (TI) approach or with any other Public Sector Enterprises/ Undertaking in India of any Government Department in India that could justify his exclusion from the tender process.

4.2 If the Bidder(s)/ Contractor(s) makes incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Section-3 of the above for transgressions of Section-2 of the above and shall be liable for compensation for damages as per Section- 5 of this Pact.

SECTION 5 – COMPENSATION FOR DAMAGE

5.1 If the Principal has disqualified the Bidder(s)/Contractor(s) from the tender process prior to the award according to Section 3 the Principal is entitled to forfeit the Earnest Money Deposit/Bid Security/ or demand and recover the damages equitant to Earnest Money Deposit/Bid Security apart from any other legal that may have accrued to the Principal.

5.2 In addition to 5.1 above the Principal shall be entitled to take recourse to the relevant provision of the contract related to termination of Contract due to Contractor default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor or demand and recover liquidate and all damages as per the provisions of the contract agreement against termination.

SECTION 6 – EQUAL TREATMENT OF ALL BIDDERS/CONTRACTORS

6.1 The Principal will enter into Integrity Pact on all identical terms with all bidders and contractors for identical cases.

6.2 The Bidder(s)/Contractor(s) undertakes to get this Pact signed by its sub-contractor(s)/sub-vendor(s)/associate(s), if any, and to submit the same to the Principal along with the tender document/contract before signing the contract. The Bidder(s)/Contractor(s) shall be responsible for any violation(s) of the provisions laid down in the Integrity Pact Agreement by any of its sub-contractors/sub-vendors/associates.

6.3 The Principal will disqualify from the tender process all bidders who do not sign this Integrity Pact or violate its provisions.

Signature of the Bidders with Stamp & Date

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SECTION 7 – CRIMINAL CHARGES AGAINST VIOLATING BIDDER(S)/ CONTRACTOR(S)

7.1 If the Principal receives any information of conduct of a Bidder(s)/Contractor(s) or sub-contractor/sub-vendor/associates of the Bidder(s)/Contractor(s) which constitutes corruption or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer of the Principal for appropriate action.

SECTION 8 – INDEPENDENT EXTERNAL MONITOR(S)

8.1 The Principal appoints competent and credible Independent External Monitor(s) 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 under this pact.

8.2 The Monitor is not subject to any instructions by the representatives of the parties and performs his functions neutrally and independently. He will report to the Chairman and Managing Director of the Principal.

8.3 The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all product documentation of the Principal including that provided by the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The Monitor is under contractual obligation to treat the information and documents Bidder(s)/Contractor(s) with confidentiality.

8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meeting could have an impact on the contractual relations between the Principal and the Bidder(s)/Contractor(s). 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 specific manner, refrain from action or tolerate action.

8.5 The Monitor will submit a written report to the Chairman & Managing Director of the Principal within a reasonable time from the date of reference or intimation to him by the principal and, should the occasion arise, submit proposals for correcting problematic situations.

8.6 If the Monitor has reported to the Chairman & Managing Director of the Principal a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman & Managing Director of the Principal 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.

8.7 The word ‘**Monitor**’ would include both singular and plural.

Signature of the Bidders with Stamp & Date

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8.8 Details of the Independent External Monitor appointed by the Principal at present is furnished below: -

IEM I

Shri Atul Jundall, IFS (Retd.)
3/10 Vishesh Khand Opp. Little Friend School,
Gomti Nagar, Lucknow-226010(UP)

IEM II

Shri Benny John, IRS (Retd.),
Villa No. 36, Kent Plam Villas,
Fort Valley Township, Athani,
Kakkanad, Ernakulam, Kerala- 682 030

Any changes to the same as required / desired by statutory authorities is applicable.

SECTION 9 – FACILITATION OF INVESTIGATION

9.1 In case of any allegation of violation of any provisions of this Pact or payment of commission, the Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) shall provide necessary information and documents in English and shall extend all help to the Principal for the purpose of verification of the documents.

SECTION 10 – LAW AND JURISDICTION

10.1 The Pact is subject to the Law as applicable in Indian Territory. The place of performance and jurisdiction shall be the seat of the Principal.

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

SECTION 11 – PACT DURATION

11.1 This Pact begins when both the parties have legally signed it. It expires after 12 months on completion of the warranty/guarantee period of the project / work awarded, to the fullest satisfaction of the Principal.

11.2 If the Bidder(s)/Contractor(s) is unsuccessful, the Pact will automatically become invalid after five months on evidence of failure on the part of the Bidder(s)/Contractor(s).

11.3 If any claim is lodged/made during the validity of the Pact, the same shall be binding and continue to be valid despite the lapse of the Pact unless it is discharged/determined by the Chairman and Managing Director of the Principal.

Signature of the Bidders with Stamp & Date

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SECTION 12 – OTHER PROVISIONS

12.1 This pact is subject to Indian Law, place of performance and jurisdiction is the Registered & Corporate Office of the Principal at Bengaluru.

12.2 Changes and supplements as well as termination notices need to be made in writing by both the parties. Side agreements have not been made.

12.3 If the Bidder(s)/Contractor(s) or a partnership, the pact must be signed by all consortium members and partners.

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

12.3 Any disputes/ difference arising between the parties with regard to term of this Pact, any action taken by the Principal in accordance with this Pact or interpretation thereof shall not be subject to any Arbitration.

12. 4 The action stipulates in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this Pact at the place and date first done mentioned in the presence of the witnesses:

For PRINCIPAL

For BIDDER(S)/CONTRACTOR(S)

.....

.....

(Name & Designation)

(Name & Designation)

Witness

Witness

1)

1).....

2)

2).....

ANNEXURE-6

MUTUAL NON- DISCLOSURE AGREEMENT

This Agreement is made as of the ----- 2026 between ITI Ltd. having its registered and Corporate office at Dooravani Nagar, Bangalore-560016

And -----hereinafter called ITI Ltd. which expression shall unless repugnant to the subject or the context mean and included its successors, nominees or assigns and (M/s. -----) a company having its registered office at ----- herein after called "The Bidder" which expression shall unless repugnant to the subject or the context mean and include its successors, nominees or assigns.

Whereas in order to pursue the mutual business purpose of this particular Consultancy as specified in Exhibit A (the "Business Purpose"), ITI Ltd. and M/s ----- recognize that there is a need to disclose to one another certain information, as defined in Para 1 below, of each party to be used only for the Business purpose and to protect such confidential information from unauthorized use and disclosure.

In consideration of the other party's disclosure of such information, each party agrees as follows:

This Agreement will apply to all confidential and proprietary information disclosed by one party to the other party, including information listed in Exhibit A attached hereto and other information which the disclosing party identifies in writing or otherwise as confidential before or within thirty days after disclosure to the receiving party ("Confidential information").

Information consists of certain specifications, designs, plans, drawings and /or technical information, and all copies and derivatives containing such information, that may be disclosed to one another for and during the purpose, which a party considers proprietary or confidential ("Information"). Information may be in any form or medium, tangible or intangible, and may be Communicated/disclosed in writing, orally, or through visual observation or by any other means to one party (hereinafter referred to as the receiving party) by the other party (hereinafter referred to as one disclosing party). Information shall be subject to this Agreement, if it is in tangible form, only if clearly marked as proprietary or confidential as the case may be, when disclosed to the receiving party or, if not in tangible form, its proprietary nature must first be announced, and it must be reduced to writing and furnished to the receiving party within thirty (30) days of the initial disclosure.

