

TENDER DOCUMENT

Tender for Procurement of Routers and associated metrials for interconnecting RTECs for remote testing with NGN Labs

2-12/2016-MM/TEC 08.01.2016



ISO 9001:2008

**Government of India
Ministry of Communications & IT
Department of Telecommunications
TELECOMMUNICATION ENGINEERING CENTRE,
Khurshid Lal Bhawan, Janpath, New Delhi - 110001**

(Visit at www.eprocure.gov.in or www.tec.gov.in)

Price: Rs. 1000/-only

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SECTION - I

NOTICE INVITING TENDER

Govt. of India
Ministry of Communications & IT
Department of Telecommunications
Telecommunication Engineering Centre
Khurshid Lal Bhawan, Janpath,
New Delhi – 110001

Tender No. 2-12/2016-MM/TEC

Dated: 08.01.2016

Tenders are invited by Sr. DDG, Telecom Engineering Centre (TEC), on behalf of President of India, only from Original Equipment Manufacturers or System Integrators for Procurement of Routers and associated materials for interconnecting RTECs for remote testing with NGN Labs.

Approximate cost of Tender	Rs. 24,00,000/-
Tender Fee	Rs. 1000/-
Earnest Money Deposit	Rs. 60,000/-
Date/Time of Publishing of e-Tender	0900 Hrs of 08.01.2016
Document Download Start Date/Time	0900 Hrs of 08.01.2016
Document Download End Date/Time	1100 Hrs of 08.02.2016
Clarification Start Date/Time	0900 Hrs of 08.01.2016
Date & Time of Pre Bid Conference	1100 Hrs of 25.01.2016
Clarification End Date/Time	1700 Hrs of 27.01.2016
Bid Submission Start Date/Time	0900 Hrs of 30.01.2016
Bid Submission End Date/Time	1100 Hrs of 08.02.2016
Date/Time of opening of Techno-commercial Bid	1130 Hrs of 08.02.2016

The tender document is available on website <http://eprocure.gov.in>. The intending bidders may download the e-tender document from the above mentioned website. The interested bidders may submit the bids online at <https://eprocure.gov.in> in two bids systems {i.e. (i) Techno-commercial Bid and (ii) Financial Bid} in the prescribed proforma. Bids are to be submitted only online through the e-procurement portal <https://eprocure.gov.in/eprocure/app>. All the documents in support of bid are also to be scanned and uploaded along with the tender document. Bid sent by any other mode will not be accepted.

The bidder shall upload the e-bids and submit original Demand Drafts/Banker's Cheques i.r.o. EMD and Tender Fee both, separately, drawn in any Scheduled Bank in Delhi, in favour of Accounts Officer (Cash) TEC, New Delhi, in Room No 257, Khurshid Lal Bhawan, TEC, before scheduled date & time. E-Bid submitted without EMD & Tender Fee in the prescribed formats will not be accepted. Tender Fee submitted by the bidders will be non-refundable.

ADG (MM)
TEC, New Delhi

FAX No.: 011-23725144

SECTION - II

INSTRUCTIONS TO BIDDERS

1.0 DEFINITIONS:

- a. "The Purchaser" means the Telecommunication Engineering Centre (TEC).
- b. "The e-bidder" means a company or firm who participates in this tender and submits its e-bid. (hereafter e-bidder shall be referred as bidder)
- c. "The Supplier" means a company or firm supplying the goods under the contract.
- d. "The Goods" means all the equipment, measuring instruments, Computer Hardware/ Software and/ or other materials, which the Supplier is required to supply to the Purchaser under the contract.
- e. "The Advance Purchase Order" means the intention of Purchaser to place the Purchase Order on the successful bidder.
- f. "The Purchase Order" means the order placed by the Purchaser on the Supplier signed by the Purchaser including all attachments and appendices thereto and all documents incorporated by reference therein. The purchase order shall be deemed as "Contract" appearing in the document.
- g. "The Contract Price" means the price payable to the Supplier under the purchase order for the full and proper performance of its contractual obligations.
- h. "Contract Period" means the period starting from the placement of PO and ending with expiry of the SLA.

1.1 REGISTRATION AT E-PROCUREMENT PORTAL:

For participating in bidding through the e-procurement portal, it is necessary for the bidders to be the registered users of the e-procurement portal; <http://eprocure.gov.in>. For Bidders guidance Bidders Manual Kit is available at <http://eprocure.gov.in/eprocure/app>.

2.0 ELIGIBLE BIDDERS:

2.1 General

2.1.1 The bidder for this tender shall belong to any of the following categories.

- a. Original Equipment Manufacturer (OEM), who shall be original equipment manufacturer of complete solution being offered as per the Scope and Schedule of Requirements mentioned in Section (V).
- b. Traders (Authorised Suppliers/Distributors/Dealers/Agents).
- c. Reputed, experienced and IT Networking System Integrator.

2.1.2 The bidder at Sr. no. 2.1.1 (b) & (c) above is required to produce authorization from the concerned OEM to sell the routers in India, if applicable, along with letter of commitment from the OEM for complete supply and after sales support for the period of warranty and Service Level agreement (SLA), as per terms and conditions of tender and any amendment/clarification thereto.

2.2 Bidder Company Status:

2.2.1 The bidder company shall be registered and incorporated in India under the Companies Act, 1956 or Companies Act, 2013. In case of firm, it shall be registered under the relevant law.

2.2.2 The bidders at Sr. no. 2.1.1 (b) & (c) above shall ensure that there is appropriate teaming arrangement / MOU with OEM for successful installation, validation, commissioning and smooth functioning of the Remote Test Setup project.

2.3 Technical Experience:

The bidder should have executed, installed and commissioned, at least three orders of similar strength in India in last two financial years. Proof of such successful execution/installation/commissioning shall be provided on company's letter head containing company's registered office address as well as the name & contact details (telephone no. and/or email ID) of the person signing the Certificate.

2.3.1 The bidder or its partner OEM's shall have capability and experience in development and implementation of test scripts for various test & measurement equipment to facilitate automated test processes. The bidder or its partner OEM's shall also have experience in integrating multiple test & measurement equipment for functions and test capabilities. The experience requirement shall be related to the scope of this tender as mentioned at Section (V).

2.4 Turnover:

The bidders as well as its partner OEMs who may participate in supply of Devices as per Schedule of Requirement (Section-V B) (in case of a foreign OEM: either Indian subsidiary or its parent company) shall have Annual audited financial turnover of at least Rs. Two crore only(INR) during each of the last 3 completed financial years (FY 2012-13, 2013-14 & 2014-15). In case the turnover is in foreign currency, the SBI exchange rate as on the date of actual opening of the bid shall be taken into account.

2.5 Certification:

The bidder who may participate in supply of items at Sr. No. 1 and 2 as per Schedule of Requirement (Section-V) B shall have a valid (on the date of opening of tender)TL9000 or ISO 9001:2008 certification in their sphere of operation for at least last two consecutive years. In case of contract/ outsourced manufacturing of their offered equipment by the bidder, the contract/ outsourced manufacturing company shall have TL9000 or ISO9001:2008 certification in their sphere of operation.

3.0 COST OF BIDDING:

The bidder shall bear all costs associated with the preparation and submission of the bid. The Purchaser, will in no case, be responsible or liable for any costs, regardless of the conduct or outcome of the bidding process.

4.0 DOCUMENTS COMPRISING THE e-TENDER:

- 4.1 The goods required, bidding procedures and contract terms are prescribed in the Bid Document. The Bid Document includes:
- a. Notice inviting tender
 - b. Instructions to bidders
 - c. General (commercial) conditions of contract
 - d. Special conditions of contract
 - e. Technical specifications & schedule of requirement
 - f. Indemnity Bond
 - g. Profile of bidder
 - h. No near Relative Declaration/Certificate
 - i. Performance security bond form
 - j. Technical Proforma
 - k. Bid Form
- 4.2 Price Schedule shall be filled separately in Financial Bid of the tender, as per the procedure given in Bidders Manual Kit.
- 4.3 The bidder is expected to examine all instructions, forms, terms and specifications in the tender document. Failure to furnish all information as per the e-tender document or submission of e-bid not as per the requirement of e-tender document in every respect will be at the bidders risk and result in rejection of the said e-bid.

5.0 CLARIFICATIONS/AMENDMENTS OF e-TENDER DOCUMENT:

- 5.1 A prospective bidder requiring any clarification on the tender document shall upload its queries on e-procurement portal, prior to 1700 Hrs of 27.01.2016.
- 5.2 Purchaser shall upload the response to such queries, which are received in due time, generally by 10 days prior to the date of opening of the bids.
- 5.3 At any time, prior to the date of submission of bids, Purchaser may, for any reasons whether at its own initiative or in response to a clarification sought by a prospective bidder, modify the e-tender document by amendments.
- 5.4 The amendments/clarifications, if any, which are uploaded on the portal www.eprocure.gov.in, shall form an integral part of the tender document, and shall be binding on all bidders.
- 5.5 It shall be the sole responsibility of the prospective bidder to check the web site <http://eprocure.gov.in> from time to time for any amendment in the e-tender documents. In case of failure to get the amendments, if any the department shall not be responsible for it. Interested bidders are required to keep abreast of latest corrigendum (s) issued by Purchaser till the date of submission of bid.

6.0 PRE-BID CONFERENCE:

- 6.1 A Pre-bid conference shall be held at 1100 Hrs of 25.01.2016 in the New Committee Room, 3rd Floor, Telecom Engineering Centre, Khurshid Lal Bhavan, New Delhi. The queries already received shall, to the extent possible, be clarified in a Pre-bid Conference. The prospective bidders may attend the conference for clarifications on technical specifications, and other terms and conditions of the tender document. The queries, verbally raised during the Pre-

Bid conference, must be uploaded in the portal by 1700 Hrs of 27.01.2016. Consolidated replies to the relevant uploaded queries, shall form part of the tender document, and shall be uploaded on the web-sites, generally by 10 days prior to the date of opening of the bids.

- 6.2 For interpretation of any condition of this tender document, the decision of purchaser shall be final and binding on the Prospective Bidder.
- 6.3 In order to afford prospective bidders a reasonable time to take the amendment into account in preparing their bids, the purchaser may, at its discretion, extend the deadline for the submission of bids suitably.

7.0 DOCUMENTS COMPRISING THE BID AND SEALING/ MARKING THEREOF:

The bid prepared by the bidder shall comprise of:

- (1) Techno-commercial bid, and
- (2) Financial bid

- 7.1 All documents to be submitted under the bid must be uploaded in pdf format along with scanned copy of Demand Draft/Banker's Cheque for Earnest Money Deposit and Tender Fee both, separately. However, original, Demand Drafts/Banker's Cheques i.r.o. EMD & Tender Fee shall be submitted in Room No 257, Khurshid Lal Bhawan, TEC upto the last date of submission of e-bids(1100 Hrs of 08.02.2016).The purchaser reserves the right to seek actual documents for any uploaded documents during evaluation of the e-bid.
- 7.2 The Techno-commercial e-bid for 2-12/2016-MM/TEC dated 08.01.2016 should contain:
- a Scanned copy of Demand Draft/Banker's Cheque from Scheduled Bank of India for the prescribed amount (Rs. 60,000/-) of earnest money deposit, if applicable.
 - b Scanned copy of Demand Draft/Banker's Cheque for the prescribed amount of tender cost (Rs. 1000/-), if applicable.
 - c Latest NSIC certificates and documents, if applicable.
 - d Authorization letter for signing the bid document as per clause no. 7.11 to 7.14 of Section II.
 - e Attested copy of Certificate of Registration of company/firm as per clause no.2.2.1 of Section II.
 - f A copy of MOU between bidder and OEMs as required in clause 2.2.2 of section II shall be provided, if Applicable.
 - g Complete Audited financial report as a proof for annual turnover of Rs. Two crore only or more in preceding three financial years (FY 2012-13, 2013-14 & 2014-15) as per clause 2.4 of Section II.
 - h List, giving full particulars including available sources of all spare parts, special tools, software including licences etc., necessary for the proper and continuing functioning of the offered solution for the entire contract period
 - i Copy/Copies of Purchase Order duly authenticated by the authorised signatory of the bidder as proof of supply as per Clause No. 2.3 of Section II.