M/s ----- and ITI Ltd hereby agreed at during the Confidentiality Period:

ITI Ltd. RFP. No. _____

The receiving party shall use Information only for the Purpose, shall hold Information in confidence using the same degree of care as it normally exercises to protect its own proprietary information, but not less than reasonable care, taking into account the nature of the Information, and shall grant access to Information only to its employees who have a need to know, but only to the extent necessary to carry out the business purpose of this project as defined in exhibit A, shall cause its employees to comply with the provisions of this Agreement applicable to the receiving party, shall reproduce Information only to the extent essential to fulfilling the purpose, and shall prevent disclosure of information to third parties.

Upon the disclosing party's request, the receiving party shall either return to the disclosing party all Information or shall certify to the disclosing party that all media containing Information have

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been destroyed. Provided, however. That an archival copy of the Information may be retained in the files of the receiving party's counsel, solely for the purpose of proving the contents of the Information.

The foregoing restrictions on each party's use or disclosure of Information shall not apply to Information that the receiving party can demonstrate

was independently developed by or for the receiving party without reference to the Information, or was received without restrictions; or

has become generally available to the public without breach of confidentiality obligations of the receiving party; or

was in the receiving party's possession without restriction or was known by the receiving party without restriction at the time of disclosure; or

is the subject of a subpoena or other legal or administrative demand for disclosure; provided, however that the receiving party has given the disclosing party prompt notice of such demand for disclosure and the receiving party reasonably cooperates with the disclosing party's efforts to secure and appropriate protective order; or

is disclosed with the prior consent of the disclosing party; or

was in its possession or known to it by being in its use or being recorded in its files or computers or other recording media prior to receipt from the disclosing party and was not previously acquired by the receiving party from the disclosing party under an obligation of confidence; or the receiving party obtains or has available from a source other than the disclosing party without breach by the receiving party or such source of any obligation of confidentiality or non-use towards the disclosing party.

Each party agrees not to remove any of the other party's Confidential Information from the premises of the disclosing party without the disclosing party's prior written approval. Each party agrees to exercise extreme care in ITI Ltd. RFP. No. _____ protecting the confidentiality of any confidential information, which is removed, only with the disclosing party's prior written approval, from the disclosing party's premises. Each party agrees to comply with any and all terms and conditions the disclosing party's may impose upon any such approved removal, such as conditions that the removed confidential information and all copies must be returned by a certain date, and that no copies are to be made off of the premises.

Upon the disclosing party's request, the receiving party will promptly return to the disclosing party all tangible items containing or consisting of the disclosing party's confidential information all copies thereof.

Each party recognizes and agrees that all of the disclosing party's confidential information is owned solely by the disclosing party (or its licensors) and that the unauthorized disclosure or use of such confidential information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain. Accordingly, each party agrees that the disclosing party will have the right to obtain an immediate injunction enjoining any breach of this agreement, as well as the right to pursue any and all other rights and remedies available at law or in equity for such a breach.

Access to information hereunder shall not preclude an individual who has seen such information for the purpose of this agreement from working on future projects for the receiving party which

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relate to similar subject matters provided that such individual does not make reference to the information and does not copy the substance of the information during the confidentiality period. Furthermore, nothing contained herein shall be construed as imposing any restriction on the receiving party's disclosure or use of any general learning, skills or know how developed by the receiving party's personnel under this agreement, if such disclosure and use would be regarded by a person of ordinary skill in the relevant area as not constituting a disclosure or use of the information.

As between the parties, all information shall remain the property of the disclosing party. By disclosing information or executing this agreement, the disclosing party does not grant any license, explicitly or implicitly, under any trademark, patent, copyright, mask work protection rights, trade secret or any other intellectual property right. THE DISCLOSING PARTY DISCLAIMS ALL WARRANTIES REGARDING THE INFORMATION, INCLUDING ALL WARRANTIES WITH RESPECT TO INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS AND ALL WARRANTIES AS TO THE ACCURACY OR UTILITY OF SUCH INFORMATION.

Execution of this agreement and the disclosure of information pursuant to this agreement does not constitute or imply any commitment, promise, or inducement by either party to make any purchase, or sale or to enter into any additional agreement of any kind.

Either party's failure to enforce any provision, right or remedy under this agreement shall not constitute a waiver of such provision, right or remedy.

This Agreement will be construed in, interpreted and applied in accordance with the laws of India.

M/s ITI Ltd. has sole rights for the feasibility report submitted by M/s. ----- for its use with other successful bidder for next Phase (if any). If there is any conflict between earlier clauses and this clause, then this clause shall prevail.

That in case of any dispute or differences, breach & violation relating to the terms of the agreement. The said matter or dispute, difference shall be referred to sole arbitration of Chairman ITI Ltd or any other person appointed by him. That the award of the arbitrator shall be final and binding on both parties. In the vent of such arbitrator to whom the matter is originally referred to is being transferred or vacates his office on resignation or otherwise or refuses to do work or neglecting his work or being unable to act as Arbitrator for any reasons whatsoever, the Chairman ITI Ltd shall appoint another person to act as Arbitrator in place of outgoing Arbitrator and the person so appointed shall be entitled to proceed further with the reference from the stage at which it was left by his predecessor. The M/s ----- will have No Objection in any such appointment, that arbitrator so appointed is employee of ITI Ltd.. The said Arbitrator shall act under the Provisions of the Arbitrator and Conciliation Act, 1996 or any statutory modifications or re-enactment there of any rules made thereof.

This Agreement and Exhibit A attached hereto constitutes the entire agreement of the parties with respect to the parties' respective obligations in connection with Information disclosed hereunder and supersedes all prior oral and written agreements and discussions with respect thereto. The parties can amend or modify this agreement only by a writing duly executed by their

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respective authorized representatives. Neither party shall assign this Agreement without first securing the other Party's written consent.

This Agreement will remain in effect for one year from the date of the last disclosure of Confidential Information., at which time it will terminate, unless extended by the disclosing party in writing.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by Their duly authorized officers or representatives.

(M/s-----)

Signature_____.

Printed Name: _____.

Title: _____.

ITI Ltd

RFP No. _____

Exhibit A

(M/s ITI Ltd.)

Signature: _____

Printed Name: _____

Title: _____

Business Purpose: Supply, Installation & Commissioning, Training, Integration Services and Maintenance of OTDR.

Confidential Information of M/s. ITI Ltd. w.r.t RFP No. _____

All sites and their related information.

All information shared in oral or in written form by ITI Ltd. with M/s -----

Information downloaded or taken in physical form shall be returned/destroyed after use not copied.

ITI Ltd : _____

Signed

M/s -----

Signed

COMPLIANCE TO NO VARIANCE/DEVIATION IN BID

NAME OF WORK:

Tender Ref No:

Dated:

We hereby agree to fully comply with, abide by and accept without variation, deviation or reservation

all technical, commercial and other conditions whatsoever of the Bidding Documents and Amendment(s)/ Addendum(s) to the Bidding Documents, if any, for subject work/tender issued by ITI

Limited. We hereby further confirm that any terms and conditions if mentioned in our bid (Un-priced

as well as Priced Part) shall not be recognized and shall be treated as null and void.

Bidder's Company Seal:

Authorized Signatory's Signature:

Authorized Signatory's Name and Designation:

Place:

Date:

Ref: Tender Ref. No.....

dated ...

UNDERTAKING THAT THE BIDDER HAS NOT BEEN BLACKLISTED/DEBARRED

To,

<Name and address>

Subject: Declaration of Bidder being not Blacklisted/Debarred.

Dear Sir,

It is certified that our firm/company or any of our entity is not black listed/Debarred from doing business or put on holiday list etc. by any Govt. Organization / Semi Govt. Organizations/PSUs for any reason. However, if we fail to complete the awarded work / fulfill the Tender conditions or if any of the information submitted by our company or its employee or associate, proves to be false, ITI Ltd shall be free to take action / black list our firm / company notwithstanding of taking any other legal action.”

Bidder’s Company Seal:

Authorized Signatory’s Signature:

Authorized Signatory’s Name and Designation:

Place:

Date:

TENTATIVE DELIVERY SCHEDULE

- (i) Delivery of the material should be in **single lot** within 12 Months from the date of completion of PDI.
- (ii) ITI will provide the schedule of staggered delivery in release order.
- (iii) Delivery of the items will be at 8 locations. Location details of delivery will be shared later.
(Note: Final location details will be shared after end-customer dispatch clearance).
- (iv) The bidder shall have the ability to supply the whole Lot in single supply Order
- (v) PDI will be the responsibility of Bidder.
- (vi) Bidder will support during Joint Receipt Inspection (JRI) of the material.

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ANNEXURE-10

Tender Ref No:

Dated:

Annual Maintenance Contract for SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

1. Terms and conditions:

The AMC will be applicable for 08 (Eight) years after the completion of warranty period of 03 (Three years) and the payment will be made on quarterly basis (contract amount of a year will be distributed equally in four parts for each quarter) to be paid at the end of the period on satisfactory delivery of services on production of satisfactory performance certificate and system serviceability certificate from the ITI for the period of which AMC payment is claimed by Bidder for AMC.

If the Bidder is offering for AMC for SDH Analyser (1/4/16) with Jitter & Wander-Test Instrument with any other organization, public/private in India, The Bidder are required to give a written undertaking that they have not provided AMC for similar systems or subsystems at a price lower than that offered in the present bid to any other Ministry/Department of the Government of India and if the similar AMC price has been offered at a lower price than the details regarding the cost, time of AMC and AMC schedule be included as part of the commercial offer. In case of non-disclosure, if it is found at any stage that the similar AMC was provided by the Bidder/OEM to any other Ministry/Department of the Government of India at a lower price, then that very price, will be applicable to the present case and, with due allowance for elapsed time.

During AMC period, the life time, support all updates and modifications including software patches will be carried out free of cost and will be continuing life time support to the provided products even if the production of the equipment/system is stopped due to any reason.

During AMC period, if any Hardware card/component replacement is required Bidder shall replace the required hardware free of cost.

2. SCOPE OF WORK:

Broad scope of work for AMC is given as below:

- (a) Comprehensive maintenance shall be provided as part of the project during the AMC period at locations where the supplied equipment has been installed. The maintenance support has to be provided either through telephonic support, remote support or through onsite support, if required as the case may be, but overall objective is to bring up the equipment.
- (b) Comprehensive AMC shall include maintenance of the complete equipment and systems, spares, repair and replacement of components etc.
- (c) Bidder shall be exclusively responsible for any defect that may develop under normal use arising from faulty material, design and workmanship and shall remedy such a defect at their own cost immediately after getting intimation from the ITI. All expenses, which are incurred for replacement or repair during AMC period, shall be entirely borne by the Bidder.

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- (d) **Travelling Time:** Travelling time permitted for the Bidder to travel to the sites shall be decided by ITI in coordination with Bidder.

3. Repair / Receipt / Return of Equipment

Procedure for repair/receipt/return of equipment is as under:-

- (a) All equipment including spares supplied by Bidder are covered under repair and maintenance.
- (b) The faulty equipment will be handled by the Bidder when fault is reported by ITI till it gets repaired /replaced.
- (c) OEM origin card / sub systems ex-import - within 30 (thirty) days if being repaired out of India and within 15 (Fifteen) days if being repaired within India.
- (d) The repaired equipment once repaired will be inspected by Bidder engineer/ technicians in presence of ITI representative at centralized location in North-India. Location details will be shared later). If the equipment are not functioning as per the defined parameter, it will continue to be considered as faulty from the initial date of fault.
- (e) **Maintenance of Equipment:** Faulty equipment shall be collected from and delivered at centralized location in North-India (Location details will be shared later). In case of any unforeseen circumstances like road blockages, landslides etc. faulty equipment may be collected / delivered from / to nearest location (i.e. nearest location to faulty location) with approval of ITI. Spares used as interim measure will be replenished once repaired equipment is delivered and accepted as repaired.
- (f) **Replacement of 'Beyond Repair' Equipment:** Equipment declared 'Beyond Repair' by the Bidder will be replaced by Bidder at no additional charge. The replaced equipment will be of same make and model and shall be the property of the ITI.
- (g) **Repair:** While attempting to repair the faulty equipment, if the faulty components of equipment are found to have become obsolete or are not readily available, Bidder will rectify the faults using suitable substitute equipment to serve the function, guaranteeing the original electrical parameters as also the mechanical compatibility with the system.
- (h) **Failure Analysis Report:** Bidder shall deliver to ITI the repaired or replaced equipment, or part thereof, accompanied by written "Failure Analysis Report" setting forth a description of the fault found and the corrective action taken by the Bidder.

4. Provisioning of Spares:

- 1) **Maintenance Spares:** The list of maintenance spares, required for providing maintenance support, shall be worked out by the Bidder and submitted for ITI's approval.
- 2) **Last Buy of Equipment and Spares:** Bidder will ensure adequate stocking of cards/accessories likely to get obsolete and taken out of production, to ensure life time maintenance support.

5. Original Equipment Manufacturer (OEM) Support

Original Equipment Manufacturer (OEM) Support: OEM support will be guaranteed by the Bidder for the complete period of AMC. All OEMs will have their repair facility in India. The repair and support for equipment / spares will be available for the period of AMC. Repair support of respective OEMs on requirement basis, training of ITI's Engineer / technicians and personnel employed will be done by OEMs. OEM support also includes upgrades of firmware / updates released for software by OEM.

Signature of the Bidders with Stamp & Date

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6. Penalties:

Repair and return of faulty items has to be done within below given timelines, otherwise penalty will be imposed as given in succeeding para:

- OEM origin card / sub systems ex-import - within 22 (twenty two) days if being repaired out of India and,
- Within 15 (Fifteen) days if being repaired within India.

Penalty shall be @ 0.5 % of AMC Order Value per week or part thereof subject to a maximum of 10% ceiling

7. Termination of AMC:

The ITI shall have the right to terminate this Contract in part or in full in any of the following cases:-

- (a) The delivery of services is delayed for causes not attributable to Force Majeure for more than 30 days after the scheduled timelines for attending the fault/repair.
- (b) The Bidder is declared bankrupt or becomes insolvent.
- (c) The delivery of material is delayed due to causes for Force Majeure by more than 2 months after the scheduled timelines for attending the fault/repair.

DECLARATION OF BIDDERS

FROM

TO

.....
.....