- j Copy of documentary evidence in support of clause no 2.3.1 of Section II.
 - k Copy of Indemnity Bond as per Annexure-I.
 - l Duly filled and signed Profile of bidder as per Annexure II.
 - m List of Partners/directors of the bidder along with Partnership Deed or Article/Memorandum of Association, as applicable.
 - n List of user replaceable spares proposed to be supplied and their quantity (Refer clause No. 11 of Section IV)
 - o Copy of PAN card/ GIR card and copy of Sales Tax Registration Certificate of the organization.
 - p No near relative Certificate/Declaration as per Annexure-III
 - q Duly filled Bid Form as per annexure-VI.
 - r For supply of any software i.e. operating system or any applications software the bidder shall have a Certificate Of Authenticity (COA) of the OEM counter signed by Authorised Signatory of the bidder stating that all Software's supplied are authentic and legal copy is/are being supplied.
 - s A statement showing item wise power requirement and heat load as clause no 4.1(e) of Section IV.
 - t A copy of Certificate confirming TL9000 or ISO 9001:2008 as per clause 2.5 of Section II.
 - u Duly filled Technical Proforma as per Annexure V mentioning name of his collaborator (if applicable), brand name and model no along with software version of the products offered in this tender. The technical literatures of the products should also be submitted.
 - v Tender document consisting of all Sections and Annexures, Subsequent Amendments/Clarifications if any, duly filled and signed by the authorised signatory with the stamp of the bidder.
- 7.3 Price Schedule for tender no. 2-12/2016-MM/TEC dated 08.01.2016 shall be filled separately as given in financial bid.
- 7.4 The bidder is expected to examine all instructions, forms, terms& conditions and specifications in the Tender Document and amendments/ clarifications, if any, and submit the bid accordingly.
- 7.5 No tender shall be uploaded after 1100 Hrs of 08.02.2016. Only in case the last date of submission of bids is declared as Central Government holiday in Delhi, the original EMD & Tender Fee will be accepted up to the next working day till the same time and the Techno-commercial Bid will be opened on the next working day at the scheduled time.
- 7.6 Tender document, as downloaded, must be submitted without making any additions, alternations. Tender document modified in any manner is liable to be rejected.
- 7.7 The purchaser reserves the right to accept/reject any/all/part of the bids without assigning any reason.
- 7.8 Any bid unaccompanied by EMD or/and Tender Fee in variance with the instructions herein, is liable to be rejected summarily.

- 7.9 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder in which case such corrections shall be signed by the person or persons authorized for signing the bid.
- 7.10 In case any requisite document(s) is submitted with bid in any language other than Hindi or English, the duly signed copy of the translation of that document from any authorised translator shall also be submitted along with the bid document.
- 7.11 The power of Attorney should be submitted and executed on the non-judicial stamp paper of appropriate value as prevailing in the respective states(s) and the same be attested by a Notary public or registered before Sub-registrar of the state(s) concerned.
- 7.12 The power of Attorney should be in favour of person(s) authorized by the Board of Directors of the bidder for participation tender and signing the documents, on behalf of the Company/ institution/Body corporate.
- 7.13 In case of the bidder being a partnership firm, the said Power of Attorney should be executed by all the partner(s) in favour of the said Attorney.
- 7.14 Board of Directors, who is unable to register Power of Attorney in India due to territorial constraints, shall give board resolution to this effect.

8.0 BID PRICES:

- 8.1 The prices should be quoted only in Indian Rupees as per Price Schedule only. No foreign exchange shall be made available by the purchaser. The Unit price inclusive of Custom/excise duty, after discount, if any and all other components need to be quoted individually.
- 8.2 The bidder must quote a definite price for each component & each year for SLA. In case the prices of any component are included in some other component, it should be mentioned specifically in the remark column, failing which the bid shall be rejected. However the Price of that component shall be indicated as '0' in the relevant column.
- 8.3 The column for quoting "Unit Rate (After discount, if any) In Figures to be entered by the Bidder" should not be left blank. If there is no specific price towards any component or SLA, the same shall be indicated as '0' in the relevant column.
- 8.4 In case any column other than "Unit Rate (After discount, if any) In Figures to be entered by the Bidder" of Price Schedule is left blank the value of that component shall be treated as '0'.
- 8.5 It is mandatory to quote the rate for complete configuration, including all the software, in respect of all the items mentioned in Price Schedule.
- 8.6 The bidder offering concessional E.D/sales tax shall submit the proof of applicable concessional ED/Sales Tax.
- 8.7 Price quoted must be exclusive of Octroi and/or Entry Tax. Suitable exemption from payment of Octroi and/or Entry Tax, if applicable, should be sought from the consignee who shall arrange the certificate. Octroi and/or Entry Tax, if not exempted, will be refunded on the production of original receipts along with the bill for supply.

- 8.8 In the case of revision of Statutory Levies/Taxes during the finalization period of tender, the purchaser reserves the right to ask for reduction in the prices if there is reduction in any duties or taxes.
- 8.9 Rates only for a single brand should be quoted against each item. In case multiple prices are quoted, the highest prices shall be considered during evaluation of financial bids.
- 8.10 A bid submitted with an adjustable or variable price will not be accepted.
- 8.11 The price approved by the purchaser for procurement will be inclusive of all levies and taxes i.e., Sales Tax, VAT & Excise Duty, packing, forwarding, freight and insurance etc., for delivery upto the Ultimate Consignee. Break up/variation in various heads like Custom duty, Excise duty, Sales Tax, Insurance freight and other taxes paid/payable is for the information and any changes in the taxes shall have no effect on the price during the scheduled delivery period except that any decrease shall be passed on to the purchaser.
- 8.12 Telecommunication Engineering Centre has been registered with Department of Scientific & Industrial Research, Govt. of India and is exempted from payment of custom duty on production of custom duty exemption certificate. Rates should be quoted without any custom duty in case the items are to be imported by the supplier from their principals and the invoice & other documents are in the name of purchaser. The Custom duty exemption certificate will be provided only after the items arrive at destination airport.

9.0 DOCUMENTS ESTABLISHING GOODS CONFORMITY TO BID DOCUMENTS:

- 9.1 The documentary evidence of goods in conformity with the Bid Documents may be in the form of literature and data and the bidder shall furnish a clause-by-clause compliance of all the terms & conditions of the tender demonstrating substantial responsiveness in the form of signing & stamping all the pages of the original bid document and corrigendum's/amendments by the authorized person/persons. In case of deviations, a statement of deviations and exceptions shall be given by the bidder.
- 9.2 For purposes of compliance to be furnished pursuant to Clause 9.1 above, the bidder shall note that the standards for workmanship, material and equipment and reference to brand names or catalogue number, designated by purchaser in its Technical Specifications are intended to be descriptive only and not restrictive.
- 9.3 The bidder should furnish the name of his collaborator (if applicable), brand name, model no. and type of the products offered in this tender. The technical literatures of the products should also be submitted. No change in either technology or product shall be permitted after opening of bids.

10.0 EARNEST MONEY DEPOSIT (BID SECURITY):

10.1 FURNISHING OF EMD

- 10.1.1 Earnest Money Deposit (refundable) of Rs. 60,000/- (Rs. Sixty Thousand only) is to be furnished with the bid by way of demand draft, banker's cheque or pay order valid for at least 225 days, from the date of opening of bids, from any scheduled bank in India, drawn in favour of AO (Cash), TEC, payable at New Delhi. Any other amount of money lying with the purchaser cannot be

adjusted against this head. Failure to furnish Earnest Money Deposit shall result in summarily rejection of the bid.

- 10.1.2 The bidder registered with National Small Scale Industries Corporation (NSIC) for the tendered item under single point registration scheme and desirous of claiming concessions available to such units inclusive of Earnest Money Deposit, should submit their latest and valid NSIC certificate and documents in respect of their monetary limit and financial capability duly certified by NSIC.

10.2 FORFEITURE OF EMD

The EMD shall stand forfeited if

- a. The bidder withdraws its offer before initial bid validity.
- b. The successful bidder, whose tender is accepted, fails or refuses to furnish the security deposit amount within the stipulated time, or fails or refuses to execute the contract.
- c. It is established that near-relatives of bidder is working in the units of DoT, as detailed in this document.
- d. In case it is found that tender document submitted by the bidder has been altered by way of tampering or doctoring.

In the above cases, the bidder will also not be eligible to participate in the tender for same item for one year from the date of any of the above events.

10.3 REFUND/RELEASE OF EMD

- 10.3.1 No interest would be payable for any period on EMD or on any other amount lying with the purchaser.
- 10.3.2 The EMD amount/BG will be refunded / released only after finalisation of tender, and on receipt of written request from the unsuccessful bidders.
- 10.3.3 The EMD of the successful bidder will be refunded /released only after the receipt of the prescribed Performance Security Deposit/Bank Guarantee.

11.0 PERIOD OF VALIDITY OF BIDS:

- 11.1 The prices quoted in the bid shall remain valid for acceptance by the purchaser for a period of 180 days from the date of opening of bids. A bid valid for a shorter period shall be rejected by the purchaser as non-responsive.
- 11.2 In case the Purchaser requests, in writing, the bidders to extend the period of validity of their bids, they may confirm the extension of the validity of their bids in writing, unconditionally. In such a case, the validity of the BG, if furnished, should also be extended suitably. A bidder may refuse the request without forfeiting its Earnest Money Deposit. A bidder accepting the request and granting extension will not be permitted to modify its bid.

12.0 SUBMISSION OF BIDS:

- 12.1 The bidders shall upload their bids online at e-procurement portal, in response to the e-tender published by the department. Bid submission can be done from the date of release of e-Tender till the last date of receipt of e-bids, as mentioned in the schedule in NIT (Section-I). Indemnity Bond, Payments for tender Fee and EMD must be received by the Purchaser at the address Assistant Director General (MM), Room No. 257, TEC, Khurshid Lal Bhawan,

Janpath, New Delhi not later than 1100 Hrs of 08.02.2016. In case, the last date of submission of bids is declared as central government holiday in Delhi, the original EMD & Tender Fee will be accepted up to the next working day till the same time and the Techno-commercial Bid will be opened on the next working day at the scheduled time.