1. I/We.....have read the conditions of the tender and tender documents attached hereto and agree to abide by such conditions. I/We offered to do..... at the rates quoted in the attached schedule to complete the works on or before the dates mentioned in the schedule for completion of works.
2. I/We further agree to sign an agreement, bind to abide by the general conditions of the contract, and to carry out all works according to the specifications laid down in the tender papers. I/We hereby pay the earnest money ofby demand draft/banker's cheque. I/We bind myself/ ourselves to deposit the security deposit [Performance security] as prescribed within 15 days after receiving the notice that the contract has been awarded to me/us failing which I/We have no objection to the forfeiture of the earnest money in full; otherwise they said earnest money shall be retained by the said company towards security deposit as specified in the conditions. I/We further bind myself /ourselves to execute the Tender document and to commence the work with 15 days after issue of the Purchase order in writing as aforesaid failing I/We agree to the company forfeiting the earnest money and security deposit deposited with them. The accepting authority shall also be at liberty to cancel the acceptance of the tender if I/We fails to deposit the security amount as specified or to execute an agreement or to start work as stipulated in the tender documents.
3. I/We hereby enclose a declaration of my/our experience of execution of works of similar nature and magnitude carried out by me/us in the prescribed proforma, and also the income tax and sales tax clearance certificates.
4. The offer shall remain open for acceptance by the Accepting Authority for a **period of 6 months** from the date of opening of the tender. **[180 days]**

Date:

Signature of bidder
with the seal of the firm

Witness.....

(Name in block letters)

Power of attorney in case the tender is signed by the authorized nominee must be enclosed.

Address:

Occupation:

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ANNEXURE-12

TECHNICAL COMPLIANCE SHEET

[Part-A (BoQ) & Part-B (TECHNICAL SPECIFICATION)]

Bidder has to submit bid covering following:

- 1) Supply of all items complying to BoM & technical specifications of this ANNEXURE.
- 2) AMC of supplied items to be covered for the specified period.

A. BILL OF QUANTITY

Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model	Complied (Yes/No) Remarks (If Any)
1	VePAL TX300s Portable SDH/SONET Tester with SFP interface up to STM1/4/16 and PDH 2M/8M/34M/45M/ 139M.Incl. TX300s Chassis/Rechargeable Battery Pack, AC Adaptor/Power Cord, Shoulder Strap, Rugged Reusable transit case with lock and key, USB Stick with Manual/ ReVeal TX300s Software for PC with accessories as follows :	Nos.	1	10	Make : VeEX Model : VePAL TX3000S (STM 1/4/16)	
2	Accessories/ Additional Items					
(a)	2M Bantam Interface	Nos	2	20		
(b)	Jitter Generation and measurement analysis	Nos	2	20		
(c)	Wander Analysis	Nos	1	10		
(d)	Voice Frequency testing	Nos	1	10		
(e)	Pulse Mask Analysis	Nos	1	10		
(f)	TX300S 2 year extended warranty (Total 3 year warranty)	Nos	1	10		
(g)	Over-the Head Headset (2.5mm Type)	Nos	1	10		
(h)	FC/PC to FC/PC (Male/Female) SM 1310/1550 nm Attenuator 10dB	Nos	2	20		

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Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model	Complied (Yes/No) Remarks (If Any)
(i)	BNC to BNC Test Cable, 2m (6 ft) (SS211).	Nos	2	20		
(j)	Bantam to Bantam Test Cable, 2m (6 ft), (SS106)	Nos	2	20		
(k)	SS212 Bantam (m) 120 Ohm to BNC (m) 75 Ohm, 2m (6 ft)	Nos	2	20		
(l)	1310nm SR SFP for 155M/622M/2.5G STM 1/4/16-OC3/12/48	Nos	2	20		
(m)	1310nm IR for 155M/622M/2.5G STM 1/4/16- OC3/12/48	Nos	2	20		
(n)	1310nm LR for 155M/622M/2.5G STM 1/4/16 - OC3/12/48	Nos	2	20		
(o)	1550nm IR SFP for 155M/622M/2.5G STM 1/4/16-OC3/12/48	Nos	2	20		
(p)	1550nm LR for 155M/622M/2.5G STM 1/4/16- OC3/12/48 (Part No. 301-01-009G)	Nos	2	20		
(q)	Optical Patch cord- FC-PC to LC-PC SM Duplex Patch cord	Nos	2	20		
(r)	FC/PC to FC/PC (M/F) SM 1310/1550 nm Attenuator 10dB.	Nos	2	20		
(s)	LAN Cable with RJ-45 Connector	Nos	1	10		
(t)	Rugged Carrying case with lock & key	Nos	1	10		
(u)	Warranty 3 years	Nos	1	10		

Signature of the Bidders with Stamp & Date

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

B. TECHNICAL SPECIFICATIONS

Sl. No.	Technical Specifications	Complied (Yes/ No) Remarks (If Any)
1	Introduction. The test equipment and accessories shall comply with the prevailing international standards. The instrument shall support PDH Interfaces, i.e. E1 (2M), E2 (8M), E3 (34M), E4 (140M) and SDH interfaces, i.e. STM-0, STM-1, STM-4 and STM-16). It shall be capable to perform jitter and wander measurements at all PDH and SDH interfaces. The PDH electrical interfaces must comply with ITU-T G.703 and SDH optical interfaces must comply with ITU-T G.757. The offered tester shall be compact, handy and standalone (Not modular). It shall conform to GR/SDA 05/02.FEB.09 .	
2	Technical Specifications	
(a)	Transmitter Bit Rates: STM-16, STM-4, STM-1 and STM-0 (with tolerance: $>+ 4$ ppm).	
(b)	Frequency offset: ± 50 ppm in 1, 10 ppm steps (for 2.488 Gbit/s, 622.080 Mbit/s and 155.520 Mbit/s 51.840 Mbit/s).	
(c)	Transmit output power:	
(c)(i)	STM-1 and STM-4 at 1310 nm: - 8 dBm to -16 dBm.	
(c)(ii)	STM-1 and STM-4 at 1550 nm: + 2 dBm to -3 dBm (Long Reach).	
(c)(iii)	STM-16:	
(c)(iii)(aa)	1310 nm : - 4 to -10 dBm (Short Reach).	
(c)(iii)(ab)	1310 nm : 0 to -5 dBm (Intermediate Reach).	
(c)(iii)(ac)	1310 nm : +3 to -2 dBm (Long Reach).	
(c)(iii)(ad)	1550 nm : 0 to -5 dBm (Intermediate Reach).	
(c)(iii)(ae)	1550 nm : +3 to -2 dBm (Long Reach).	
(d)	Clock Source: Internal, Recovered and External within tolerance of $\geq \pm 4$ ppm.	
(e)	Payloads: Both for PDH and SDH as per ITU-T standards.	
(f)	Receiver Wavelength: 1280 - 1580 nm.	
(g)	Input Sensitive:	
(g)(i)	STM-1/4 at 1310 nm : $\geq - 30$ dBm (Intermediate Reach & Long Reach) with maximum input power: - 3 dBm.	
(g)(ii)	STM-1/4 at 1550 nm: $\geq - 30$ dBm Long Reach) with maximum input power: - 5 dBm.	
(g)(iii)	STM-16 at 1310 nm: $\geq - 17$ dBm for 1310 nm Short/Intermediate Reach, -28 dBm (Long reach).	
(g)(iv)	STM-16 at 1550 nm: $\geq - 18$ dBm (Intermediate reach) and $> - 28$ dBm (Long reach).	
(h)	STM-0/STM-1 Electrical	
(h)(i)	Clock Source (STM-1): Internal with the tolerance of $\geq + 4$ ppm.	
(h)(ii)	Frequency Offset: 155.520Mbp/s ± 50 ppm in 1, 10 ppm steps.	
(h)(iii)	Clock Source (STM-0): Internal with the tolerance of $\geq \pm 5$ ppm.	
(h)(iv)	Frequency Offset: 51.840Mbp/s $> \pm 500$ ppm in 1, 10, 100 ppm steps.	

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Technical Specifications	Complied (Yes/ No) Remarks (If Any)
3	Receiver (STM-1): Clock recovery: 155.520Mbps/s +150 PPM Clock recovery (STM-0): 51.840Mbps/s >+ 500 PPM in 1, 10,100 ppm steps.	
3(a)	Type of connectors: FC/PC Optical Connectors, 1.5/2M Bantam Connectors.	
3(b)	Test Pattern : PRBS , All 1's, All 0's, 10 User Patterns defined up to 16 bits, Test Pattern Inversion Unselected Channels: Unequipped, broadcast.(b) Test Pattern : PRBS , All 1's, All 0's, 10 User Patterns defined up to 16 bits, Test Pattern Inversion Unselected Channels: Unequipped, broadcast.	
3(c)	Tester shall be able to inject alarms and errors.	
3(d)	SDH Measurements (622M, 155M, 52M).	
3(e)	Tester should be able to measure all the errors and alarms which come up during testing.	
3(f)	The tester shall comply with the performance standardsITU-T G.821, G.826, G.828 and G.829, M.2100/M.2101/M.2110 (Maintenance or BIS).	
4	Optical Power Level Measurement.	
4(a)	Output power: -9 dBm to -21 dBm with the accuracy of ± 1 dBm.It pertains to the Test & Measurement specifications of the equipment.	
4(b)	Tester shall have the Automatic Tributary Scan function.	
5	SDH Features	
5(a)	The tester shall have the function of ITU-T and ETSI mapping, Overhead Monitoring and Decoding, Text encoding of all applicable bytes (K1, K2, S1, C2, etc.), Full SOH/POH Overhead bytes control in binary or HEX format, and Programming K1, K2 APS signalling bytes as per ITU-T G.783.	
5(b)	The tester shall have the Through Modes functions i.e. Line through, Payload through, All SOH bytes can be modified except for B1, B2, H1, H2 bytes, Alarms/Error Insertion, Trace Generation.	
5(c)	SDH-PDH Mux/Demux Testing. Tester shall have two sets of physical ports with the following combinations:- (i) 2.5G 0/34M. (ii) 622M 0/34M. (iii) 155M E (0)/34M. (iv) 2.5G 0/2M. (v) 622M 0/2M. (vi) 155M E (0)/2M. (vii) MuxTest, MuxMode.	
5(d)	Tester shall have the function of SDH-SDH Mux/Demux Testing. The following combinations are applicable:- (i) 2.5G 0/622M 0. (ii) 622M 0/155M E (0). (iii) 155M E (0)/52M E. (iv) 2.5G 0/155M E (0). (v) 622M 0/52M E. (vi) 2.5G 0/52M E.	

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Technical Specifications	Complied (Yes/ No) Remarks (If Any)
5(e)	Tester shall have G.783 Pointer Test Sequences (AU or TU pointer). Sequences: Single, Burst, Phase, Transient Burst, Periodic, 87-3, 26-1, Opposite (Increase + Decrease), and Custom Movement: Increase, Decrease, Increase + Decrease Anomalies: Added, Cancel, and None.	
5(f)	Tester shall have APS Timing Measurement function with following features:-	
5(f)(i)	Tester should measure the time anomaly present with the 1 ms resolution.	
5(f)(ii)	Anomaly selection: MS-AIS, B2 errors, AU-AIS, TU-AIS, LOS.	
5(f)(iii)	Selectable switch time to display PASS or FAIL.	
5(f)(iv)	Selectable gate time to control the minimum interval for the circuit to be anomaly time.	
5(f)(v)	APS timing at 2M interfaces: 2M-AIS, 2M-LOS.	
5(f)(vi)	APS bytes capture with the save and printing facility.	
5(f)(vii)	Tester shall have the function of Round trip delay measurement.	
6	<u>PDH Specifications.</u>	
6(a)	<u>34 M Transmitter.</u>	
6(a)(i)	Clock Source: Internal with the tolerance of ± 5 ppm.	
6(a)(ii)	Frequency offset generation: 34.368 Mbit/s ± 500 ppm in 1, 10, 100 ppm steps.	
6(b)	<u>34 M Receiver.</u>	
6(b)(i)	Clock Recovery: 34.368 Mbit/s ± 500 ppm.	
6(b)(ii)	Jitter Tolerance shall conform to ITU-T G.823.	
6(b)(iii)	Input Sensitivity: Terminate: -12 dB cable loss.	
6(b)(iv)	Impedance: 75 Ω , unbalanced.	
6(b)(v)	Port/Connector: 75 Ω , unbalanced BNC.	
6(c)	<u>Dual 2M Transmitter (Lines 1 and 2).</u>	
6(c)(i)	Clock Source: Internal with the tolerance of ± 5 ppm, external, recovered.	
6(c)(ii)	Frequency offset: $\geq \pm 5000$ ppm in 1, 10, 100, 1000 ppm steps.	
6(c)(iii)	Line Coding: AMI, HDB3.	
6(c)(iv)	Port/Connector: 120 Ω .	
6(d)	<u>Dual 2M Receiver (Lines 1 and 2).</u>	
6(d)(i)	Clock Recovery: $\geq \pm 5000$ ppm.	
6(d)(ii)	Jitter Tolerance shall comply with ITU-T G.823 recommendations.	

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Technical Specifications	Complied (Yes/ No) Remarks (If Any)
6(e)	<u>Voice Frequency Testing.</u>	
6(e)(i)	Monitor speaker with volume control.	
6(e)(ii)	VF Level and Frequency Measurement Level: +3 to -60 dBm.	
6(e)(iii)	Resolution: 0.1 dBm	
6(e)(iv)	Frequency Range: 50 to 3950 Hz, resolution 1 Hz	
6(e)(v)	VF Tone Generation.	
6(e)(vi)	Noise measurement.	
6(f)	<u>Pulse Mask Analysis.</u>	
6(f)(i)	The tester shall have the pulse mask (2M, 34M, and 45M).	
6(f)(ii)	Scan period: 500 ns	
6(f)(iii)	On-screen pulse shape display with G.703 Pulse Mask verification.	
7	<u>PDH/T-Carrier Jitter Measurement.</u>	
7(a)	Tester shall comply fully with ITU-T recommendations O.171 and O.172 (payloads inside SDH signals); wide band/High band Jitter Measurement PASS/FAIL threshold as per ITU-T G.823, G.824 recommendations or user defined.	
7(b)	<u>Jitter Generation Modulation Source Type.</u> Sinusoidal Jitter Amplitude/ Frequency as per ITU-T O.171.	
7(c)	<u>Jitter Transfer/Tolerance Measurement PASS/FAIL Template.</u> As per ITU-T G.823, G.824; Test Frequencies: Up to 30 points; Technique: Onset of errors; Storage: upto 100 records.	
8	<u>SDH Jitter.</u>	
8(a)	Jitter Measurement Tester shall fully comply with ITU-T recommendations O.172. Accuracy: As Per ITU-T O.172 Tester shall Store ≥ 99999 measurement intervals and > 99 records. Measurement Interval: One second Jitter Histogram.	
8(b)	<u>High Band Jitter Measurement.</u> PASS/FAIL threshold as per ITU-T G.825 or user defined.	
8(c)	<u>Accuracy.</u> As per ITU-T O.172; Test Duration: Timed or Continuous; Storage: ≥ 99999 measurement intervals, > 99 records; Measurement Interval: min1 second.	
8(d)	<u>Jitter Generation Modulation Source Type.</u> Sinusoidal Jitter Amplitude/Frequency: Fully compliant to ITU-T recommendations as per ITU-T Recommendation O.172.	
8(e)	Tester shall have the Jitter Tolerance/Transfer Measurement function, PASS/FAIL Template as per ITU-T G.825, Test Frequencies: Up to 30 points, Technique: Onset of errors ,Storage: Up to 100 records.	