- 12.2 The bidders should start the bid submission process well in advance so that they can submit their e-bid in time. The bidder should submit their e-bid considering the server time displayed in the e-procurement website. This server time is the time by which the e-bid submission activity will be allowed till the permissible time on the last/end date of submission indicated in the e-tender schedule.
- 12.3 Once the e-bid submission date and time is over, the bidders cannot submit their e-bid.
- 12.4 The Purchaser shall not be responsible for delay in submission of e-bid due to any reasons. No other mode of submitting the bid except the online method should be entertained
- 12.5 The Purchaser shall not be responsible if the bids are uploaded in any other portal than the one specified.
- 12.6 The Purchaser may, at its discretion extend this deadline for the submission of the bids by amending the tender document in accordance with Clause 5 of Section II in which case all rights and obligations of the Purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 12.7 Not more than one bid shall be permitted from a single bidder otherwise all the bids submitted by such bidder shall be summarily rejected.

13.0 LATE BID:

The server time indicated in the bid management window on the e-procurement website <http://eprocure.gov.in> will be the time by which the e-bid submission activity will be allowed till the permissible date and time scheduled in the e-tender. Once the e-bid submission date and time is over, the bidder cannot upload the e-bid.

14.0 MODIFICATION AND WITHDRAWAL OF BIDS:

The bidder may modify, withdraw or re-submit its e-bid online only, before the bid submission date and time as per provisions available in CPP Portal.

15.0 OPENING OF BIDS:

- 15.1 A two stage process shall be adopted in the evaluation of the bids. The purchaser shall open Techno-commercial bids online and check the Techno-commercial bids proposal online.
- 15.2 Authorized Representatives may check portal for status of tender opening, online.
- 15.3 The date fixed for opening of bids, if subsequently declared as central government holiday in Delhi, the revised date of schedule will be notified. However, in absence of such notification, the bids will be opened in the next working day at the same time.

16.0 CLARIFICATION OF BIDS BY THE PURCHASER:

To assist in the examination, evaluation and comparison of bids, the purchaser may, at its discretion, seek clarification/document(s) of its bid from the bidder. Only the information furnished, by the bidder, shall be considered in future evaluation. However, no post-bid clarification at the initiative of any bidder shall be entertained.

17.0 TECHNO-COMMERCIAL BID EVALUATION:

- 17.1 The bids will be evaluated Techno-commercially to determine whether they are complete, whether documents have been properly submitted, and whether bids are generally in order and qualify for opening and evaluation of financial bid.
- 17.2 Bid shall be considered substantially responsive if it conforms to the terms and conditions of the tender document without any material deviation.
- 17.3 The purchaser or his authorized representatives shall have the right to inspect the works, offices, showrooms, service centres etc. of the bidder, for verification of facts furnished by the bidder in support of his bid documents, and the bidder is bound to answer any query made by the purchaser.

18.0 FINANCIAL BID OPENING/FINANCIAL EVALUATIONS AND COMPARISON OF BIDS:

- 18.1 The purchaser shall shortlist only those bidders who are eligible and have submitted substantially techno-commercially responsive bid for opening of financial bid. Successful bidders would be intimated regarding opening of financial bids. The Financial Bids of techno-commercially unsuccessful bidders would not be opened.
- 18.2 Prices quoted in the Price Schedule only will be considered for evaluation.
- 18.3 The evaluation and comparison of responsive bids shall be done on the total price of the goods and SLA offered inclusive of Levies & Taxes i.e., Sales Tax, VAT & Excise Duty, packing, forwarding, freight and insurance etc. as indicated in the Price Schedule.
- 18.4 The supplier shall quote for a year wise Service Level Agreement for 5 years. The cost shall be quoted as a lump sum for maintenance, Updates, Upgradation and visit of the engineers as and when required.
- 18.5 The cost of SLA will be added to the basic quotation for the purpose of evaluation at the discount rate of 12% per year. Since the SLA will start at the end of warranty period of two years, the calculation for NPV of SLA will be done as follows:

$$\begin{aligned} \text{Net Present Value (NPV) of SLA} = & \text{Quoted rates for SLA for 1}^{\text{st}} \text{ year} / (1.12)^3 \\ & + \text{Quoted rates for SLA for 2}^{\text{nd}} \text{ year} / (1.12)^4 \\ & + \text{Quoted rates for SLA for 3}^{\text{rd}} \text{ year} / (1.12)^5 \\ & + \text{Quoted rates for SLA for 4}^{\text{th}} \text{ year} / (1.12)^6 \\ & + \text{Quoted rates for SLA for 5}^{\text{th}} \text{ year} / (1.12)^7 \end{aligned}$$

- 18.6 For the purpose of determination of lowest (L-1) bidder, price comparison will be done on the basis of the cost of complete quantity of hardware and

software considering the Total price of all the items as given in Price Schedule and NPV of SLA.

- 18.7 The purchaser may waive any minor infirmity or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.

19.0 CONTACTING THE PURCHASER:

- 19.1 No bidder shall try to influence the purchaser on any matter relating to its bid, from the time of the bid opening till the time the contract is awarded.
- 19.2 Any effort by a bidder to influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decision shall result in the rejection of the bid of that bidder.

20.0 PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS:

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

21.0 PLACEMENT OF ORDER:

- 21.1 The purchaser shall consider placement of orders for commercial supplies on the bidder whose offer has been found techno-commercially and financially acceptable. The tender will be awarded to the lowest (L-1) bidder.
- 21.2 The purchaser shall place an Advance Purchase Order of the tendered quantity on the bidder whose offer has been accepted. The issue of an Advance Purchase Order shall constitute the intention of the purchaser to enter into the contract with the bidder. The bidder shall, within the stipulated time, furnish performance security in conformity with the terms and conditions, in the form of a demand draft or bank guarantee as per the proforma enclosed at Annexure IV, from any scheduled bank in India.
- 21.3 Failure to furnish performance security within the stipulated time may result in cancellation of Advance Purchase Order along with forfeiture of the EMD.
- 21.4 Purchase Order will be placed only after acceptance of the performance security submitted by the bidder.
- 21.5 The issue of Purchase Order shall constitute the Award of Contract on the bidder.

22.0 PURCHASER'S RIGHT TO VARY QUANTITIES AT TIME OF AWARD:

- 22.1 Purchaser reserves the right at the time of award of contract to increase or decrease by up to 25% of the quantity of goods (subject to minimum of one unit) and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions at the time of award of contract. However purchaser reserves the right to order any item/part of the item as mentioned in the Price Schedule.

- 22.2 Repeat Order: The purchaser reserves the right to place repeat order up to 25% of the original tendered quantity during one year from the date of First Phase Purchase Order. However, such orders shall be placed after price negotiation (downward) with the supplier considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

23.0 DISQUALIFICATION OF BIDDER:

- 23.1 Purchaser reserves the right to disqualify the bidder for a period as deemed fit to the purchaser who have habitually failed to supply the equipment in time. Further, the suppliers whose equipment does not perform satisfactorily in accordance with the specifications may also be disqualified for a period as deemed fit to the purchaser.
- 23.2 Purchaser reserves the right to blacklist a bidder for a suitable period in case bidder fails to honour his bid without sufficient grounds.
- 23.3 The bidder should give a certificate that none of his/her near relative is working in the units where he/she is going to apply for the tender, as per Annexure-V. None of the near relative of proprietor OR all partners of partnership OR all the Directors of the company excluding Government of India/Financial institution nominees and independent non-Official part time Directors appointed by Govt. of India or the Governor of the state should be working in the unit where the tender is being applied. Due to any breach of these conditions by the company or firm or any other person the tender will be cancelled and Earnest Money Deposit will be forfeited at any stage whenever it is noticed and purchaser will not pay any damage to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.
The near relatives for this purpose are defined as:-
- a. Members of a Hindu undivided family.
 - b. They are husband and wife.
 - c. The one is related to the other in the manner as father, mother, son(s) & Son's wife (daughter in law), Daughter(s) and daughter's husband (son in law), brother(s) and brother's wife, sister(s) and sister's husband (brother in law).

SECTION - III

GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT

1.0 APPLICATION:

The General Conditions shall apply in contracts made by the purchaser for the procurement of Goods and associated services.

2.0 STANDARDS:

The Goods supplied under this contract shall conform to the standards prescribed in the Technical Specifications mentioned in Section-V & Special conditions mentioned in Section IV.

3.0 PATENTRIGHTS:

The Supplier shall indemnify, in the format prescribed in Annexure-I, the purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in Indian Telecom Network & TEC Laboratory.

4.0 PERFORMANCE SECURITY:

- 4.1 The contractor shall furnish performance security to the purchaser for an amount equal to 10% of the Contract Price for the goods as prescribed in Advance Purchase Order within 15 days of issue of the Advance Purchase Order.
- 4.2 The proceeds of the performance security shall be payable to the purchaser for non-compliance on account of the contractor's failure to complete its obligations under the contract.
- 4.3 The performance security may be submitted in the form of demand draft in favour of AO (Cash), TEC, or in the form of a Performance Bank Guarantee (PBG) issued by a scheduled bank and in the proforma provided in 'Annexure-VI' of this tender document.
- 4.4 The Performance Bank Guarantee (PBG) shall be valid for at least 8 Years & 6 Months from the date of Advance Purchase Order. The PBG shall be renewed from time-to-time till all the liabilities of the supply of goods and services are resolved by the contractor, or till 6 months beyond the expiry of SLA period of supply, whichever is later.
- 4.5 In case, any amount of Liquidated Damages (L/D) is recovered from PBG, the Contractor shall replenish the PBG to original value within 30 days of recovery.
- 4.6 The purchaser will discharge the performance security bond, deducting the pending dues, liquidated damages, if any, after completion of the contractor's performance obligations including warranty obligations under the contract.
- 4.7 No interest shall be paid on the security deposit amount.

5.0 TESTING AND TAKING OVER:

- 5.1 When the validation followed by sixty days field trial has been successfully carried out, lab will be declared as commissioned and the Inspector/Consignee will issue a Taking Over Certificate. The Inspector / consignee shall not delay

the issue of any "Taking Over Certificate" contemplated by this clause on account of minor defects in the physical installation which do not materially affect the commercial use thereof provided that the supplier shall undertake to make good the same in a time period not exceeding three months. The Taking Over Certificate shall be issued by the consignee within three weeks of commissioning of Remote Test Setup. In this case BCPC (Bill copy payable challan) shall be equivalent to "Taking over certificate" issuance of which shall certify receipt of goods in Safe & Sound Condition. However, they shall not discharge the supplier of their warranty obligation.

5.2 Nothing in clause 5 shall, in any way release the Supplier from any Warranty or other obligations under this contract.

6.0 PACKING, FORWARDING AND DISPATCH DOCUMENTS:

- 6.1 The contractor shall ensure that the goods are securely and adequately packed and marked to ensure safe arrival at the destination withstanding all hazards, such as rough handling severe climatic conditions, natural calamities etc. during transit.
- 6.2 The contractor shall be fully responsible for the safe arrival of the goods at destination and till the time they are received by the consignee, in good working condition.
- 6.3 Intimation of dispatch of goods should be sent to the consignee well within time. Such intimation should also be sent to the paying authority and to the purchaser.
- 6.4 The goods shall be supplied in original packing from the manufacturer clearly indicating item's Serial No, date, etc.