Tender for supply of SDH Analyser (1/4/16) with Jitter & Wander -Test Instrument

Sl. No.	Technical Specifications	Complied (Yes/ No) Remarks (If Any)
9	Wander Measurements. Tester shall have the PDH Wander function and shall fully comply with ITU-T recommendations per ITU-T O.171 and ITU-T O.172 (payloads inside SDH signals).	
10	Additional Features. Auto Configuration, Test results/events storage and events log capability. Tester should store more than 18 test results or 750 errors or alarms events with user definable labels; lock/unlock records, available to screen view or print; Print at timed interval , Audible alarm: On/off switchable.	
11	Histogram Analysis.	
11(a)	Upgrades. SW options upgradeable via software in-field cartridge replacement.It implies insitu software upgrade capability.	
11(b)	Display. Backlit 320 x 240 pixels STN indoor/outdoor Color screen with CFL Backlight.	
11(c)	Printer. Report printing via serial port, RS-232 DIN-9.	
11(d)	Network. 10Base-T DIN-9.	
11(e)	Battery. Built-in NiMH rechargeable battery pack	
11(f)	Power. AC operation w/100 to 240 V AC, 50/60 Hz universal charger.	
12	Environmental.	
12(a)	Operating temperature: -5°C to +45°C.	
12(b)	Storage temperature: -20 to 70°C.	
12(c)	Relative Humidity: > 95% at 40°C.	
12(d)	Size: Handy and small in size.	
12(e)	Weight should not be more than 1.5 kg.	
13	Accessories.	
13(a)	The test instruments and their accessories shall be provided with rugged re-usable transit case with lock and keys with field usage.	
13(b)	Carrying Case.	
13(c)	AC/DC Charger Adapter.	
13(d)	Instruction Manual.	
13(e)	Optical Patch cordSM (FCUPC to FCUPC).	
14	Warranty- 3 years.	
15	Calibration- The calibration after expiry of warranty period and till the end life as required for the test equipment and accessories shall be covered under AMC.	

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

ANNEXURE-13

Un-Price Bid-A Proforma (without GST)

Supply of SDH ANALYSER (1/4/16) WITH JITTER & WANDER Test Instrument							
Tender Reference							
Name & Address of the Bidder							
Description		Supply of SDH ANALYSER (1/4/16) WITH JITTER & WANDER Test Instrument					
Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model	Unit Price (INR)	Total Price (INR)
1	VePAL TX300s Portable SDH/SONET Tester with SFP interface up to STM1/4/16 and PDH 2M/8M/34M/45M/ 139M. Incl. TX300s Chassis/Rechargeable Battery Pack, AC Adaptor/Power Cord, Shoulder Strap, Rugged Reusable transit case with lock and key, USB Stick with Manual/ ReVeal TX300s Software for PC. with accessories as follows :	Nos	1	10	Make : VeEX & Model : VePAL TX3000S (STM 1/4/16)		
	Accessories/ Additional Items						
2	2M Bantam Interface	Nos	2	20			
3	Jitter Generation and measurement analysis	Nos	2	20			
4	Wander Analysis	Nos	1	10			
5	Voice Frequency testing	Nos	1	10			

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model	Unit Price (INR)	Total Price (INR)
6	Pulse Mask Analysis	Nos	1	10			
7	TX300S 2 year extended warranty (Total 3 year warranty)	Nos	1	10			
8	Over-the Head Headset (2.5mm Type)	Nos	1	10			
9	FC/PC to FC/PC (Male/Female) SM 1310/1550 nm Attenuator 10dB	Nos	2	20			
10	BNC to BNC Test Cable, 2m (6 ft) (SS211).	Nos	2	20			
11	Bantam to Bantam Test Cable, 2m (6 ft), (SS106)	Nos	2	20			
12	SS212 Bantam (m) 120 Ohm to BNC (m) 75 Ohm, 2m (6 ft)	Nos	2	20			
13	1310nm SR SFP for 155M/622M/2.5G STM 1/4/16-OC3/12/48	Nos	2	20			
14	1310nm IR for 155M/622M/2.5G STM 1/4/16- OC3/12/48	Nos	2	20			
15	1310nm LR for 155M/622M/2.5G STM 1/4/16 - OC3/12/48	Nos	2	20			
16	1550nm IR SFP for 155M/622M/2.5G STM 1/4/16-OC3/12/48	Nos	2	20			
17	1550nm LR for 155M/ 622M/ 2.5G STM 1/4/16- OC3/12/48 (Part No. 301-01-009G)	Nos	2	20			

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Sl. No.	Items Description	AU	Unit Qty	Total Qty	Make & Model	Unit Price (INR)	Total Price (INR)
18	Optical Patch cord- FC-PC to LC-PC SM Duplex Patch cord	Nos	2	20			
19	FC/PC to FC/PC (M/F) SM 1310/1550 nm Attenuator 10dB.	Nos	2	20			
20	LAN Cable with RJ-45 Connector	Nos	1	10			
21	Rugged Carrying case with lock & key	Nos	1	10			
22	Warranty 3 years	Nos	1	10			

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Un-Price Bid-B (Without GST)

Annual Maintenance Contract (AMC) including Calibration of SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Tender Reference		
Name & Address of the Bidder		
Description		Annual Maintenance Contract (AMC) including Calibration
AMC charges for 8 years (including Calibration) after Warranty period of 3 years		
Sl. No.	Description	Price in Rupees
1	1 st year of AMC	
2	2 nd year of AMC	
3	3 rd year of AMC	
4	4 th year of AMC	
5	5 th year of AMC	
6	6 th year of AMC	
7	7 th year of AMC	
8	8 th year of AMC	
Total- B		

Supply of SDH ANALYSER (1/4/16) WITH JITTER & WANDER Amount [Total A]	
AMC charges of SDH ANALYSER (1/4/16) WITH JITTER & WANDER [Total B]	
Grand Total [Total A + Total B]	

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER**ANNEXURE-14****EMD BANK GUARANTEE PROFORMA**

1. As agreed under the relevant terms and conditions of Enquiry Ref _____ dt _____ (hereinafter called the said Enquiry) between M/s. ITI Ltd., NS Unit, Dooravani Nagar, Begaluru-560016, India. (Hereinafter called the Purchaser) and M/s. _____ (hereinafter called the Bidder) for supply of _____, the Bidder hereby agrees to furnish EMD against supply performance by way of an irrevocable Bank Guarantee for Rs. _____ (Rupees. _____). We _____ (indicate the name of Bank) (hereinafter referred to as 'THE BANK' at the request of the Bidder do hereby undertake to pay to the Purchaser, an amount not exceeding Rs. _____ (Rupees. _____) against any loss or damage caused to or suffered or would be caused to or suffered by the Purchaser, by reasons or breach by the said Bidder of any of the terms or conditions contained in the said Enquiry.