7.0 DELIVERY:

- 7.1 Delivery of the goods along with original printed copies of instruction/ operation manual(s) in English, test reports for hardware and software, software licences and documents shall be made by the Contractor in accordance with the Schedule of Requirements (SOR) and the Special Conditions of the contract. The delivery of the equipment shall be to the Consignee as given in the purchase order. OEM Quality Check Certificate would be required.
- 7.2 The delivery of the goods and documents should be implemented strictly as per the delivery schedule. All the goods are to be delivered at the location specified in the Purchase Order.
- 7.3 The delivery of the goods, for all the items in schedule of requirements shall be completed within 60 days from the date of placement of purchase order. The Remote Test Setup shall be installed within 75 days from the date of placement of PO. The validation of the Lab should be completed by the supplier within 120 days from the date of PO. The field trial of the Lab shall be for 60 days, which shall start within 15 days of validation tests being declared successful. The full commissioning of the Lab shall be within 195 days from the PO date. Any minor point of validation, so declared by the purchaser which does not materially affect the field trial, can be offered for testing during field trial period. Validation in UMP can be completed during field trial period. If the above mentioned pending issues of validation and UMP are not resolved/completed by the supplier during the field trial period of 60 days, the field trial shall be extended till all the issues are resolved/UMP validation is completed.

- 7.4 In case the purchaser exercises the right of pre supply testing as per clause 5.1 above, supplier has to ensure that the goods are offered for pre-supply testing sufficiently in advance so as to meet the scheduled delivery requirement. Purchaser shall not be responsible in any manner for deviation from the prescribed delivery schedule.
- 7.5 The supplier shall provide original licenses from its OEM for all software.
- 7.6 If the supplier fails to complete the supply, installation, validation and commissioning as per clause 7.3 above, the purchaser reserves the right to cancel the P.O. and encash the Performance Bank Guarantee.
- 7.7 The extension of delivery period against the purchase order, if any, may be granted subject to the condition that purchaser shall have the absolute right to revise the price(s) as per clause 10 of Section III and also to levy penalty for the delayed supplies.

8.0 WARRANTY:

- 8.1 The supplier shall warrant that the stores / equipment (including software and software tools) or any part thereof to be supplied shall be new and free from all defects and faults in materials used, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the technical specifications and drawings as per Section V. The supplier shall be responsible for any defect that may develop under the conditions provided by the contract and under proper use, arising from faulty material, design or workmanship such as corrosion of the equipment, inadequate quality of material to meet equipment requirements, inadequate contact protection, deficiencies in circuit design and/or otherwise and shall remedy such defects at his own cost when called upon to do so by the purchaser who shall state in writing in what respect the stores are faulty. This warranty shall survive inspection or payment for / and acceptance of goods, but shall expire (except in respect of complaints notified prior to such date) 24 months after the commissioning of Lab. The warranty period of the hardware and software components shall be for two years after successful commissioning and handing over to purchaser. During the warranty period, the complete responsibility to keep the equipment working (including manpower and replacement of parts / components hardware and software and or both) shall rest with the supplier.
- 8.2 If it becomes necessary for the Supplier to replace or renew any defective portion(s) of the equipment under this clause, the provisions of the Clause 5.3 of this Section shall apply to the portion(s) of the equipment so replaced or renewed or until the end of the above mentioned period of 24 months, whichever may be later. If any defect is not remedied by the supplier within two weeks, the Purchaser may proceed to get the defects remedied from other sources, at the supplier's risk and expenses, but without prejudice to any other rights which the purchaser may have against the supplier in respect of such defects including extension of warranty for delay beyond 2 weeks. SLA conditions as per Section IV shall be applicable during warranty period also except that no payment shall be made for compliance of SLA conditions during warranty period.

8.3 Replacement of any hardware and software components under warranty clause shall be made by the supplier free of all charges at site including freight, insurance and other incidental charges.

9.0 PAYMENT TERMS:

- 9.1 Payment shall be released as scheduled below:
- a 50% Payments shall be released on proof of receipt of entire ordered material by all the consignees.
 - b 20% payment shall be released on installation (including power ON) of racks, cables, other essential accessories and ordered equipment by all the consignees.
 - c 20% payment on completion of validation and testing of routers and interfacing with NGN lab and commissioning.
 - d The balance 10% of payment shall be released after 6 months from "Taking Over" as per Clause 5.6 of Section III subject to production of certificate of satisfactory performance from all the designated officer in-charge of the ultimate consignees.
- 9.2 All payments mentioned above are for all the items in the price schedule excluding SLA cost.
- 9.3 Cost of the goods supplied in a purchase order will be paid on receipt of the goods in good condition by all ultimate consignees, at site. For claiming this payment following documents must be produced.
- a. Bills in duplicate duly pre-receipted
 - b. Delivery Challan
 - c. Excise gate pass and/or Custom Duty Paid Certificate or equivalent document as applicable.
 - d. Certificates of receipt of goods in physically good condition from the ultimate consignees.
 - e. Proof of payment of Octroi /Entry tax etc., if any
- 9.4 Bills for the supply of total quantity of a purchase order of complete supply will be settled once, on submission of the documents as mentioned above.

10.0 PRICES:

- 10.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not be higher than the prices quoted by the Supplier in his Bid.
- 10.2 Prices once fixed will remain valid during the scheduled delivery period. Increase and decrease of Taxes and other statutory duties will not affect the price during this period.
- 10.3 Any increase in taxes and other statutory duties/levies after the expiry of the delivery date shall be to the supplier's account. However benefit of any decrease in these taxes/duties shall be passed on to the purchaser by the supplier.

11.0 SUBCONTRACTS:

No subcontracts are permitted.

12.0 DELAYS IN THE SUPPLIER'S PERFORMANCE:

- 12.1 Delivery of the Goods and performance of the services shall be made by the Supplier in accordance with the time schedule specified by the purchaser in its purchase order. In case the supply is not completed in the stipulated delivery period, as indicated in the Purchase Order, purchaser reserves the right to short close/cancel this purchase order and/or recover liquidated damage charges. The cancellation/short closing of the order shall be at the risk and responsibility of the supplier and purchaser reserves the right to purchase balance unsupplied item at the risk and cost of the defaulting suppliers.
- 12.2 Delay by the Supplier in the performance of its delivery and SLA obligations shall render the Supplier liable to any or all of the following sanctions, viz., imposition of liquidated damages, and forfeiture of its performance security and/or termination of the contract for default.
- 12.3 If at any time during the performance of the contract, the supplier encounters condition impacting timely delivery of the goods and performance of service, the Supplier shall promptly notify to the purchaser in writing the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at its discretion extend the period for performance of the contract subject to extension of period of performance security deposit.
- 12.4 If the supplies are not completed in the extended delivery period, the purchase order may be short-closed and the Performance Security shall be forfeited. However in such situation the supplier will have to furnish a fresh performance security of 10% of the Purchase Order value for the quantity supplied.
- 12.5 In case the partner OEM/OEMs fail to support/help the supplier and as a result bidder fails to provide satisfactory service to the TEC, the supplier alone will be held liable for any kind of loss incurred by the TEC.

13.0 LIQUIDATED DAMAGES:

- 13.1. The date of delivery of the stores stipulated in the acceptance of tender should be deemed to be the essence of the contract and delivery must be completed not later than the dates specified therein. Extension will not be given except in exceptional circumstances. Should, however, deliveries be made after expiry of the contract delivery period, without prior concurrence of the purchaser, and be accepted by the consignee, such deliveries will not deprive the purchaser of his right to recover liquidated damages under clause 13.2 below. However, when supply is made within the contracted original delivery period, the consignee may accept the stores and in such cases the provision of clause 13.2 will not apply.
- 13.2. Should the supplier fail to deliver the stores or any consignment thereof within the period prescribed for delivery the purchaser shall be entitled to recover 0.5% of the value of the delayed supply for each week of delay or part thereof for a period upto 10 weeks and thereafter at the rate of 0.7% of the value of the delayed supply for each week of delay or part thereof for another 7 weeks of delay.
- 13.3. Further if there is a delay in installation or commission, LD charged shall be levied on the total value of the Purchase Order (excluding the value of SLA).

The LD rate shall be 0.5% of total value per week for period of ten weeks and thereafter at the rate of 0.7% of the total value per week for each week of delay or part thereof for another 7 weeks of delay.

- 13.4. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challenged by the supplier. LD if any will be recovered from the payment to be made to the supplier.
- 13.5. Any amount which becomes due and recoverable from the contractor on account of liquidated damages or account of any matter relating to this contract, shall also be recoverable from any sum that is due or any sum thereafter may become due to the contractor out of this contract or any other contract with the Government.
- 13.6. The PBG shall be encashed to the extent of LD amount, if the same is not paid within the time period specified in the notice for recovery of LD. Where the Bank Guarantees have been encashed partially, the supplier on such occasions shall restore the encashed guarantees to the full amount. Any failure to do so shall amount to violation of the terms and conditions of the project. Without prejudice to its rights of any other remedy, purchaser may encash Bank Guarantee (PBG) in case of any breach in terms & conditions of the Contract by the supplier.

14.0 FORCE MAJEURE:

- 14.1 If, at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God (hereinafter referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such an event come to an end or cease to exist, and the decision of the purchaser as to whether the deliveries have been so resumed or not shall be final and conclusive. Further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract.
- 14.2 Provided, also that if the contract is terminated under this clause, the purchaser shall be at liberty to take over from the Supplier at a price to be fixed by the purchaser, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture which may be in possession of the Supplier at the time of such termination or such portion thereof as the purchaser may deem fit, except such materials, bought out components and stores as the Supplier may with the concurrence of the purchaser elect to retain.

15.0 TERMINATION FOR DEFAULT:

- 15.1. The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the supplier, terminate this contract in whole or in part
- a. If the supplier fails to deliver any or all of the goods within the time period(s) specified in the contract, or any extension thereof granted by the purchaser pursuant to Clause 15.
 - b. If the supplier fails/delays to perform any other obligation(s) under the Contract; and
 - c. If the supplier, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as the purchaser may authorize in writing) after receipt of the default notice from the purchaser.
- 15.2. In the event the purchaser terminates the contract in whole or in part pursuant to Clause 15.1 the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered and the supplier shall be liable to the purchaser for any excess cost for such similar goods. However the supplier shall continue the performance of the contract, including SLA, to the extent not terminated.

16.0 TERMINATION FOR INSOLVENCY:

The purchaser may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the supplier, if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

17.0 ARBITRATION:

- 17.1 In the event of any dispute or difference arising as to the execution of the contract or as to the respective rights or liabilities of the parties or the interpretation of any condition of agreement (except as to any matters the decision of which is specially provided for any by those or the special conditions) the same shall be referred to the sole arbitration of Advisor (T), DoT, New Delhi or of his nominee. If the post of Advisor (T) is vacant, a higher authority or his nominee will act as Sole Arbitrator. The award of the arbitrator shall be final and binding on the parties to the agreement.
- 17.2 The arbitrator may from time to time with the consent of the parties to the agreement enlarge the time for making the award.
- 17.3 Upon every such reference, the assessment of the cost incidental to the reference and award respectively shall be the discretion of the arbitrator.
- 17.4 The agreement to appoint an arbitrator will be in accordance with the Arbitration and conciliation Act. 1996.
- 17.5 In the event of such arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reasons whatsoever another person shall be appointed to act as arbitrator by purchaser in accordance with terms of agreement and person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

17.6 The venue of arbitration shall be New Delhi the place from which the acceptance note is issued or such other places, as the Advisor (T) at his discretion may determine. In this clause, the terms Advisor (T) includes any other officer who is for the time being discharging the duties of Advisor(T), whether in addition to other functions or otherwise.

18.0 SET OFF:

18.1 Any sum of money payable to the contractor (including security deposit refundable to him) under this contract may be appropriated by the purchaser or the purchaser or any other person or persons contracting through the purchaser and set off the same against any claim of the purchaser or purchaser or such other person or persons for payment of sum of money arising out of this contract or under any other contract made by the Contractor with purchaser of the purchaser or such other person or persons contracting through the purchaser.

18.2 The suppliers, who are given Purchase Orders, must give the details of the supplies made against all the Purchase Orders every month on the first working day of the following month to the purchaser.

19.0 COURT JURISDICTION:

This Contract/PO is subject to jurisdiction of the competent Courts at New Delhi only.

20.0 PAYMENT METHOD:

20.1 Payment shall be made to the contractor electronically or through cheque for which a supplier shall provide the necessary details of his bank account.

20.2 Income Tax or any other applicable taxes shall be deducted at source at the time of payment to the contractor, in accordance with the provisions of the relevant applicable Acts.

21.0 PAYING AUTHORITY:

Sr. DDG (TEC), shall be the paying authority and A.O. (Cash), Telecommunication Engineering Centre, Gate No. 5, Khurshid Lal Bhavan, Janpath, New Delhi will be the disbursing authority.

22.0 CONSIGNEE:

Location wise consignee details are as given below:

1. ADG (AS), Telecommunication Engineering Centre, Gate No. 5, Khurshid Lal Bhavan, Janpath, New Delhi
2. ADG (SR), Telecom Engineering Centre, IInd Floor, BSNL, Telephone Exchange Building, 4th Block, Jayanagar, Bangalore – 560011.
3. Director (ER), RTEC, BSNL QA Building, Salt Lake, Sector 5, Kolkata – 700091.
4. ADG (Admn) (WR), O/o DDG (WR), Telecom Engineering Centre, 2nd Floor, D-wing, BSNL Administrative Building, Juhu Road, Santa Cruz (W), Mumbai – 400054.

SECTION - IV

SPECIAL CONDITIONS OF CONTRACT

1.0 The special conditions of contract shall supplement the 'Instructions to the Bidders' as contained in Section II & "General (Commercial) Conditions of the Contract" as contained in Section III and wherever there is a conflict, the provisions herein shall prevail over those in Section II and Section III. If there is any discrepancy in NIT published in newspapers and eligibility, terms & conditions stipulated in tender document, provision in the tender documents will prevail.

For interpretation of any condition of this tender document, the decision of Purchaser shall be final and binding on the Bidder.

1.1 The bidder shall furnish the name of his collaborating OEM (if applicable), brand name, model no. and type of the products offered in this tender. The technical literatures of the products should also be submitted. No change in either technology or product shall be permitted after opening of bids except for the upgraded version of that product with the prior approval of the purchaser.

1.2 The bidder shall have back to back arrangement with OEM's for API and its updates/upgrades for integration with Unified Management Platform.

2.0 UPDATES:

2.1 The supplier shall provide correction patch for any software bug, noticed from the date of supply till the end of contract, in the supplied software, at no extra cost to the purchaser. This shall also cover updates as per 3GPP/3GPP2/IETF/ITU-T/MEF/Broad Band forum/IPv6 Forum/any other protocol already mentioned in the technical conditions specified under Section V, at no extra cost to the purchaser.

2.2 All software features provided initially with various tools including protocols of the tender document shall fall within the purview of updates.

2.3 Any media used for upgradation and updates shall remain within the Remote Test Setup premises.

3.0 UPGRADATION:

3.1 The project envisages supply, installation, validation, commissioning, field trail, and warranty after commissioning and there after five years' service support for the Remote Test Setup in TEC and RTECs.

3.2 The supplier shall quote cost of Service Level Agreement as detailed in Price Schedule. This shall include:

A. Cost of Services for AMC which will also include cost of upgradation as per 3GPP/3GPP2/IETF/ITU-T/MEF/Broad Band forum/IPv6 Forum/any other protocol for upgradation of other tools for the entire duration of Contract.

3.3 Upgradation of various tools shall mean any new feature developed by the OEM which is not covered in clause 2 of this section. The upgrade requirement of various tools shall be as per Section V (TECHNICAL SPECIFICATIONS & SCHEDULE OF REQUIREMENT).

- 3.4 Any hardware, software, firmware which is required as a pre-requisite to support upgradation shall be provided free of cost. Any specific training to utilize the upgraded feature shall be provided on site by the supplier at no extra cost to the purchaser.
- 3.5 Updates and Upgrades shall not be allowed remotely. Separate platform shall be provided for updates and upgrades. Remote supervision of Remote Test Setup shall not be permitted.
- 3.6 LD charges of Rs one thousand per week or part thereof shall be levied in case of delay in upgradation of the Remote Test Setup as per the requirement of clause 3.1 to 3.5 above.

4.0 Turnkey Project:

The Supplier shall be responsible for the complete installation and validation testing and commissioning of the equipment. All DUTs and /or software required for the purpose of completing the validation shall be arranged by the supplier at no extra cost to purchaser.

4.1 Supplier's Responsibilities:

The responsibility of the Supplier shall be as follows:

- a. Supply delivery, installation, integration, validation, commissioning, operation & maintenance.
- b. Supply and installation of spare parts, and special tools, etc., whenever required.
- c. Providing set of complete documents for the whole project. This shall include physical and wiring layout, network diagrams of the project.
- d. To conduct the required in-house trainings.
- e. The Supplier shall provide the peak power requirements and heat load of the equipment / tools along with the Techno-commercial bid.
- f. The Supplier shall provide fire proof wiring.

4.2 ROLE OF Purchaser:

Role of Purchaser shall be to provide the following:

- a. Necessary infrastructure including air-conditioned working space in the premises of purchaser.
- b. IP-MPLS connectivity between TEC and RTECs.
- c. Space for installation of equipment in purchaser building.
- d. Facilities like AC electric power etc. for which planning and deployment shall be separately done for the Remote Test Setup required.

5.0 Installation, Integration, Validation, Commissioning, Operations & Maintenance:

- 5.1 It shall be the responsibility of the Supplier to install, validate and commission the entire project including hardware and software within the specified period of time. It shall be ensured that all the necessary equipment is delivered in time.

The complete interconnecting wiring for all the equipment (including for various types of DUTs required) meeting the applicable standards is to be supplied and carried out by the Supplier so that the Remote Test Setup shall discharge the required output.

The lab shall be considered commissioned after validation by purchaser and satisfactory operation during the trial period of 60 days thereafter.

5.2 For the purpose of supply, validation and field trial of Remote Test Setup project the following terms shall be used:

- Device under Test (DUT): DUT: The set of DUTs to be arranged by the supplier for the purpose of validation of Remote Test Setup.
- Equipment under Test (EUT): The equipment offered for testing and certification to TEC after validation.

5.3 The Remote Test Setup shall be treated as commissioned on completion of following activities:

- a. Installation, Integration, Validation (validation as per the test schedule approved by the purchaser) with DUTs and field trial,
- b. Verification of stock including spares software's and its licences.

In addition to above, there shall not be any pending performance and availability issues.

6.0 Warranty and Service Level Agreement (SLA):

6.1 The supplied solution shall be under warranty for a period of two years from the date of commissioning of the project. The contractor shall provide efficient after-sales support for repair, required Professional(s), updates and upgrades of the supplied items in the form of SLA. The SLA will come into force immediately after completion of warranty period and shall be valid for five years. No separate SLA agreement will be signed as the same will be part of the Purchase Order itself. The SLA can further be extended for another five years on mutually agreed terms.

6.2 During warranty the Suppliers shall perform all the functions as enunciated under the SLA free of cost. All the penalty and LD clauses shall be applicable during the period of warranty also in case of failure on part of supplier.

6.3 The supplier shall, undertake to maintain the equipment for hardware, software, firmware and any other related items supplied by them and take full responsibility for their continuous working. The SLA shall include periodic testing, preventive and corrective maintenance including replacement of spare parts. The offered rate per annum shall be clearly specified. Supplier shall be responsible for complete technical/operation support during the warranty/SLA period.

6.4 Liquidated Damages (L/D) shall be recovered from Contract Performance Bank Guarantee (PBG), if the amount to be recovered cannot be adjusted against SLA amount due for the corresponding period. In such a case the Contractor shall replenish the PBG to original value within 30 days of

recovery. The PBG shall be renewed from time-to-time till all the liabilities under the contract are resolved by the contractor, or till 6 months beyond the expiry of SLA period of supply, whichever is later.

7.0 Software License:

All software prices shall be quoted as a one-time charge on fixed price basis including license fee for the entire contract period.

8.0 Complete System:

The intention of this specification is basically to specify the main features required for the system. The bidder is required to provide complete details of additional facilities/optional facilities available in the offered solution even though they may not be covered by these specifications. The list of hardware and software indicated in the Tender Document is indicative only. Any additional component required to complete the project as per scope and objectives defined in Section V shall have to be supplied free of cost.

9.0 Project schedule:

The bidder shall provide a detailed project plan for the supply, installation, validation and commissioning of the Remote Test Setup and abide by it, if selected.

10.0 Evaluation of SLA in Bid:

10.1 The supplier shall quote for a year wise Service Level Agreement for 5 years. The cost shall be quoted as a lump sum for Maintenance, Updates, Upgradation and visit of the engineers as and when required.

10.2 The cost of SLA will be added to the basic quotation for the purpose of evaluation at the discount rate of 12% per year. Since the SLA will start at the end of warranty period of two years, the calculation for NPV of SLA will be done as follows:

$$\begin{aligned} \text{Net Present Value (NPV) of SLA} = & \text{Quoted rates for SLA for 1}^{\text{st}} \text{ year} / (1.12)^3 \\ & + \text{Quoted rates for SLA for 2}^{\text{nd}} \text{ year} / (1.12)^4 \\ & + \text{Quoted rates for SLA for 3}^{\text{rd}} \text{ year} / (1.12)^5 \\ & + \text{Quoted rates for SLA for 4}^{\text{th}} \text{ year} / (1.12)^6 \\ & + \text{Quoted rates for SLA for 5}^{\text{th}} \text{ year} / (1.12)^7 \end{aligned}$$

10.3 For the purpose of determination of L-1 bidder, NPV of SLA cost calculated as per clause 10.2 above shall be considered for evaluation.

11.0 List of Essential Spares:

The SLA quote shall be with user replaceables spares stocked by supplier at his cost at the purchaser premises.

12.0 Validation:

12.1 The validation of the Remote Test Setup shall be carried out by a committee constituted by the purchaser at the installation / purchaser site. The supplier shall be required to give a detailed test plan for the equipment supplied within thirty days of the placement of PO. The test plan shall cover testing of various DUTs along with its OS, networking software and application software. The

test plan shall also cover all the tools that are being supplied to meet the scope and objective of the Remote Test Setup. The test plan shall be approved by the purchaser with modifications as deemed fit and the same shall be final.. The test plan shall include the hardware (the entire technical requirement mentioned in the specification) and the software related tests. Purchaser reserves the right to conduct certain tests, wherever offered, at any site other than the installation site. The supplier shall make necessary arrangements to facilitate smooth testing of the offered equipment. Delay in submission of test plan and validation of Remote Test Setup shall result in LD as per clause 13 of Section III.