2. We _____ (indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the Purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Purchaser, by reason of breach by the said Bidder of any of the terms and conditions contained in the said Enquiry or by reason of the Bidder's failure to perform the said Enquiry. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees. _____).

3. The Bank further agrees that the Purchaser shall be the sole judge as to whether the said Bidder has committed any breach or breaches of any of the terms and conditions of the contract and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Purchaser on account thereof, and the decision of the Purchaser that the said Bidder has committed such breach or breaches and as to the amount or amounts of loss, damage costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Purchaser from time to time shall be conclusive, final and binding on the Bank.

4. We undertake to pay to the Purchaser, any money so demanded notwithstanding any dispute or disputes raised by the Bidder in any suit or proceedings pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

5. It shall not be necessary for the Purchaser to proceed against the Bidder before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the Purchaser may have obtained or obtains from the Bidder.

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

6. We _____ (indicate the name of Bank) further agree with the Purchaser, that the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Enquiry or to extend time of performance by the said Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Enquiry and we shall not be relieved from our liability by reasons of any such variation, or extension being granted to said Bidder or for any forbearance, Tender document for Supply & Maintenance of Desktop PC Page 47 of 48 act or omission on the part of the Purchaser or any indulgence by the Purchaser, to the said Bidder 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.

7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Bidder.

8. We _____ (indicate the name of Bank) undertake not to revoke this Guarantee during its currency except with the previous written consent of the Purchaser, in writing.

9. Notwithstanding anything contained in the foregoing clauses, our liability under this guarantee is restricted to Rs. _____ (Rupees. _____) and our guarantee shall remain in force until _____ (Date of expiry of Bid validity). Unless a demand is made against us to enforce a claim under this guarantee within five months from the date of expiry of Bid validity, all your rights under this guarantee shall be forfeited and we shall be relieved and discharged from all liability hereunder.

DATE: _____ For _____ (indicate the name of Bank)

PLACE:

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER**ANNEXURE-15****BANK GUARANTEE PROFORMA**

1. As agreed under the relevant terms and conditions of Purchase Order Ref dt (hereinafter called the said Purchase Order) between M/s. ITI Ltd., NS Unit, Dooravaninagar, Bangalore-560 016, India. (Hereinafter called the purchaser) and M/s. (Hereinafter called the supplier) for supply of the supplier hereby agrees to furnish a security Deposit against supply performance by way of an irrevocable Bank Guarantee for Rs. (Rupees.) We (indicate the name of Bank) (hereinafter referred to as 'THE BANK' at the request of the supplier do hereby undertake to pay to the purchaser, an amount not exceeding Rs. (Rupees.) against any loss or damage caused to or suffered or would be caused to or suffered by the Purchaser, by reasons or breach by the said supplier of any of the terms or conditions contained in the said Purchase Order.
2. We (indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser, by reason of breach by the said supplier of any of the terms and conditions contained in the said Purchase Order or by reason of the supplier's failure to perform the said Purchase Order. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee shall be restricted to an amount not exceeding Rs. (Rupees.)
3. The Bank further agrees that the Purchaser shall be the sole judge as to whether the said Supplier has committed any breach or breaches of any of the terms and conditions of the contract and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Purchaser on account thereof, and the decision of the Purchaser that the said Supplier has committed such breach or breaches and as to the amount or amounts of loss, damage costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Purchaser from time to time shall be conclusive, final and binding on the Bank.
4. We undertake to pay to the Purchaser, any money so demanded notwithstanding any dispute or disputes raised by the Supplier in any suit or proceedings pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.
5. It shall not be necessary for the Purchaser to proceed against the Supplier before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the Purchaser may have obtained or obtains from the Supplier.

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

6. We (indicate the name of Bank) further agree with the Purchaser, that the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Purchase Order or to extend time of performance by the said Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Supplier and to forbear or enforce any of the terms and conditions relating to the said Purchase Order and we shall not be relieved from our liability by reasons of any such variation, or extension being granted to said Supplier or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser, to the said Supplier 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.
7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Supplier.
8. We (indicate the name of Bank) undertake not to revoke this Guarantee during its currency except with the previous written consent of the Purchaser, in writing.
9. Notwithstanding anything contained in the foregoing clauses, our liability under this guarantee is restricted to Rs.....(Rupees.....) and our guarantee shall remain in force until (Date of expiry of warranty period + 60 Days). Unless a demand is made against us to enforce a claim under this guarantee within twelve months from the date of expiry of warranty period, all your rights under this guarantee shall be forfeited and we shall be relieved and discharged from all liability hereunder.

DATE:

For (indicate the name of Bank)

PLACE:

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

ANNEXURE-16

MANDATORY UNDERTAKING

Undertaking as per the tender document Ref. No. :

dated.....

Undertaking-I

Provision of the Information Technology Act 2000 (No 21 of 2000)

(To be rendered on the Company letter head)

It is certified that (Company name), strictly adhere to all the provisions of the information technology act 2000(No 21 of 2000) of ministry of Law, Justice and company affairs government of India.

In case of any violation-deviation (company name) would be liable for any action under the provisions of the aforesaid law.

(Signed)

Designation/Name/Address of the Firm

Date:

Place:

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Undertaking-II

CERTIFICATE: NON-MALICIOUS CODE

(To be rendered on the Company letter head)

1. This is to certify that the Hardware and the software being offered, as a part of the Contract, does not contain embedded malicious code that would activate procedure to:

- a) Inhibit the desired and designed function of the equipment.
- b) Cause physical damage to the user for equipment during the exploitation.
- c) Tap information, resident or transient in the equipment/Networks.

2. The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyrights and Intellectual Property Rights (IPRs) are caused due to activation of any such malicious code in embedded software.

(Signed)

Designation/Name/Address of the Firm

Date:

Place:

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

Undertaking-III

Undertaking from OEM

(To be rendered on the Company letter head)

As an OEM we under take
that:

Final delivery/supply of equipment/cards as part of Project "Customer project name" including spares / maintenance equipment to be provided during the warranty and AMC period will be Non-'Country of Concern' for "Customer project name."