- 12.2 Non completion of validation shall not prevent the purchaser to use the remote test setup for commercial purpose.
- 12.3 If there is any delay in completion of validation beyond prescribed time, the supplier shall provide support as applicable during warranty period without any cost to the purchaser. Any non-compliance to these obligations as per clauses 5 & 6 of this section will lead to LD's/actions as per terms & conditions mentioned in the tender document. This shall not constitute start of warranty period as per clause 6 of this Section.

13.0 TRAINING:

- 13.1 The supplier shall submit a generic training/lecture with names of topics proposed to be covered along with the acceptance of APO. The purchaser will finalise the training schedule including the contents of the training which will be binding on the supplier. The training shall commence within six weeks after placement of PO.
- 13.2 The initial training shall be for six persons in one or two batches at the premises of the purchaser. The training will be provided without any extra cost to the purchaser. The transport/boarding/lodging expenses of the trainees will be borne by the purchaser. All other costs, including that of trainer, training material, training tools/aids and generation/evaluation of test reports, will be borne by the supplier.
- 13.3 The configuration training of DUTs shall be arranged at purchaser premises for four officers at the time of installation.
- 13.4 Training material, in the form of high quality printed documents and/or in the form of soft copy, shall be provided by the contractor to every trainee. One set of training material shall also be given to ultimate consignee, and ADG (MM), TEC. The purchaser reserves the right to reject training material, if not found of proper quality. In such a case the supplier shall immediately replace rejected material with good quality material.
- 13.5 The training shall include theoretical and hands on practical sessions on the following:
- i. Installation and Configuration of the system (including hardware and software) and tools
 - ii. Operation and Maintenance of the system (including hardware and software) and tools
 - iii. Testing procedure and Application of the System for different DUT's, Applications Software/ Networking Software / Operating System
 - iv. Day to day maintenance and up gradation of systems and tools.

14.0 TAKING OVER OF THE REMOTE TEST SETUP:

The Remote Test Setup shall be taken over by the consignee on fulfilment of the following conditions:

- a) Commissioning of Remote Test Setup as defined in clause 5.0 of this Section.
- b) Imparting initial training as per clause 13 above.

15.0 Requirements OF SLA:

15.1 During the period of SLA, the Supplier shall inter alia:

- i Diagnose the hardware and software faults.
- ii Rectify the hardware and software faults.
- iii Repair and replace the faulty PCB/modules and any other equipment or part thereof.
- iv Carry out the periodic preventive maintenance on quarterly basis or as recommended by OEM's of the tools.
- v Supply all software updates on continuing basis.
- vi Perform Software maintenance like software debugging, patch implementation, version control of software, document generation and repository of working versions.
- vii Software upgrades and new software versions, of the new releases/ upgrades of - various standards, specifications, recommendations, etc. (of ITU, IETF, ETSI, IEEE, 3GPP, 3GPP2, MEF, IPv6 forum, etc.).
- viii Create various customized reports and DUT/EUT test results as required and specified by purchaser from time to time.
- ix The supplier shall provide assistance in integrating Remote Test Setup, including API support, with other labs in purchaser premises and to resolve any problems that may arise during integrated testing of an EUT/DUT.
- x The SUPPLIER shall be solely responsible for the maintenance, repair & upgradation of the software/hardware systems, equipment and parts thereof and purchaser shall not be liable to interact with any of the partners or collaborators of the SUPPLIER.
- xi No post-reporting adjustment shall be made to any Service Level performance data or supporting information without purchaser's approval.

16.0 MAINTENANCE OF HISTORY SHEET AND LOG BOOKS:

16.1 The designated in-charge of the Remote Test Setup shall maintain a log book/ history sheet to record, events including alarm, faults (including restarts) and updates and upgrade activities, test in progress etc., which shall be verified by supplier.

16.2 History sheet proforma shall become part of this agreement. Purchaser reserves the right to make changes in the proforma proposed by the Supplier which shall be submitted at the time of installation.

- 16.3 The Supplier shall provide detailed maintenance procedures and proforma of the history sheet. The officer In charge of the Remote Test Setup shall fill up the history sheet containing the statistics about the health of the Remote Test Setup equipment installed at the remote test setup and send a report to the Technical support and national Center of the Supplier on monthly basis. Based on the History sheet report, the Supplier shall analyze the health record of Remote Test Setup and if something alarming or unusual is noticed, shall advise the in-charge of Remote Test Setup to take necessary actions for preventive maintenance of such equipment. These instructions for preventive maintenance shall be passed on to Remote Test Setup staff in writing and by sending experts to the Remote Test Setup as special activity.

17.0 INCIDENT MANAGEMENT - HARDWARE AND SOFTWARE DEFECT:

- 17.1 Following Hardware and Software defects shall be treated as non-availability of Remote Test Setup:
- (a) Total remote test setup crash or complete disruption of testing activities.
 - (b) Any performance degradation which means remote test setup hangs (stuck) or not operative, or there is unreasonable wait times for resources or response as if the remote test setup system is hanging
 - (c) Remote test setup crashes repeatedly under normal use.
 - (d) Operational error which means remote test setup is impaired in full or in part.

System availability	Metric (Uptime)
Routers, Network Elements LAN Switch etc.	99 %
Other items	95 %

17.2 PERMISSIBLE AVAILABILITY OF THE REMOTE TEST SETUP

- i. The metric values of the availability of the remote test setups are inclusive of any planned outages and are measured over a period of one month.
- ii. The desired system availability over a defined period shall be ensured. Scheduled backup and other recovery functions must be clearly identified by the supplier.
- iii. Tools unavailable due to hardware faults shall only be treated as hardware fault provided that tool was working satisfactorily before the occurrence of fault.
- iv. In case a remote test setup is completely or partially non-available then the severity level shall be defined as per the remote test setup non-availability calculated over a period of one month. The LD in such cases shall be imposed as per clause 21 of Section IV.

17.3 TECHNICAL SUPPORT CENTRE:

- i) The supplier shall have at least one Technical support Center in India. The supplier may decide the location, resources, manpower, etc. of such Center

so as to meet the criteria for fault restoration/faulty unit repair times as mentioned in the SLA. The SUPPLIER shall furnish the names, locations, complete postal address, Email address, Telephone numbers and FAX numbers of the Technical support Center at the time of signing this Agreement. The SUPPLIER shall also specify the details of Technical support Center in the format given below.

Details of Technical support Center

1. Location of Technical support Center :
 2. Name of the Contact person :
 3. Postal Address :
 4. Telephone Numbers Minimum two :
 5. Mobile Phone Number :
 6. FAX Number :
 7. e-mail :
- ii) The SUPPLIER shall also provide the name of alternate contact person or Technical Support Center with address/ email address & telephone /FAX no. which may be contacted by purchaser staff for support in case of no response/poor response from the designated Technical support center. This, however, shall not preclude purchaser from imposing the penalties, if any, as applicable as per the terms & conditions of this agreement.
- iii) Any change in Address, Email address, Phone number, FAX Number etc shall have to be intimated in writing by the SUPPLIER to the concerned In charge of the Remote Test Setup at the earliest. If the station In charge of the Remote Test Setup is unable to report the faults to the normally assigned Technical support Center due to the change of email, phone number etc. the fault will be reported (as per provision of (i) above) and the SUPPLIER shall be responsible for rendering all the maintenance support services to the Remote Test Setup as per the terms and conditions of this Agreement.

18.0 RESPONSIBILITIES OF TECHNICAL SUPPORT CENTER:

18.1 The SUPPLIER shall ensure that the Technical support center(s) is/are manned by fully competent and responsible Engineers and are:

- a) Capable of giving all types of necessary technical guidance/ assistance over phone to the In-charge of Remote Test Setup, for fast restoration of faults. Telephonic assistance shall be made available between 9am to 6 pm IST from Monday to Saturday.
- b) Capable of attending the faults at the Remote Test Setup site whenever needed by deputing competent technical expert.

18.2 The other responsibilities of the supplier are:

- i) The Technical support Center shall collect the faulty modules/cards/units/PCBs etc. from purchaser Remote Test Setup and repair / replace them with good cards during the period of SLA.
- ii) The SUPPLIER shall either carry-out the repair on its own or through the facilities of third party or parent company. In all cases, however, purchaser shall interface only with this SUPPLIER.

- iii) The first line maintenance shall be done by authorized staff of supplier by replacement of the faulty /affected Hardware/ Software module with a readily available good Hardware/ software module, stocked at the site by the SUPPLIER at his (Supplier's) cost or out of the spare capacity or any other module arranged by the supplier as the case may be. Decision whether the Hardware/ Software module / cards at Remote Test Setup can be made spare or not shall rest with purchaser.
- iv) The responsibility of packing & dispatch of faulty Hardware/ Software modules/ cards/ units/ PCB etc. at the site of purchaser as well as at the repair/ maintenance site shall lie with the Supplier.
- v) The SUPPLIER shall ensure repair or replacement of the faulty equipment/card, within 30 days (including transit time) of reporting of the faulty equipment from purchaser to the SUPPLIER's designated Technical support Centre. The cost of transport on both sides shall be borne by the SUPPLIER. The 30 days' time shall be calculated from the date of reporting the faulty equipment at the SUPPLIER's designated premises to the date of receiving back of the repaired / replacement of the same at purchaser.

19.0 TECHNICAL SUPPORT PROCEDURE:

19.1 The following procedure shall be followed for Technical support:

- i) In case of any fault, abnormality in the system, partial or total failure of the system, the officer In charge of the Remote Test Setup will immediately contact the designated Technical support Center of the SUPPLIER and give information about the nature of fault over phone / FAX /e-mail.
- ii) The details of the faults reported shall be recorded in a prescribed format, called the "FAULT – DOCKET" as given in Appendix-A of this Agreement. Changes in the "FAULT – DOCKET" may be incorporated for better reporting and recording reconciliation of the faults at Remote Test Setup and also at Technical support Center of the SUPPLIER by mutual agreement and understanding, to best utilize the Fault Docket facility as and when such need is felt. To this end changes in fault reporting procedures can also be incorporated.
- iii) Even if the fault is reported over phone to the Technical support Center a copy of the "Fault Docket" duly filled in by the station In charge of Remote Test Setup shall be sent by FAX and also by post to the Technical support Center of the SUPPLIER for records. The time of occurrence of fault as recorded in the fault docket shall only be taken into consideration for calculating the actual duration of faults.
- iv) Similarly, after rectification of fault a fresh Fault- Docket duly filled in and after recording the time of restoration and total duration of fault, will be sent by station In charge of Remote Test Setup to the Technical support Center, preferably by FAX, for records.
- v) In case of any dispute arising regarding duration of fault etc., the Fault Docket as maintained at the Remote Test Setup station shall be the guiding documents to be agreed by both parties.

- vi) The "Fault Docket" shall be filled with utmost care, giving all the details of the faults and other information as prescribed in the Fault Docket and the entries made shall be authenticated by signature of the station In charge of the Remote Test Setup.
- vii) Technical instructions shall be given to the Remote Test Setup staff over phone. If the fault is restored by following the instructions given over phone, the station In charge of Remote Test Setup will close the Fault Docket after making suitable entries and after satisfying himself/herself of the proper restoration of the fault. A copy of the Fault Docket duly filled in shall be sent to the Technical support Center for records.
- viii) The SUPPLIER shall also ensure visits of the expert and competent technical staff of the SUPPLIER in case the fault is not rectified to the satisfaction of the purchaser even after following the telephonic instructions and advices.
- ix) Once the fault has been rectified and the system & services were restored to normalcy, the visiting engineer of the SUPPLIER shall record in the station Log Book, the details of the works done by him for restoration of the faults. Similar entries shall be made in the fault docket also.
- x) Any delay in the restoration of a fault, as recorded in the FAULT-DOCKET, which comes in the domain of system availability and system performance shall be penalized in accordance to clause 21 of this Section.