(Signed & Stamp)

Designation/Name/Address of the Firm

Date:

Place:

Signature of the Bidder with stamp & date

TENDER FOR SUPPLY OF SDH ANALYSER (1/4/16) WITH JITTER & WANDER

ANNEXURE-17



हिंदी केवल एक भाषा नहीं बल्कि हमारी राष्ट्रीय पहचान है।

आईटीआई लिमिटेड

नेटवर्क सिस्टम्स यूनिट - वित्त
दूरवाणीनगर, बेंगलूरु - 560 016, भारत
फोन : +91 (80) 2566 0503
: +91 (80) 2565 1714
ई.मेल : cfm_nsu@itilttd.co.in
वेबसाइट : www.itilttd.in
CIN No. : L32202KA1950GOI000640

ITI LIMITED

Network Systems Unit - Finance
Dooravaninagar
Bengaluru-560 016, India.
Tel : +91 (80) 2566 0503
: +91 (80) 2565 1714
E-mail : cfm_nsu@itilttd.co.in
Website : www.itilttd.in
GSTIN No. : 29AAACI4625C2ZU



RTGS/NEFT/ECS Mandate Form

1	Name of the Beneficiary	M/s ITI Limited - Network Systems Unit
2	Beneficiary Address	Regd. & Corporate Office, ITI Bhavan, Dooravaninagar, Bangalore 560016
3	Bank Account No.	10637729843
4	IFSC Code	SBIN0009077
5	a) Bank Name	State Bank of India
	b) Branch Name	Industrial Finance Branch
	c) Branch Address	Residency Road, Bangalore - 560025
6	Type of Account	CC Account
7	PAN No.	AAACI4625C
8	Bank MICR Code	560002059

I do hereby declare that the particulars given above are correct and complete.
If the transaction is delayed or not effected at all for reasons of incomplete or
incorrect information, the purchaser will not be responsible.

Date: 12/06/2024

Kanchana

Authorised Signatories
KANCHANA
Dy. Finance Manager
Network Systems Unit,
ITI Limited, Dooravaninagar,
Bangalore - 560016

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

For STATE BANK OF INDIA
[Signature]
Manager
S.D. No. 100/2024 डी.वि.नं. बेंगलूरु
I.P.B., BENGALURU - 560 026

Date:

Signature of Bank Manager
With Bank Seal

पंजीकृत एवं निगमित कार्यालय : आईटीआई भवन, दूरवाणीनगर, बेंगलूरु - 560016, भारत फोन : +91 (080) 2561 4466, फैक्स : +91 (080) 2561 7525
Registered & Corporate Office : ITI Bhavan, Dooravaninagar, Bengaluru - 560016, India Phone: +91(080) 2561 4466, Fax: +91(080) 2561 7525
TIN : 29980058837 GSTIN : 29AAACI4625C2ZU CIN : L32202KA1950GOI000640 Visit our Website : www.itilttd.in

Signature of the Bidder with stamp & date

JTI		PRICE BID FORMAT										Annexure C	
Serial No.	Item Description	Unit Quantity	Total Quantity	Unit	Make & Model	Basic Unit Price	HSN Code for the Item	Basic Unit Price X Total Quantity	% of GST for corresponding HSN Code	GST Amount	Total Value 9+11		
1	2	3	4	5	6	7	8	9*	10	11	12		
Supply of SDH ANALYSER (1/4/16) WITH JITTER & WANDER Test Instrument													
	VENDOR NAME												
1	VePAL TX300s Portable SDH/SONET Tester with SFP interface up to STM1/4/16 and PDH 2M/8M/34M/45M/ 139M. Incl. TX300s Chassis/Rechargeable Battery Pack, AC Adaptor/Power Cord, Shoulder Strap, Rugged Reusable transit case with lock and key, USB Stick with Manual/ ReVeal TX300s Software for PC, with accessories as follows :	1	10	Nos.	Make : VeEX & Model : VePAL TX3000S (STM 1/4/16)								
	Accessories/ Additional Items												
2	2M Bantam Interface	2	20	Nos.									
3	Jitter Generation and measurement analysis	2	20	Nos.									
4	Wander Analysis	1	10	Nos.									
5	Voice Frequency testing	1	10	Nos.									
6	Pulse Mask Analysis	1	10	Nos.									
7	TX300S 2 year extended warranty (Total 3 year warranty)	1	10	Nos.									
8	Over-the Head Headset (2.5mm Type)	1	10	Nos.									
9	FC/PC to FC/PC (Male/Female) SM 1310/1550 nm Attenuator 10dB	2	20	Nos.									

20/08/2026 8/11/2026

10	BNC to BNC Test Cable, 2m (6 ft) (SS211).	2	20	Nos.
11	Bantam to Bantam Test Cable, 2m (6 ft), (SS106)	2	20	Nos.
12	SS212 Bantam (m) 120 Ohm to BNC (m) 75 Ohm, 2m (6 ft)	2	20	Nos.
13	1310nm SR SFP for 155M/622M/2.5G STM 1/4/16- OC3/12/48	2	20	Nos.
14	1310nm IR for 155M/622M/2.5G STM 1/4/16- OC3/12/48	2	20	Nos.
15	1310nm LR for 155M/622M/2.5G STM 1/4/16 - OC3/12/48	2	20	Nos.
16	1550nm IR SFP for 155M/622M/2.5G STM 1/4/16- OC3/12/48	2	20	Nos.
17	1550nm LR for 155M/ 622M/ 2.5G STM 1/4/16- OC3/12/48 (Part No. 301-01-009G)	2	20	Nos.
18	Optical Patch cord- FC-PC to LC-PC SM Duplex Patch cord	2	20	Nos.
19	FC/PC to FC/PC (M/F) SM 1310/1550 nm Attenuator 10dB.	2	20	Nos.
20	LAN Cable with RJ-45 Connector	1	10	Nos.
21	Rugged Carrying case with lock & key	1	10	Nos.
22	Warranty 3 years	1	10	Nos.

[illegible]

Note:

1. Relevant Columns to be filled with PERCENTAGE / NUMERICAL Values ONLY, ELSE will be treated as INCLUDED in FOR Site Total Price) Quoted Price is including of Packing/Forwarding charges (if any) and Freight/Insurance charges (if any).
2. The tender will be evaluated based on the total price quoted in the price bid including AMC.
3. Bidder has to quote for all the line items.
4. Separate Instructions/order will be issued for AMC post warranty period of 3 years as per its requirement.

Dr. Zaccaro
01/10/2026



**Annual Maintenance Contract (AMC) including Calibration of
SDH ANALYSER (1/4/16) WITH JITTER & WANDER
after 3 years Warranty**

Name & Address of the Bidder		Annual Maintenance Contract (AMC) including Calibration of SDH ANALYSER (1/4/16) WITH JITTER & WANDER after 3 years Warranty								
Sl. No.	Items Description	Quantity (UOM)	Total Quantity (Lot)	HSN Code for the Item	Rate of AMC per year Post warranty (in) on total basic value of supply	Total Price(INR)	% of GST	GST Amount	Total Value (7+9)	
1	2	3	4	5	6	7	8	9	10	
1	AMC Cost for 1st Year	Year	1							
2	AMC Cost for 2nd Year	Year	1							
3	AMC Cost for 3rd Year	Year	1							
4	AMC Cost for 4th Year	Year	1							
5	AMC Cost for 5th Year	Year	1							
6	AMC Cost for 6th Year	Year	1							
7	AMC Cost for 7thYear	Year	1							
8	AMC Cost for 8th Year	Year	1							
Total Cost for 8 years of AMC										
(Relevant Columns to be filled with PERCENTAGE / NUMERICAL Values ONLY. Quoted Price is including Packing/Forwarding Charges (if any)and Frieght/Insurance Charges (if any))										

Note:

1. The tender will be evaluated based on the total price quoted in the price bid including AMC.
2. Separate instructions/order will be issued for AMC post warranty period of 3 years as per its requirement.

Signature
01/10/2026