20.0 SLA CHARGES AND PAYMENTS :

- 20.0 The charges for SLA will be as given in the purchase order.
- 20.1 Purchaser shall not pay any charges in advance. Bills for SLA shall be paid by purchaser at the end of each year of the SLA, after successful execution of SLA normally within 30 (thirty) days of the receipt of the bill duly completed and endorsed by the Remote Test Setup in-charge.
- 20.2 Payments shall be made after deducting LD if any and statutory levies and taxes.
- 20.3 Purchaser reserves the right to adjust any over-payment of SLA charges, any time during the period of SLA.
- 20.4 If the fault occurs at the end of an SLA period of one year it will be carry forward to the next SLA period of next year.
- 20.5 The faults/complaints reported before completion of last year of SLA and remaining unattended / unrectified will have to be rectified without any payment after completion of SLA contract of 5 Years.

21.0 LIQUIDATED DAMAGES:

- 21.1 In case a remote test setup System/software tools are completely or partially non-available so as to meet the scope and objectives of the Remote Test Setup then the severity level shall be defined as per the system non-availability calculated over a period of one month with respect to availability prescribed in 17.1 above. The LD in such cases shall be imposed as :

0.2% of the pro-rata monthly SLA charge (excluding Cost of Services of Professional(s)) for every 0.1% drop in availability. However for the 1st year of warranty the LD shall be 0.2% of the pro-rata monthly SLA charge for every 1% drop in availability. Any drop in availability shall be counted in steps of 0.1% or 1.0% as applicable.

- 21.2 Delays other than specified above including attending to the dockets, the supplier shall be liable to pay liquidated damages of Rs. 1000 per day which will be deducted from the payments of SLA charges due to the supplier.
- 21.3 For the liquidated damages accrued during the warranty period, the deduction shall be made from the pending bills for supply of equipment and if required from PBG against the supply contract. Remaining amount, if any, shall be adjusted in the SLA bills/PBG.
- 21.4 The liquidated damages for carried over faults and upgradation at the end of a year of SLA shall be taken in to account while paying the charges for the next year of SLA. The LD for carried over faults at the end of SLA shall be taken in to account while paying the charges of last year of SLA and if required shall be deducted from PBG.
- 21.5 Delay in return of repaired card/system, LD charges shall be Rs. 500/day.
- 21.6 Any delay in the restoration of a fault, as recorded in the FAULT-DOCKET, outside the domain of system availability and system performance, beyond a period of 48 hours, LD charge shall be at Rs 1000/day.

22.0 SLA PAYMENT TERMS:

100% payment for SLA shall be made at the end of each year of SLA based on production of Bill/Invoice duly endorsed by the purchaser after adjustment of liquidated damages, if any.

Appendix-A to the SLA

**TELECOM ENGINEERING CENTRE
FAULT- DOCKET FOR REMOTE TEST SETUP**

Docket Sl.

No:

File No:

Date:

From:-

Name:

(of the officer in-charge/duty officer of the station)

Designation:

To,

M/s.----- (the SUPPLIER)

Address:

(of the Technical support / Center)

1. 1. Date ----- Time----- (of occurrence of fault)

1.2. Date.----- Time----- (of Reporting of Fault)

2. Fault Reported to: Technical support Center (Name of the person) on phone
:

3.1 Mode of Reporting : Phone/FAX e-mail/Pager
(Tick whichever is applicable)

3.2 Fault observed in: T&M Networking Equipment Other
(Tick whichever is applicable)

4. Description of fault & observation of the reporting officer:

5. Details of Services affected :

6. Percentage of Service affected :

7. Date_____ Time _____ (of receiving the 1st assistance
over phone from Technical
support Center)

8. Details of Assistance received :
(Note: Add additional sheet if needed.)

9. Date_____ Time _____ (of receiving the 2nd assistance
over phone from Technical
support Center)

10. Details of assistance received :

(Note: Add additional sheet if needed.)

11. Was the fault restored by following the instructions given over phone ?
A- YES B- NO (Tick whichever is applicable)
12. If Yes, record date & time of restoration & duration of fault :
Date _____ Time _____ (in hours & minutes)
Duration of Fault: _____ days _____ Hours _____ minutes.
13. Was the fault restored:
A- Partially B- Fully (Tick whichever is applicable)
14. If the fault is not restored or restored only partially, give details of observation:
(Note: Add additional sheet if needed)
15. Note date & time of giving feed back vide Srl No:14 above to the Technical support Center:
(only in the event of partial / non restoration of faults)
Date _____ Time _____ . (in hours & minutes)
16. Date & Time of arrival of SUPPLIER's Expert at site / station of fault :
Date _____ Time _____ . (in hours & minutes)
17. Brief observation and works done by the SUPPLIER's staff / expert:

(detailed entry to be made by SUPPLIER's staff in the station Log-Book)
18. Date & Time of complete restoration of the system :
Date _____ Time _____ . (in hours & minutes)
19. Total Duration of Fault : _____ days _____ hrs _____ minutes.
20. Remarks of Station In charge (if any) :
21. Remarks of visiting engineer (of SUPPLIER), if any :

Signature:

Name :

Designation:

(of TEC staff / In charge of the REMOTE TEST SETUP)

Note:

- 1 Each page of the Docket must be signed by designated officer of TEC(including the additional sheets, if attached)
- 2 A copy of the Fault- Docket must be sent to the Technical support Center of the SUPPLIER, immediately by FAX / Post after restoration of fault.
- 3 At the time of first reporting it may not be possible to pinpoint the fault. Hence more than one boxes can be ticked against SI.3.2. Similarly observation of the local impact of fault may not be possible against SI.5. The duty officer shall provide observation which are immediately available.
- 4 Date on percentage of services affected shall be made available by the supplier though NMS as provided under special conditions.

SECTION - V

TECHNICAL SPECIFICATIONS & SCHEDULE OF REQUIREMENT

A. TECHNICAL SPECIFICATIONS:

1.0 TECHNICAL SPECIFICATIONS OF ROUTERS:

a. Objective:

The objective of this remote test setup is:

- i. The bidder has to setup end to end IP-MPLS connectivity by tunneling for remote testing through BSNL IP-MPLS network with NGN labs available at TEC New Delhi and other three RTECs located at Kolkata, Bangalore and Mumbai.
- ii. The bidder has to demonstrate conformance testing of various test suits available in NGN Labs.
- iii. For the purpose of commissioning of the project bidder has to demonstrate testing of DUT from remote sites as mentioned in para (i) above.

b. Scope:

The scope of this tender is to procure, installation and commissioning of routers along with supply of 19" racks at TEC New Delhi and RTEC's located at RTEC (W) Mumbai, RTEC(S) Bangalore and RTEC's (E) Kolkata for interconnecting these RTECs for remote testing and interfacing with NGN labs installed at TEC New Delhi. IP-MPLS connectivity will be arranged by purchaser as per clause no. 4.2(b) of section IV. The specifications of 19" racks are available at clause no. 5.0 in this section.

1.1 Architecture: The router shall conform to the following:

- a) The router equipment shall be modular chassis design.
- b) The backplane/switch fabric shall be non-blocking, full duplex and wired speed with fully configured chassis. The capacity of the backplane/switch fabric shall be as given below for the concerned category:

Backplane capacity in Gbps (Minimum)	Minimum route entries	Packets forwarding rate in Million PPS (Minimum)
5Gbps	10,000	1Mpps

2.0 Functional Requirements

2.1 Engineering Requirements: The system shall meet the following engineering requirements:

- a) All cables shall be of Gigabit Ethernet ready standards.
- b) All ports on the interface cards shall be operational.
- c) This remote test setup shall be monitored through NMS terminal / client.
The NMS terminal / client with all software requirement for FCAPS (fault, configuration, accounting, performance, security) functions will be supplied by the bidder.

2.2 The router should be able to operate on 220V AC power supply. AC input voltage 100 to 240 VAC auto ranging. AC input frequency 47 to 63 Hz.

2.3 High Availability Requirements: The Routers shall have the following features to ensure high availability and redundancy. Redundancy features shall be with active and standby arrangement so that the network is not affected due to equipment failures. Redundancy does not imply "spare unit".

- a) The power supply components shall be load sharing, hot-swappable, and redundant even under maximum load operation.
- b) The router shall support fast boot and non-disruptive expansion of Flash memory to ensure that software upgrades do not disrupt the normal router operation. The router shall support hot software upgrade.
- c) The router shall support dynamic online reconfiguration both locally and from remote location and changes made to a router configuration shall take effect without requiring a reboot.
- d) The router shall support comprehensive hardware and software fault isolation and recovery tools for all critical components.
- e) A single point failure on the equipment shall not result in network or network management system downtime.

2.4 Software Requirements: The router shall support the following IP routing features:

- a) All the routing protocol should conform to both IPv4 and IPv6.
- b) IGMP, PIM, , and MBGP multicast routing standard technologies
- c) Reservation Protocol (RSVP): Support of Reservation Protocol's (RSVP) as per RFC 2205 shall be provided.
- d) OSPF Version 2 as per RFC 1583
- e) IP Multicast support for the protocols MSDP, MBGP, Protocol Independent Multicast (PIM).
- f) BGP Version 4/CIDR as per RFC 1771. In addition the BGP4 implementation the router shall support the following features:
 - i. RFC 1745, which describes BGP4/IDRP IP OSPF interaction.
 - ii. Confederations, Route Reflection, Communities and Multi Exit Discriminators
 - iii. BGP4 Multipath support to enable load balancing between multiple exterior BGP peers from the same downstream router.
 - iv. Exterior BGP multi-hop support to support load balancing between two EBGP peers connected by two or more links.

- v. BGP multi-protocol extensions (MBGP) as described in RFC 2283
- vi. Route Flap dampening to control frequently flapping routes.
- vii. Peer Group Optimizations to enable easy configurations of large BGP peers
- viii. Prefix List tracking & Control to enable network administrators to control peering requirements with exterior BGP peers
- ix. Policy Routing to enable flexibility in making changes to the normal routing process based on the characteristics of the traffic.
- x. IS – IS
- xi. Point to Point protocol over Ethernet.

2.4.1 The router shall support Multi-protocol Label switching (MPLS) as per RFC 2702, 2858, 3032. The following features support shall be ensured:

- i. MPLS Fast Re-route
- ii. The Router shall support dynamic MPLS Traffic Engineering as per RFC 2702 and RFC 3209
- iii. MPLS VPNs (L2 &L3)
- iv. MPLS Label Switch Router/Label Switch Controller software (LSR)
- v. MPLS Label Edge Router functionality
- vi. MPLS class of service.

2.4.2 The router shall provide Quality of Service (QoS) features as described below.

- I. Class-based scheduling/queuing with at least 4 Classes that provides configurable minimum bandwidth allocation to each class.
- II. Committed Access Rate, Traffic Policing, sub rate service offering
- III. At least two level dropping precedence levels in each queue.
- IV. Multimedia QoS support as follows:
 - a. Resource Reservation Protocol (RSVP) as per RFC 2205 to enable applications to dynamically reserve necessary network resources from end-to-end for different classes of service.
 - b. IGMPv2: Internet Group Management Protocol Version 2 as per RFC 2236
- V. DiffServe QoS support as follows :
 - a) RFC 2474 : Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers
 - b) RFC 2475 : An Architecture for Differentiated Services
 - c) RFC 2598 : An Expedited Forwarding PHB
 - d) RFC 2597 : Assured Forwarding PHB Group
- VI. The Router shall provide MPLS support for Diffserv
- VII. The router shall provide congestion management through Weighted Random Early Detection (WRED), Selective Packet Discard and Longest Queue Drop for extreme or sudden congestion.

2.5 Network Management

- a) The router shall be manageable from a standards based Network Management System (NMS) platform using SNMP Version 2 or version 3. The router NMS application shall be capable of running on a standards based NMS platform.
- b) The router shall support SSH (secured shell access), Telnet client and server functionality.
- c) The router shall support, FTP and TFTP for easy software upgrades over the network.
- d) The router shall provide adequate tools for detailed traffic statistics collection and analysis.
- e) The router shall support Network Time Protocol (NTP) as per RFC 1305.
- f) The router shall support for traffic policing like packet and byte counts, start time and stop time stamps, input and output interface ports, Type of service, TCP Flags and Protocol, Source and Destination IP and TCP / UDP addresses, Next Hop Address, Source and Destination Autonomous Number & Subnet masks.

3.0 Interconnectivity and Interoperability Requirements

Interface Requirements: The Router shall be supplied with the following interfaces.

1. 10/100/1000 Base TX auto sensing; IEEE 802.3u compliant, full duplex	Qty – 6 Nos (In two separate cards)
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4.0 Management & Security requirements

4.1 Management and Security: The Router shall support the following management and security features.

- 4.1.1 SNMP: Support for MIBs for SNMP - versions 2 and higher shall be provided. Private and public MIBS shall be provided to Telecom network.
- 4.1.2 Access Security: The Routers shall have at least one level of access password protection. Multiple levels of management access privileges for privileged (configuration), and non-privileged (read-only) tasks shall be supported.
- 4.1.3 Packet Filtering: The Router shall support extensive packet filtering. Ability to assign traffic filters based on any parameter like IP address /TCP / UDP port numbers in a data packet shall be supported.
- 4.1.4 Console or Out-of-band Management: The Router shall have console management access, with the provision for remote out-of-band management capability using asynchronous serial interface.
- 4.1.5 Telnet, FTP, and TFTP support: The Router shall support Telnet access to the console and FTP /TFTP accesses to its configuration / boot files. Provision shall also exist for remote reboot.
- 4.1.6 Configuration Management: The Router shall support configuration management through the command line interface. The router shall support

integration with GUI based/ web based configuration manager.

- 4.1.7 Debugging/Troubleshooting: The Router shall provide extensive debugging and troubleshooting features to assist in hardware and software problem resolution.
- 4.1.8 Event and System logging: Event and system history logging functions shall be available. The Router shall generate system alarms on events. Facility to put selective logging of events onto a separate hardware where the analysis of log shall be supported.
- 4.1.9 Pre-planned Timed Reboot Facility: The Router shall support the pre-planned timed reboot to upgrade their hardware to a new software feature and plan the rebooting at an off-peak time.

4.2 Security Requirements: The router shall support the following security features:

- a) Multiple Privilege Levels shall be supported to provide different level of access.
- b) Remote Authentication Dial-In User Service (RADIUS) supports.
- c) Message Digest V5 as per RFC 1321 Route Authentication.
- d) Standard Access Lists and Extended Access Lists to implement access control supervision and control.
- e) Network Address Translation (NAT) and PAT (Port Address Translation) shall be supported if MPLS VPN services are provided from the Router.
- f) Multiple Privilege Levels shall be supported to provide different level of access.
- g) Access control List violations shall generate alarms to Network Management System and a log of the same shall be generated.
- h) Per-user authorization and authentication

5.0 19" rack Specifications

- o 42U high with two Surge Suppressed Power Outlet Strips
- o Sturdy frame
- o Lockable ventilated front and rear doors
- o Depth - 37.75 Inches
- o Width - 23.5 inches
- o Rail Width - 19 inch.

B. SCHEDULE OF REQUIREMENT:

Item No.	Description of Item	Quantity
1	Routers with all hardware, software, necessary cabling, other essential accessories and installation materials	05
2	19" racks (including Cables, other essential accessories and installation material)	04

ANNEXURE - I

INDEMNITY BOND

[To be executed by the Bidder on the Stamp Paper of Rs. 100/-]

1.(Name & address of the bidder)..... indemnify Telecom Engineering Centre, Department of Telecommunications Khurshid Lal Bhawan, Janpath, New Delhi – 110 001 (hereinafter called TEC) against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof , supplied against the tender, in Indian Telecom Network & TEC Laboratory.

2.(Name & address of the bidder)..... indemnify the TEC in respect of any damages, claims, loss or legal action against TEC for acts of commission,(use of hardware and software licenses during and after commissioning) or omission on part of the supplier, its agents or servants.

Signature.....
Name.....
Address.....
.....

Place:

Date:

Witnesses:

1.

2.

ANNEXURE - II

PROFILE OF BIDDER

1. Full Name of Bidder
2. Registered Address
3. Address of correspondence
4. Details of Contact/Authorized Person
Name & Designation _____
Address _____
Tel No. (Landline) _____ Mobile _____
Email ID _____ FAX: _____
5. Type of Firm: Private Ltd./Public Ltd./Co-operative/PSU/Proprietary
(Please tick the appropriate)
6. Name(s) of Directors/ partners/ proprietor
7. PAN/GIR No. : _____
8. TIN No. : _____
9. Sale Tax Registration No. : _____
10. Proof of Annual Turnover of Rs. Two crore only or more:
11. Earnest money details: DD No. _____ dated _____ for
Rs..... drawn on _____
12. Bank Account details of the bidder:
 - a. Name and address of Bank
 - b. Account no.
 - c. MICR no.
 - d. IFSC code of Branch
13. Any other relevant information:

(Signatures of authorized signatory)
Name _____
Designation _____
Seal:

ANNEXURE - III
NO NEAR-RELATIVE DECLARATION/CERTIFICATE

(To be submitted by either authorized signatory or proprietor, or each partner/director in case of partnership firms/companies)

I _____ son/daughter/wife
of
Shri _____
_____ Proprietor/Partner/Director/Authorised signatory/Representative of M/s

(Name and address of the bidder) is competent to sign this declaration and execute the tender document regarding "Procurement of Routers and associated metrials for interconnecting RTECs for remote testing with NGN Labs".

I _____ resident of _____ hereby certify that none of relatives of mine/proprietor/partners/directors is/are employed in the units where he/she is going to apply for the tender. In case at any stage it is found that the information given by me is false/incorrect the purchaser shall have the absolute right to take any action as deemed fit/without any prior information to me.

I have carefully read and understood all the terms and conditions of the tender document and undertake to abide by the same;

I also undertake that our firm will observe all legal formalities or/and obligations under the contract well within time. In case of failure to observe any of the legal formalities or/and obligations. I shall be personally liable under the appropriate law.

The Information/documents furnished, along with the tender document are true and authentic to the best of my knowledge and belief. I am well aware of the fact that furnishing of any false information/fabricated documents would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

(Signature of Proprietor/Partners/Director/Authorized Signatory)

Full Name:

Date:

Address:

Place:

Seal:

ANNEXURE - IV

PERFORMANCE SECURITY BOND FORM

In consideration of the President of India (hereinafter called 'the Government') having agreed to exempt ----- (hereinafter called 'the said Contractor(s)') from the demand, under the terms and conditions of an agreement / (Purchase Order) No. ----- Dated ----- made between ----- and ----- for the Procurement of Routers and associated metrials for interconnecting RTECs for remote testing with NGN Labs, and Service Level Agreement (SLA)of ----- (hereinafter called 'the said Agreement'), of performance security for the due fulfilment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on Production of a bank guarantee for ----- we, (Name of the bank) ----- (hereinafter referred to as 'the Bank') at the request of ----- contractor(s) do hereby undertake to pay to the TEC an amount not exceeding ----- against any loss or damage caused to or suffered or would be caused to or suffered by the TEC by reason of any breach by the said Contractor(S) of any of the terms or conditions contained in the said Agreement.

2. We (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 TEC stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the TEC by reason of the contractor(s) failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of the TEC in these counts shall be final and binding on the bank. However, our Liability under this guarantee shall be restricted to an amount not exceeding -----.

The Bank further agrees that the guarantee herein contained shall remain in full force and effect for a period of 8 Years & 6 Months from the date hereof and also that the extension of this guarantee will be provided for by the Bank for such period beyond the period of 8 Years & 6 Months as the Purchaser may feel necessary in this behalf.

3. We undertake to pay to the TEC any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/ supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s)/ supplier(s) shall have no claim against us for making such payment.
4. We (name of the bank) ----- Further agree that the guarantee herein contained shall remain in full force and effect during for a period of 8 Years & 6 Months from the date of Advance Purchase Order (Date.....). And that it shall continue to be enforceable till all the dues of the TEC under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till ----- (TEC) certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(S) and accordingly discharge this guarantee.

5. We (Name of the bank) ----- further agree with the TEC that the TEC shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary and of the terms and conditions of the said Agreement or to extend time of performance by the said contract(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the TEC Against and said Contract(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contract(s) or for any forbearance, act or omission on the part of the TEC or any indulgence by the TEC to the said contract(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s)/ supplier(s).
7. We (name of the bank) ----- lastly undertake not to revoke this guarantee during its currency except with the previous consent of the TEC in writing.

Dated the ----- day of -----, Two thousand one only.

For -----
(Indicate the name of the bank)

Witnesses: (Name & Signature)

1.

Telephone No.(s):-
STD Code-
FAX No.
E-Mail Address:-

2.

ANNEXURE –V TECHNICAL PROFORMA

Sl. No.	Item Description	Make	Model	Hardware and Version	Software and version	Collaborator, if any	Remarks . if any
1	i. Routers (Router hardware & Software) ii. Other items (Cables, other essential accessories and installation materials).						
2	i. 19" Racks <ul style="list-style-type: none"> • Cables, other essential accessories and installation materials. • Tool Set (mechanical) and tool set (Lan cabling) 			-	-		

ANNEXURE - VI

BID FORM

2-12/2016-MM/TEC

08.01.2016

To,
Sr. DDG TEC
New Delhi

Dear Sir,

Having examined the conditions of tender and specifications including clarifications/addenda the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver the items quoted in Price Schedule of this bid document in conformity with said conditions of contract and specifications for a sum of amount as quoted in Price Schedule or such other sums as may be ascertained in accordance with the schedule of prices and made part of this Bid.

We undertake, if our Bid is accepted, to commence and complete deliveries as prescribed in the tender document.

If our Bid is accepted, we will obtain and provide to purchaser the guarantees of a Scheduled Bank for a sum not exceeding 10% of the contract sum for the due performance of the Contract.

We agree to abide by this Bid for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.

We understand that you are not bound to accept the lowest or any bid, you may receive.

Dated thisday of2016.

(.....)

Signature of.....

in capacity of.....

(Duly authorised to sign the bid for and on behalf of.....)

Witness.....

Tele No.(s):-

Signature.....

FAX No.(s):-

Address.....

E-Mail Address:-